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BoS Meeting Minutes of the Programmes offered by the University (2017-22)

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Anita Patra
REGISTRAR
Centurion University of
Technology & Management
ODISHA

2021-22

CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Management

Date: 15.07.2021

MINUTES OF BOARD OF STUDIES MEETING held on 09.07.2021

Venue: Online Zoom Platform

Time: 3.00 pm

The Board of Studies (BoS) meeting of School of Management was held on 01.07.2021 at 3.00 p.m. in the online zoom platform. The following members were participated:

1. Dr. Anita Patra, Registrar, CUTM
2. Dr. Prasanta Kumar Mohanty, Dean, Academics, CUTM
3. Dr. Arup Barman, Professor, Department of Business Administration, Assam University, Silchar
4. Mr. Aditya Sapru, Managing Director, Neumck Strategy and Advisory, Bangalore
5. Dr. R. Divakar, Center for Agrarian Studies, NIRD&PR, Hyderabad
6. Mr. Hemant Pamarthy, Independent Consultant and Former Director Ujjivan MicroFinance
7. Dr. Subhendu Mishra, PGP Coordinator, SoM, CUTM
8. Dr. Girija Nandini, PGP Coordinator, SoM, CUTM
9. Dr. Bibhunandini Das, UGP Coordinator, SoM, CUTM
10. Dr. Pramod Kumar Patjoshi, B. Com Program Coordinator, SoM, CUTM
11. Dr. Umakanta Nayak, Dean, SoM, CUTM

The Chairperson, CUTM welcomed all members of the Board and briefly outlined the purpose of the meeting. Thereafter, the Dean, SoM presented the achievements and improvements of the School in the areas of academics, research, consultancy and infrastructure.

The following agenda items were taken up subsequently:

Agenda 1: **The minutes of the last meeting of the BoS held on 11.07.2020 were confirmed.**

Agenda 2: **Discussion and approval on revision required in the Curriculum of MBA Program**

- The Dean, SoM presented the MBA curriculum based on the feedback and suggestions made by the various stakeholders. Board discussed the curriuculum throughly and approved the existing syllabus without any changes for the academic year 2021-22

Agenda 3: **Discussion and approval on revision required in the Curriculum of MBA – RUDM & ABM Program**

- MBA – RUDM & ABM curriculum was presented based on the feedback and suggestions made by the various stakeholders. Board discussed the curriuculum throughly and approved the existing syllabus without changes for the academic year Year 2021-22.

Agenda 4: **Discussion and approval on revision required in the Curriculum of BBA program**

- BBA syllabus was presented based on the suggestions made by the various stakeholders . The Board accepted and approved the existing syllabus without changes for the academic year Year 2021-22.

Agenda 5: **Discussion and approval on revision required in the Curriculum of B.Com program**

- B.Com syllabus revision was presented based on the suggestions made by the various stakeholders . The Board accepted and approved the following changes to curriculum to be implemented from the Academic Year 2020-21 (*Annexure-I*).
    - New courses were incorporated in baskets after thorough discussion.

Agenda 6: **Inclusion of courses on life skills and value addition**

Various courses were presented to be offered by the University in the areas of life skills and value addition for the overall improvement and well being of students. The same was agreed upon and approved by the Board members. *(Annexure-II)*

The Dean, SoM extended sincere thanks to all members of the Board.

The meeting ended with a vote of thanks to the Chair.

Dean, SoM

Dean
School of Management
Centurion University, Odisha

Dean, Academics

Dean - Academic
Centurion University of Technology & Management
Bhubaneswar, Khurda, Odisha-752050

Annexure-I

List of new courses added in B.Com:

Sl. No	Course Title	Type (Skill/Employability/ Entrepreneurship)	Credit
1	Business organization and Management	Employability & Entrepreneurship	4
2	Goods and Services Tax (GST) and Custom Law	Employability & Entrepreneurship	6
3	Banking and Insurance	Employability & Entrepreneurship	6
4	Advance Managerial Accounting	Employability & Entrepreneurship	6
5	Commercial Banking and ALM	Employability	6
6	Security Analysis and Portfolio Management	Employability & Entrepreneurship	6
7	Project Appraisal and Financing	Employability & Entrepreneurship	6
8	Financial Institutions, Markets and Services	Employability & Entrepreneurship	6
9	Investment Banking and Financial Services	Employability	6
10	Environmental Science	Employability and Skill	4
11	Job Readiness	Employability	6

Annexure-II

Skill Courses approved by university

Sl. No.	Course Title	Credit
1	3D Game Art	4
2	Drug Design using Biovia Discovery Studio	4
3	Opthalmic Lens and spectacle manufacturing Techniques	4
4	Medical Diagnostic Techniques_	4
5	Introduction to Aquaponics	4
6	Polyhouse Automation	4
7	Development of Processor (Shakti)	4
8	Spectroscopy	4
9	Extraction Technologies	4
10	Gamified DIY kits using Lasers	4
11	VR Assets Development	4
12	GIS and Remote Sensing: Applications in Participatory Natural Resource Management	4
13	GIS and Remote Sensing: Application Development	4
14	3D Modelling and Printing	4
15	Brew Master	4

Value Added courses approved by university

	Course Title	Credit
1	Ethical Hacking	30 Hours
2	Clinical Practice	30 Hours
3	Financial Literacy	30 Hours
4	MATLAB	30 Hours
5	MS Excel Basics	30 Hours
6	Pharmaceutical Dry-Lab Techniques	30 Hours
7	Research Methodology and IPR	30 Hours
8	Steps for Career Plan	30 Hours
9	TABLEAU	30 Hours
10	Technical Writing	30 Hours
11	Waste to Wealth	30 Hours
12	Web Development	30 Hours
13	Yoga and Meditation	30 Hours
14	Health and Lifestyle	30 Hours
15	Life Skills and Moral Value Education	30 Hours
16	Ansys	30 Hours
17	Video Making for Youtubers	30 Hours

CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Management

Date: 09.07.2021

Time: 3.00 p.m.

Venue: Online Zoom Platform

Board of Studies Meeting

Attendance Sheet

Sl.No.	Name of the Member	Designation	Signature
1	Dr. Anita Patra	Registrar, CUTM	Attended Online
2	Dr. Prasanta Kumar Mohanty	Dean, Academics, CUTM	Attended Online
3	Dr. Arup Barman	Professor, Department of Business Administration, Assam University, Silchar	Attended Online
4	Mr. Aditya Sapru	Managing Director, Neumck Strategy and Advisory, Bangalore	Attended Online
5	Dr. R. Divakar	Center for Agrarian Studies, NIRD&PR, Hyderabad	Attended Online
6	Mr. Hemant Pamarthy	Independent Consultant and Former Director Ujjivan MicroFinance	Attended Online
7	Dr. Subhendu Mishra	PGP Coordinator, SoM, CUTM	Attended Online
8	Dr. Girija Nandini	PGP Coordinator, SoM, CUTM	Attended Online
9	Dr. Bibhunandini Das	UGP Coordinator, SoM, CUTM	Attended Online
10	Dr. Pramod Kumar Patjoshi	B. Com Program Coordinator, SoM, CUTM	Attended Online
11	Dr. Umakanta Nayak	Dean, SoM, CUTM	Attended Online

Dean, SoM

Dean
School of Management
Centurion University, Odisha

Dean, Academics

Dean - Academic
Centurion University of Technology & Management
Bhubaneswar, Khurda, Odisha-752050

Centurion University

2020-21

CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Engineering & Technology

Department of Civil Engineering

Date: 11/07/2020

MINUTES OF BOARD OF STUDIES MEETING held on 11/07/2020

Venue:Virtual Mode

Time: 11.00 a.m.

The Board of Studies (BoS) meeting of Department of Civil Engineering was held on 11/07/2020, in virtual mode. The following are the members:

1. Dr Vazeer Mahammood, Andhra University College of Engineering, Visakhapatnam, AP, India

2. Dr Debi Prasanna Kanungo, senior professor and scientist CSIR central building research institute

3 Prof. Prafulla Kumar Panda, Internal Expert

4 Prof. Kamal Kumar Barik, Internal Expert

5 Mr Vishal Kumar Singh, Internal Expert

The Chairperson welcomed all members of the Board and briefly outlined the purpose of the meeting. Thereafter, the Head of the Department of Civil Engineering presented the achievements and improvements of the department in the areas of academics, research, consultancy and infrastructure.

The following agenda items were taken up subsequently:

Agenda 1: **The minutes of the last meeting of the BoS held on 22/06/2019 were confirmed.**

Agenda 2: **Credits distributions, courses and baskets layouts, and new inclusions of Smart Basket (Basket-III) Interdisciplinary domains.**

The HoD, Civil Engg. gave a presentation on the feedback received on curriculum outlining the suggestions made by the various stakeholders. Based on this , the Board accepted and approved a few suggestions for course revision to be implemented from the Academic Year 2020-21.

- The Smart stack to be delivered by people from the industry and/or enabling internal faculty members to deliver the industry aligned courses.
- The strategy of keeping at least twenty percent online delivery of courses in the curriculum was appreciated by everyone.
- It was suggested to have more MOUs with academia and industry for effective rollout.
- Everyone appreciated having the "Job Readiness" course of Basket-II as compulsory across branches and also the delivery plan of the course.
- Present final year student welcomed Job readiness component and domain course content.
- The briefing comprised of credits distributions, courses and baskets layouts, and new inclusions such as the Smart Basket (Basket-III) Interdisciplinary domains etc.
- In Basket 4 there are overlaps in construction material testing and concrete technology course curriculum, also to include recycling of construction waste materials in construction materials testing courses. *(Annexure A)*

- Rock mechanics and field laboratory test to be included in the geotechnical engineering
- The domain course should be taught in practice and project mode.

Agenda 3: **Inclusion of courses on life skills and value addition**

It was suggested that students take up the various courses offered by the University in the areas of life skills and value addition for their overall improvement and well being.The same was agreed upon and approved by the Board members.*(Annexure B).*

Agenda 4: Introduced New Course M. Sc Geoinformatics

The committee unanimously decided that, One new course M.Sc Geoinformatics will be introduce under SoAS but the subject should be under Department of Civil Engineering. The syllabus must be CBCS system followed by 96 credits. Aerial Surveying and Remote Sensing Application domain subjects must be inside the syllabus of M.Sc Geoinformatics. The output of the domain must be research papers. This course will float in the next academic year (2021-2022).

The HoD, Department of Civil Engg. extended sincere thanks to all members of the Board.

The meeting ended with a vote of thanks to the Chair.

Dean, SoET
Dean, SOET
Centurion University of Technology & Management
Odisha

Dean, Academics
Dean - Academic
Centurion University of Technology & Management
Bhubaneswar, Khurda, Odisha-752050

HoD, Civil Engineering
HOD
Dept. of Civil Engineering
Centurion University of
Technology & Management

Centurion University

Annexure-A

List of existing courses where syllabus was revised

Basket/ Semester	Name of Course	No. of Modules/ Topics revised	Revised Modules/Topics (details)
IV	Geotechnical Engineering	1	One module has been added depending on the industry requirement
IV	Construction Material Testing	2	One module has been added depending on the industry requirement
IV	Structural Detailing and Drawing	2	One module has been added and another module is merged with slight change as per industry requirement
IV	Quantity Estimation & Costing	1	One module has been added depending on the industry requirement
IV	Geometric Modeling	1	One module has been added depending on the industry requirement
IV	Hydrology and Irrigation	1	One module has been added depending on the industry requirement
IV	Surveying Techniques	1	One module has been added depending on the industry requirement
IV	Geospatial Survey	1	One module has been added depending on the industry requirement
IV	Concrete Technology	1	One module has been added depending on the industry requirement
IV	Electrical, Plumbing and Wood Works	1	One module has been added depending on the industry requirement
IV	Design of Structures	1	One module has been added depending on the industry requirement
IV	Road Engineering	1	One module has been added depending on the industry requirement
IV	Construction Materials	1	One module has been added depending on the industry requirement
IV	Water supply and Sanitary Engineering	1	One module has been added depending on the industry requirement
IV	Computer Aided Engineering	2	One module has been added and another module is merged with slight change as per industry requirement
IV	Hydraulic Machinery	2	One module has been added and another module is merged with slight change as per industry requirement
IV	Fluid Mechanics with Finite Volume Method	2	One module has been added and another module is merged with slight change as per industry requirement
IV	Theories of Failure Using Finite Element Analysis	2	One module has been added depending on the industry requirement
IV	Disaster Preparedness & Planning Management	1	One module has been added depending on the industry requirement

Annexure-B

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List of Skill courses

Sl. No	Course Title	Credit	(T+P+P)
1	Introduction to Quantum Computing	4	0+3+1
2	Organic Farming	4	0+3+1
3	Mushroom Farming	4	0+3+1
4	Hydroponics Technology	4	0+3+1
5	Poultry Farming	4	0+3+1
6	Dairy Farming	4	0+3+1
7	Vermicomposting Farming	4	0+3+1
8	Transformer Manufacturing, Repairing and Maintenance	4	0+3+1
9	Electrical Installation	4	0+3+1
10	Repair and Maintenance of Home Appliances	4	0+3+1
11	Refrigeration and air conditioning	4	0+3+1
12	Super critical Co2 plant operation	4	0+3+1
13	Business Plan Preparation	4	0+3+1
14	Composite fabrication practice	4	0+3+1
15	Powder coating practice	4	0+3+1
16	Farm appliances operation	4	0+3+1
17	Bio fertilisers preparation	4	0+3+1
18	PCB designing & fabrication	4	0+3+1
19	Introduction to Block Chain Technology	4	0+3+1
20	Introduction to Nutraceuticals	4	0+3+1
21	Introduction to NLP	4	0+3+1
22	Introduction to Computational Biology	4	0+3+1
23	Product Life Cycle Management through Gate process	4	0+3+1
24	New material development with Biovia	4	0+3+1
25	Spectral image processing using Python	4	0+3+1
26	Satellite data processing	4	0+3+1
27	Working with Graphene and carbon fibre	4	0+3+1
28	Adobe Tools and Illustrations	4	0+3+1
29	Digital Painting	4	0+3+1
30	Computer Installation and Maintenance	4	0+3+1

List of value added courses

Sl. No	Course Title	Hrs. of input
1	Natural Resource Management	30
2	Research Methodology and IPR	30
3	Urban Gardens using Hydroponics	30
4	Introduction to Python	30
5	MATLAB	30
6	Waste to Wealth	30
7	Technical Writing	30
8	Organic Farming	30
9	Disaster Management	30
10	Ethical Hacking	30

11	Web Development	30
12	Food & Nutrition	30
13	Clinical Practice	30
14	Innovation Management	30
15	Financial Literacy	30
16	Yoga and Meditation	30
17	Steps for Career Plan	30
18	MS Excel Basics	30
19	Quality Analysis	30
20	Ethical Writing Practice	30
21	Ansys	30
22	Video Making for Youtubers	30

List of Domain courses

Sl. No.	Name of the Domain	Category
1	Advance Video Processing, Computer Vision and Machine Learning	A/B/D
2	Aerial Survey and Remote Sensing Applications	A/B
3	Agri Business Management	A/B/D
4	Architectural and Structural Design	A/B
5	Business Analytics	A/B/D
6	Chip Design and Fabrication using VLSI	B
7	Commodity and Food Storage	A/B/D
8	Communication Systems	B
9	Composite Design and Manufacturing	A/B
10	Computational Fluid Dynamics	A/B
11	Cyber Security	B
12	Dairy Processing and Development	A/B
13	Fish Processing Technology	A/B
14	Food Processing	A/B/D
15	Gaming and Immersive Learning (AR & VR)	A/B/D
16	Genetic Engineering & Genomics	A
17	Go-To-Market	A/B/D
18	Health Care Assistancy	A/B
19	Intensive Aquaculture	A
20	Manufacturing Execution System	B
21	Nutraceuticals	A/C
22	Organic Farming	A
23	Protected Horticulture	A/B
24	Renewable Energy Applications	A/B
25	Seed Production using Manual and Molecular Methods	A
26	Smart Agriculture	A/B
27	Smart Farm Machinery	A/B
28	Soil and Water Conservation through Watershed	A/B

Centurion University

CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Engineering & Technology

Department of Civil Engineering

Date: 11/07/2020

Time: 11.00 a.m.

Venue: Virtual

Board of Studies Meeting
Attendance Sheet

Sl. No	Name of the BoS Member (Internal Faculty and External Resource)	Designation	Signature
1	Dr. Vazeer Mahammood	Andhra University College of Engineering, Visakhapatnam, AP, India	Attended Online
2	Dr Debi Prasanna Kanungo	senior professor and scientist CSIR central building research institute	Attended Online
3	Dr Kamal Kumar Barik	Assistant Professor, Civil Engineering, CUTM	Attended Online
4	Dr Prafulla Kumar Panda	Assistant Professor, Civil Engineering, CUTM	Attended Online
5	Mr Vishal Kumar Singh	Professor, Civil Engineering, CUTM	Attended Online

Dean, SoET

Dean, SOET
Centurion University of Technology & Management
Odisha

Dean, Academics

Dean - Academic
Centurion University of Technology & Management
Bhubaneswar, Khurda, Odisha-752050

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CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Engineering & Technology

Department of Computer Science and Engineering

Date: 11.07.2020

MINUTES OF BOARD OF STUDIES MEETING held on 11.07.2020

Venue: Virtual Mode

Time: 11.00 a.m.

The Board of Studies (BoS) meeting of Department of Computer Science and Engineering was held on 11.07.2020 at 11 a.m. in online mode. The following members were present:

1. Mr. Pramod Saini, Co-founder of Icalibrator
2. Ms. Aruna Saini, Co-founder of Icalibrator
3. Prof. Uma Valluri, Ex- Prof., IIIT SriCity
4. Dr. Sujata Chakravarty, Associate. Prof., HOD, CSE
5. Prof. Sashibhusan Moharana, Asst. Prof. , CSE
6. Abdul Raheman, Student
7. Anshit Ransingh, Alumni(Working as project executive in CUTM)

The Chairperson welcomed all members of the Board and briefly outlined the purpose of the meeting. Thereafter, the Head of the Department of Computer Science Engineering presented the achievements and improvements of the department in the areas of academics, research, consultancy and infrastructure.

The following agenda items were taken up subsequently:

Agenda 1: **The minutes of the last meeting of the BoS held on 22/06/2019 were confirmed.**

Agenda 2: **Discussion and approval on any revision required in the Curriculum of B.Tech, Computer Science Engg.**

- The HoD, Computer Science and Engg. gave a presentation on the feedback received on curriculum outlining the suggestions made by the various stakeholders. Based on this , the Board accepted and approved a few suggestions for course revision to be implemented from the Academic Year 2020-21.
- The syllabus of basket – 4, 5 of B. Tech, Computer science and Engg. was considered and approved by the Board. *(Annex 1)*
- The members of board approved some new domain courses introduced for matching latest industry standard. *(Annex 2)*

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Agenda 3: **Inclusion of courses on life skills and value addition**

It was suggested that students take up the various courses offered by the University in the areas of life skills and value addition for their overall improvement and well being. The same was agreed upon and approved by the Board members. *(Annex 3 and Annex 4)*

The HoD, Department of Computer Science and Engg. extended sincere thanks to all members of the Board.

The meeting ended with a vote of thanks to the Chair.

Dean, SoET
Dean, SOET
Centurion University of Technology & Management
Odisha

Dean, Academics
Dean Academics
Centurion University of Technology & Management
Odisha

HoD, Computer Science & Engineering
HOD CSE
Centurion Institute of Technology

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Annex 1

List of new courses added

Sl. No	Course Title	Type(Skill/Employability/Entrepreneurship	Credit
1	Data Analysis and Visualisation using Python	Skill and Employability	4
2	Machine Learning using Python	Skill and Employability	4
3	IT Infrastructure Management	Skill and Employability	6
4	Cloud Practitioners	Skill and Employability	2
5	Information Security	Skill and Employability	3
6	OOPs with C ++ Programming	Skill and Employability	4
7	Data Structures using C++	Skill and Employability	4
8	Advanced Web Programming	Skill and Employability	4
9	Java Technologies	Skill and Employability	4
10	Database Creation and Maintenance	Skill and Employability	4
11	Android App Development	Skill and Employability	6
12	Data Science and Machine Learning	Skill and Employability	26
13	Software Technology	Skill and Employability	20
14	Cloud Technology	Skill and Employability	18
15	Wireless Networks	NA	3
16	Database Cluster Administration and Security	NA	4

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List of existing courses where syllabus was changed

Basket/ Semester	Name of Course	No. of Modules/Topics revised
IV	Data Structures using C++	Mod 1: Problem Solving Analysis added
IV	Operating System Concepts	Mod 1: Concurrent Programming Mod III The Hierarchical Filesystem, Directory Files and Ordinary Files , The Working Directory ,Your Home Directory, Pathnames, Relative Pathnames ,Working with Directories , Access Permissions
IV	Android App Development	Mod II

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Annex 2

List of Domain Courses offered in 2020-21

Group A : Agriculture/ Agri Engineering/Phyto Pharma/ Dairy Tech/ Fisheries/ Biological Sciences

Group B: All other Engineering/Physical and Mathematical Science/Vocational or Skills

Group C: Pharmacy and Allied Health

Group D: Management & Media and Communication

S No	Domain Name	Credit	Category
1	Advance Video Processing, Computer Vision and Machine Learning	30	A/B/D
2	Aerial Survey and Remote Sensing Applications	18	A/B
3	Agri Business Management	23	A/B/D
4	Architectural and Structural Design	20	A/B
5	Business Analytics	21	A/B/D
6	Chip Design and Fabrication using VLSI	18	B
7	Commodity and Food Storage	29	A/B/D
8	Communication Systems	18	B
9	Composite Design and Manufacturing	24	A/B
10	Computational Fluid Dynamics	20	A/B
11	Cyber Security	24	B
12	Dairy Processing and Development	28	A/B
13	Fish Processing Technology	29	A/B
14	Food Processing	29	A/B/D

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15	Gaming and Immersive Learning (AR & VR)	20	A/B/D
16	Genetic Engineering & Genomics	29	A
17	Go-To-Market	22	A/B/D
18	Health Care Assistancy	25	A/B
19	Intensive Aquaculture	29	A
20	Manufacturing Execution System	18	B
21	Nutraceuticals	29	A/C
22	Organic Farming	29	A
23	Protected Horticulture	29	A/B
24	Renewable Energy Applications	22	A/B
25	Seed Production using Manual and Molecular Methods	29	A
26	Smart Agriculture	29	A/B
27	Smart Farm Machinery	28	A/B
28	Soil and Water Conservation through Watershed	28	A/B

Centurion University

Annex 3

List of skill Courses offered in the Year 2020-21

S No	Course Name	Course Code	Credit
1	Introduction to Quantum Computing	CUTM3079	4
2	Organic Farming	CUTM3081	4
3	Mushroom Farming	CUTM3082	4
4	Hydroponics Technology	CUTM3083	4
5	Poultry Farming	CUTM3084	4
6	Dairy Farming	CUTM3085	4
7	Vermicomposting Farming	CUTM3086	4
8	Transformer Manufacturing, Repairing and Maintenance	CUTM3087	4
9	Electrical Installation	CUTM3089	4
10	Repair and Maintenance of Home Appliances	CUTM3090	4
11	Refrigeration and air conditioning	CUTM3091	4
12	Super critical Co2 plant operation	CUTM3092	4
13	Business Plan Preparation	CUTM3095	4
14	Composite fabrication practice	CUTM3098	4
15	Powder coating practice	CUTM3099	4
16	Farm appliances operation	CUTM3100	4
17	Bio fertilisers preparation	CUTM3103	4
18	PCB designing & fabrication	CUTM3104	4
19	Introduction to Block Chain Technology	CUTM3105	4
20	Introduction to Nutraceuticals	CUTM3106	4
21	Introduction to NLP	CUTM3107	4
22	Introduction to Computational Biology	CUTM3108	4
23	Product Life Cycle Management through Gate process	CUTM3109	4
24	New material development with Biovia	CUTM3110	4
25	Spectral image processing using Python	CUTM3111	4
26	Satellite data processing	CUTM3112	4
27	Working with Graphene and carbon fibre	CUTM3113	4
28	Adobe Tools and Illustrations	CUTM3114	4
29	Digital Painting	CUTM3115	4
30	Computer Installation and Maintenance	CUTM3120	4

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Annex 4

List of Value Added Courses added in 2020-21

S No	Name of the value added courses (with 30 or more contact hours)offered	Course Code	Duration of course
1	Natural Resource Management	CUVA0067	30 Hours
2	Research Methodology and IPR	CUVA4009	30 Hours
3	Urban Gardens using Hydroponics	CUVA0044	30 Hours
4	Introduction to Python	CUVA0046	30 Hours
5	MATLAB	CUVA4035	30 Hours
6	Waste to Wealth	CUVA4029	30 Hours
7	Technical Writing	CUVA4023	30 Hours
8	Organic Farming	CUVA0043	30 Hours
9	Disaster Management	CUVA0022	30 Hours
10	Ethical Hacking	CUVA4013	30 Hours
11	Web Development	CUVA4012	30 Hours
12	Food & Nutrition	CUVA0047	30 Hours
13	Clinical Practice	CUVA4002	30 Hours
14	Innovation Management	CUVA0048	30 Hours
15	Financial Literacy	CUVA4038	30 Hours
16	Yoga and Meditation	CUVA4021	30 Hours
17	Steps for Career Plan	CUVA4018	30 Hours
18	MS Excel Basics	CUVA4010	30 Hours

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19	Quality Analysis	CUVA4001	30 Hours
20	Ethical Writing Practice	CUVA4031	30 Hours
21	Ansys	CUVA4044	30 Hours
22	Video Making for Youtubers	CUVA4016	30 Hours

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CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Engineering & Technology

Department of Computer Science and Engineering

Time: 11.00 a.m. **Date: 11.07.2020**

Venue: Online

Board of Studies Meeting

Attendance Sheet

List of Members present

Sl. No.	Name	Organization	Signature
1	Mr. Pramod Saini	Co-founder of Icalibrator	Attended online
2	Ms. Aruna Saini	Co-founder of Icalibrator	Attended online
3	Prof. Uma Valluri	Ex- Prof., IIIT SriCity	Attended online
4	Dr. Sujata Chakravarty	HOD, CSE	Attended online
5	Prof. Sashi Bhushan Maharana	Asst. Prof. , CSE	Attended online
6	Abdul Raheman	Student	Attended online
7	Anshit Ransingh	Alumni(Working as project executive in CUTM)	Attended online
8	Dr. Prasant Kumar Mohanty	Dean, SoET	Attended online

Dean, Academics
Dean - Academic
Centurion University of Technology & Management
Bhubaneswar, Khurda, Odisha-752050

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CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Engineering & Technology

Department of Electrical & Electronics Engineering

Date: 11.07.2020

MINUTES OF BOARD OF STUDIES MEETING held on 11.07.2020

Venue: Virtual Mode

Time: 11.00 a.m.

The Board of Studies (BoS) meeting of Department of EEE was held on 11.07.2020 at 11 a.m. in the Room No.-104 , CUTM Bhubaneswar. The following are the Board members:

1. Prof. (Dr.) Radhakant Padhi, Honorary Provost, CUTM
2. Prof. (Dr.) Jharna Majumdar, Prof. of Eminence, CUTM
3. Prof. Jagannath Padhi, Director, CUTM
4. Prof. (Dr.) Prasant Kumar Mohanty, Dean, SoET, CUTM
5. Prof. (Dr.) Ashish Ranjan Dash , Associate Dean, CUTM
6. Prof. (Dr.) Sudhansu Kumar Samal, HOD, EEE, CUTM
7. Prof. (Dr.) P. K. Hota, Professor, EE, VSSUT, Burla
8. Mr. P. K. Pradhan, Ex- Director (Commercial), GRIDCO; Ex-CEO, WESCO

The Chairperson welcomed all members of the Board and briefly outlined the purpose of the meeting. Thereafter, the Head of the Department of EEE presented the achievements and improvements of the department in the areas of academics, research, consultancy and infrastructure.

The following agenda items were taken up subsequently:

Agenda 1: **The minutes of the last meeting of the BoS held on 22.06.2019 were confirmed.**

Agenda 2: **Discussion and approval on any revision required in the Curriculum of B.Tech, EEE.**

The HoD, EEE gave a presentation on the feedback received on curriculum outlining the suggestions made by the various stakeholders. Based on this , the Board accepted and approved a few suggestions for course revision to be implemented from the Academic Year 2018-19.

1. Renaming of subjects from all the baskets were done as per industry demand
2. All the course contents were changed by giving more importance to software simulations which are useful for doing research in higher education
3. Faculties were asked to complete various online courses offered from NPTEL, UDEMY, Coursera etc. to enhance their knowledge to teach the new restructured courses.
4. The Board approved the updation of the courses important from higher studies point of view and replacement of contents of open basket with new courses with greater practice component. List of new courses added in *(Annexure A)*
5. The Board approved the changes suggested in the Distributed Generation & Microgrid, Power System Protection as per the latest Software and technology being used by the industry. List of existing courses where syllabus was revised in *(Annexure B)*

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Discussion and approval on any revision required in the Curriculum of M.Tech, Power System & Control.

- As there was a complete revision of the syllabus of M.Tech program in Power system & control in previous academic session, No change was suggested.

Agenda 3: **Inclusion of courses on life skills and value addition**

It was suggested that students take up the various courses offered by the University in the areas of life skills and value addition for their overall improvement and well being. The same was agreed upon and approved by the Board members.*(Annexure C)*

Agenda 4:

Basket 3 syllabus got completely changed as per present industrial requirement. More emphasis was given on practice and project and less importance on theory content. All circuit branch faculties were asked to teach these advanced subjects.

The HoD, Department of EEE extended sincere thanks to all members of the Board.

The meeting ended with a vote of thanks to the Chair.

Dean, SoET

Dean, SOET
Centurion University of Technology & Management
Odisha

Dean, Academics

Dean - Academic
Centurion University of Technology & Management
Bhubaneswar, Khurda, Odisha-752050

HoD, EEE Department

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Annexure-A

List of new courses added

Sl. No.	Course Title	Type(Skill/Employability/Entrepreneurship)	Credit
1	Electromagnetic Field Theory and Transmission Line	Skill development	3
2	Network Analysis	Employability	3
3	Energy Production & Transmission	Skill development	3
4	Substation Switch gear & Protection	Skill development	4
5	System Modeling and Control	Skill development	4
6	Electrical Machines Operation and Control	Skill development	4
7	Industrial Power Electronics	Skill development	4
8	Digital Measurement and Instrumentation	Skill development	3
9	Basic Electrical Engineering	Skill development	2
10	Introduction to Industrial Automation	Skill development	1
11	Advanced Programming & Control Blocks of PLC	Skill development	3

12	Control & Signal Wiring of PLC	Skill development	2
13	SCADA based advanced features	Skill development	2
14	SCADA & PLC based sequential control	Skill development	1
15	Human Machine Interface	Skill development	3
16	OPC server base data fetching & control	Skill development	2
17	Project	Skill development	6
18	Internship	Skill development	4
19	Introduction, Power Scenario, Power Quality & Fault clearance	Skill development	2
20	Switchyard & substation Networks	Skill development	3
21	Protection scheme & Switchgear	Skill development	3
22	Cable system & Testing	Skill development	3
23	Power Markets	Employability	1
24	Grid Safety	Skill development	2
25	Transformer Manufacturing	Skill development	6
26	Project	Skill development	4

27	Materials for Renewable Energy applications	Skill development	2
28	Renewable Energy Technology for Industrial Process	Skill development	3
29	Micro-grid Design & Implementation	Skill development	2
30	Hybrid Renewable Energy Systems	Skill development	3
31	Solar Off-grid Entrepreneur	Skill development	2
32	Project	Skill development	6
33	Internship	Skill development	4
34	Soft Computing Techniques - I	Skill development	2
35	Electrical Circuit Drawing (Using Auto CAD)	Skill development	2
36	Linear Integrated Circuits & Application	Employability	3
37	Micro Controllers for Industrial Application (PIC)	Skill development	4
38	Power Quality and FACTS	Skill development	3
39	Soft Computing Techniques - II	Skill development	3
40	Basic Electrical Maintenance	Skill development	3
41	Automotive Electrician	Skill development	3
42	Advanced Power Electronics	Skill development	5

43	Electrical Drives	Skill development	5
44	Advance Control System	Skill development	5

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Annexure-B

List of existing courses where syllabus was changed

Basket/ Semester	Name of Course	No. of Modules/Topics revised	Revised Modules/Topics (details)
IV	Network Analysis		Practice • Incidence Matrix Formulation • Tie-set Matrix Formulation • Cut-set Matrix Formulation • Analysis of transient characteristics using Matlab • AC and DC transient response analysis for RL,RC and RLC circuits • Design and frequency response analysis of Low Pass filter • Design and frequency response analysis of High Pass filter • Design and frequency response analysis of Band Pass filter • Design and frequency response analysis of Band elimination filter • Fourier series expansion of Square wave • Fourier series expansion of Sine wave
	Energy Production & Transmission	7	Practice: 1. Schematic Layout design Thermal Plant using AutoCad 2. Schematic Layout design Nuclear Plant using AutoCad 3. Schematic Layout design of Hydro Plant using AutoCad 4. Preparation of Load calculator using MATLAB 5. Designing of transmission line parameters using MATLAB 6. Designing of Insulators and calculation of voltages using MATLAB 7. Designing of Cables
	Substation Switch gear & Protection		Practice: 1. Layout Designof 220KV substation using MATLAB 2. Layout Design of 400KV & 750KV substation using MATLAB as per IEEE standards 3. Maintenance tests of CT & PT of substation as per manufacturers Hand book 4. Maintenance tests of Lightening Arrestor & Circuit Breaker of substation as per manufacturers Hand book 5. Maintenance tests of transformer as per

			manufacturers Hand book 6. Design of Protection Scheme using MATLAB 7. Design & simulation of Circuit breaker using 3DS Tools Project: 1. Analysis of critically operating power system using MATLAB/DYMOLA
	System Modeling and Control	7	Practice: Hardware/MATLAB 1. Study of Temperature control system 2. Using MATLAB, find the poles, zeros, gain and draw the pole-zero plot of the transfer function. 3. Using MATLAB, find the transfer function from given block diagram. 4. Standard Test Signals 5. Time response of first order systems to unit step and unit ramp inputs 6. Time Response of Second order systems to unit step input 7. Using MATLAB, determine the steady state error of the given system. 8. Construct the root locus for 2nd&3rd order system and analyze its stability (Gain) 9. Construct the bode plot for 2nd and 3rdorder system and analyze its stability (PM & GM) 10. Design of P,PD, PI and PID Controller for 2ndor 3rdorder system
	Electrical Machines Operation and Control	1	Theory Stepper motor drive, basic principles involved in stepper motor control, stepper motor specification, operation and commercial driver chips and packages, Brushless DC Motors, Reluctance Motor, Hysteresis Motor Application in Medical, Automobile, Civil, Electrical etc Practice: 4) Motor Voltage and Current Measurement. 5) ON-Load Tap changer

	Industrial Power Electronics	7	Simulation of V-I characteristics of power diode & power transistor. Simulation of V-I characteristics of MOSFET& IGBT. Simulation of V-I characteristics of silicon-controlled rectifier. Simulation of R and RC triggering. Simulation of UJT triggering 6. Simulation of single phase half-wave and full-wave diode rectifier using R & L load. 7. Simulation of single phase fully controlled converter using R & L load. 8. Simulation of single phase semi converter using R-L load. 9. Simulation of 3-phase semi converter with R, R-L and dc motor load with/without freewheeling diode. 10. Simulation of 3-phase bridge converter with R, R-L and dc motor load with/without freewheeling diode. 11. Simulation of buck converter. 12. Simulation of boost converter. 13. Simulation of buck boost converter. 14. Simulation of single-phase inverter&three phase inverter. 15. Simulation of single phase AC voltage controller&cyclo-converter 16.Simulation of converter fed dc drives (Wind Turbines). 17. Simulation ofchopper fed dcdrives (PV Systems). 18. Simulation of induction motor drives (e-Vehicle). 19.Simulation of railway electrification system using Dymola **Project**

			500 VA Sine wave Inverter Industrial Battery Charger using SCR Precision Illumination control of Lamp Dual Converter using Thyristors
	Digital Measurement and Instrumentation	7	Module I Philosophy of digital measurements Module II Digital frequency measurement techniques Module III

			Digitally Programmable Circuits Module IV Digital to Analog Converters Module V Digital Voltage Measurement Techniques Module VI Digital Instrument Module VII: Signal Generator, Analyzersand Oscilloscopes
	Basic Electrical Engineering	7	Design and Analysis of Basic electrical circuits using Dymola. Plotting the V-I Characteristics of Incandescent lamp using Dymola. Verification of KCL and KVL in series and parallel circuits using Dymola. Analysis of Thevenin's and Norton's theorem. 3. Verification of Thevenin's and Norton's theorem using Dymola. Solenoids and field coils. Application of solenoids in different circuits in Automobiles and in electrical circuit. Study of Transformers, Linear Transformer Model, Ideal Transformer Model, No-load Loss and Load-loss Calculation. Calculation of current, voltage, power & power factor of series RLC circuit excited by 1-Ø A.C Supply using Dymola. Measurement of power and power factor in a 3-Ø AC circuit by (one, two and three) wattmeter using Dymola.
V	SCADA based advanced features	1	SCADA BASED ADVANCED FEATURES 4.1 Alarms 4.2 Trends, Data base connectivity & Report generation 4.3 Recipe management 4.4 Security Practice: P4.1 - Data fetching and representing on graph and excel P4.2 - Advanced controlling of industry by using SCADA
	SCADA & PLC based sequential control	1	SCADA & PLC BASED SEQUENTIAL CONTROL 5.1 Script 5.2 Networking 5.3 Device connectivity.

			Practice: P5.1 Script P5.2 Networking P5.3 Device connectivity
	OPC server base data fetching & control	1	OPC SERVER BASE DATA FETCHING & CONTROL 7.1 Study of Open Platform Communications 7.2 OPC to control PLC, SCADA. 7.3 OPC based different protocol concept. 7.4 Data handling using OPC. Practice: P7.1 Installation of OPC P7.2 OPC protocols P7.3 Connectivity of PLC, SCADA & ARDUINO to OPC.
	Introduction, Power Scenario, Power Quality & Fault clearance.	7	Generation, Transmission & Distribution scenario in India, Hydro Power Generation [Lab Practice in Own Distribution Network, Modeling], Thermal Power Generation [Field Visit+ Lab Practice in Own Distribution Network], Renewable Energy Sources [Visit to Standard Testing Lab, Workshop Practice, & Maintenance], Energy Conservation, Electricity Costing & Audit, Future of Energy
	Switchyard & substation Networks	7	Switchyard system, Switchyard/Substation Types, System Networking, Busbar Electrical System, Layout plan, Safety Norms, & Isolation, Locking & Tagging
	Protection scheme & Switchgear	7	System Protection Schemes, IDMT Protection, Distance Protection, Busbar Protection, Switchgears, Safety Norms, & CT-PT, Locking & Tagging
	Cable system & Testing	7	General Cable System, 3 Phase cable system, Cable Protection, Cable Testing, Cable Jointing, Safety Norms, & Cable, Cable Layout
	Power Markets	7	Market Schemes, Market Framework, Market Operation, Channeling, Power Evacuation, Costing, Modeling
	Grid Safety	7	Safety Practice, Safety Framework, Fire Safety Operation, Electrical Safety, Safety Equipments, PPE, Safety Drill
	Transformer Manufacturing & Testing	7	About Transformer, Manufacturing Process, Transformer Operation, Electrical Safety in Testing, Testing Equipments, Type Test, Routine Test
	Renewable Energy Technology for Industrial Process	5	Module 1 Overview of Renewable Energy technology Module 2 Solar PV technology Module 3 Wind energy technology Module 4 Bio-energy technology Module 5 Solar Thermal Technology
	Materials for Sustainable Energy Applications	3	Module 1 Basic fundamentals of different types semiconductors Module 2 Efficiency calculation of solar cell Module 3 Perovskite based solar cell
	Microgrid Design and	4	Practice 1: Site survey (1 kW or 1MW) Practice 2: Sizing of micro grid system (1kW/1MW)

	Implementation		Practice 3: Single line diagram of micro grid system Practice 4: Identify and specify different components used in a micro grid system Practice 5: Connection practice of solar modules in a micro grid system Practice 6: Designing of micro grid system Practice 7: Analysis of micro grid system Practice 8: Designing of micro grid system with battery storage Practice 9: Performance calculation of micro grid system Practice 10: Connection practice of CCR/Inverter in a micro grid system Practice 11: Test, record and verify the power quality of a micro grid system Practice 12: O & M of micro grid system
	Hybrid Renewable Energy Systems	4	Module 1 Hybrid Power systems Module 2 Solar PV and Thermal (Solar PVT) system Module 3 Photovoltaic and wind system Module 4 Photovoltaic and Hydro system
	Solar Off-Grid Entrepreneur	3	Module 1 Government Scheme and Subsidy Module 2 Costing of Solar components and selection criteria Module 3 Business development for solar energy customers

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Annexure-C

List of Skill courses (Basket) approved

Sl. No.	Course Title	Credit
1	Introduction to Quantum Computing	4
2	Organic Farming	4
3	Mushroom Farming	4
4	Hydroponics Technology	4
5	Poultry Farming	4
6	Dairy Farming	4
7	Vermicomposting Farming	4
8	Transformer Manufacturing, Repairing and Maintenance	4
9	Electrical Installation	4
10	Repair and Maintenance of Home Appliances	4
11	Refrigeration and air conditioning	4
12	Super critical Co2 plant operation	4
13	Business Plan Preparation	4
14	Composite fabrication practice	4
15	Powder coating practice	4
16	Farm appliances operation	4
17	Bio fertilisers preparation	4
18	PCB designing & fabrication	4
19	Introduction to Block Chain Technology	4
20	Introduction to Nutraceuticals	4
21	Introduction to NLP	4
22	Introduction to Computational Biology	4
23	Product Life Cycle Management through Gate process	4
24	New material development with Biovia	4

25	Spectral image processing using Python	4
26	Satellite data processing	4
27	Working with Graphene and carbon fibre	4
28	Adobe Tools and Illustrations	4
29	Digital Painting	4
30	Computer Installation and Maintenance	4

List of Domain courses approved

Sl. No	Domain Course Title	Credit	(T+P+P)
1	Industrial Automation	24	5+9+10
2	Operation & Maintenance of Electrical Grid System & Transformers	24	6+14+4
3	Embedded System Design	18	3+9+6
4	Renewable Energy Applications	22	4+8+10

List of value added courses approved

Sl. No	Course Title	Hrs. of input
1	Natural Resource Management	30 Hours
2	Research Methodology and IPR	30 Hours
3	Urban Gardens using Hydroponics	30 Hours
4	Introduction to Python	30 Hours
5	MATLAB	30 Hours
6	Waste to Wealth	30 Hours
7	Technical Writing	30 Hours
8	Organic Farming	30 Hours
9	Disaster Management	30 Hours
10	Ethical Hacking	30 Hours
11	Web Development	30 Hours
12	Food & Nutrition	30 Hours
13	Clinical Practice	30 Hours
14	Innovation Management	30 Hours
15	Financial Literacy	30 Hours
16	Yoga and Meditation	30 Hours
17	Steps for Career Plan	30 Hours
18	MS Excel Basics	30 Hours
19	Quality Analysis	30 Hours
20	Ethical Writing Practice	30 Hours
21	Ansys	30 Hours
22	Video Making for Youtubers	30 Hours

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CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Engineering & Technology
Department of EEE

Time: 11.00 a.m.
Venue: Virtual Mode

Date: 11.07.2020

Board of Studies Meeting

Attendance Sheet

Sl. No	Name of the BoS Member(Internal Faculty and External Resource)	Designation	Signature
1.	Prof. (Dr.) Radhakant Padhi	Honorary Provost, Centurion University of Technology and Management	Attended online
2.	Prof. (Dr.) Jharna Majumdar	Prof. of Eminenc, Centurion University of Technology and Management	Attended online
3.	Prof. Jagannath Padhi	Director, Centurion University of Technology and Management	Attended online
4.	Prof. (Dr.) Prasant Kumar Mohanty	Dean, SoET, Centurion University of Technology and Management	Attended online
5.	Prof. (Dr.) Ashish Ranjan Dash	Associate Dean, SoET, Centurion University of Technology and Management	Attended online
6.	Prof. (Dr.) Sudhansu Kumar Samal	HOD, EEE, Centurion University of Technology and Management	Attended online
7.	Prof. (Dr.) P. K. Hota	Department of Electrical, VSSUT, Burla	Attended online
8.	Mr. P. K. Pradhan	Ex- Director (Commercial), GRIDCO; Ex-CEO, WESCO	Attended online

Dean, Academics
Dean - Academic
Centurion University of Technology & Management

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CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Engineering & Technology

Department of Mechanical Engineering

Date: 11/07/2020

MINUTES OF BOARD OF STUDIES MEETING held on 11/07/2020

Virtual Mode

Time: 11.00 a.m.

The Board of Studies (BoS) meeting of Department of Mechanical Engineering was held on 11/07/2020 at 11 a.m. in the Board Room, CUTM Bhubaneswar. The following are the members:

1. Dr. Srinivasa Rao Perla, Global training Head-Cyient
2. Dr. U. Chandrasekhar, WIPRO 3D
3. Prof. S. S. Mohapatra, NIT Rourkela
4. Dr. A.M Mohanty, Pro VC, CUTM
5. Dr. R.C Mohanty, Professor, SoET, Mechanical Engg.
6. Prof. Prajna Paramita Debata, HoD, Mechanical Engg.
7. Mr. Hari Krishna, Final year student (placed in Byjus through campus recruitment)
8. Mr. Saubhagya Ranjan Parida, Alumni (Working in Federal Bank)
9. Mr. Abhisek Chinara, Alumni (Working in Tata Motors)
10. Mr. Rama Mohan, Parent

The Chairperson welcomed all members of the Board and briefly outlined the purpose of the meeting. Thereafter, the Head of the Department of Mechanical Engineering presented the achievements and improvements of the department in the areas of academics, research, consultancy and infrastructure.

The following agenda items were taken up subsequently:

Agenda 1: **The minutes of the last meeting of the BoS held on 22/06/2019 were confirmed.**

Agenda 2: **Credits distributions, courses and baskets layouts, and new inclusions of Smart Basket (Basket-III) Interdisciplinary domains.**

The HoD, Mechanical Engg. gave a presentation on the feedback received on curriculum outlining the suggestions made by the various stakeholders. Based on this , the Board accepted and approved a few suggestions for course revision to be implemented from the Academic Year 2020-21.

- The Smart stack to be delivered by people from the industry and/or enabling internal faculty members to deliver the industry aligned courses.
- The strategy of keeping at least twenty percent online delivery of courses in the curriculum was appreciated by everyone.

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- It was suggested to have more MOUs with academia and industry for effective rollout.
- Everyone appreciated having the "Job Readiness" course of Basket-II as compulsory across branches and also the delivery plan of the course.
- For two courses, syllabus is to be trimmed off. To start Masters Course in Additive manufacturing with help of Industry professionals.
- Present final year student welcomed Job readiness component and domain course content.
- List of new courses added in *(Annexure A.)*
- The briefing comprised of credits distributions, courses and baskets layouts, and new inclusions such as the Smart Basket (Basket-III) Interdisciplinary domains etc.
- Discussion on modification of syllabus of Basket- 4,5
- The domain course should be taught in practice and project mode.

***Agenda 3*: Discussion on modification of syllabus of Basket- 4, 5**

The Board approved the changes suggested in the Domain -Manufacturing (Conventional, CNC and Additive), Domain - Welding and Inspection, Domain -Automobile Engineering, Domain -Computational Fluid Dynamics as per the latest Software and technology being used by the industry. List of existing courses where syllabus was changed in (*Annexure B)*

***Agenda 4:* Inclusion of courses on life skills and value addition**

It was suggested that students take up the various courses offered by the University in the areas of life skills and value addition for their overall improvement and well being.The same was agreed upon and approved by the Board members.*(Annexure C)*

The HoD, Department of Mechanical Engg. extended sincere thanks to all members of the Board.

The meeting ended with a vote of thanks to the Chair.

Dean, SoET

Dean, SOET
Centurion University of Technology & Management
Odisha

Dean, Academics

Dean - Academic
Centurion University of Technology & Management
Bhubaneswar, Khurda, Odisha-752050

HoD, Mechanical Engineering

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Annexure-A

List of new courses added

Sl. No	Course Title	Type(Skill/Employability/Entrepreneurship)	Credit
1	Computer Aided Drafting	Skill and Employability	3
2	Product Design and Development	Skill and Employability	2
3	Reverse Engineering and Rapid Prototype	Skill and Employability	4
4	Product Life Cycle Management	Skill and Employability	2
5	Manufacturing Process-process planning and Heat Treatment	Skill and Employability	3
6	Material in product design and development	Skill and Employability	2
7	Computer Aided Engineering	Skill and Employability	3
8	Quality Assurance	Skill and Employability	2
9	Applied Ergonomics	Skill and Employability	2
10	Computer Aided Manufacturing	Skill and Employability	2
11	CNC Programming & CNC Machining	Skill and Employability	2
12	Design of Tools, Jigs and Fixtures	Skill and Employability	3
13	Advance Metrology	Skill and Employability	2
14	Thermodynamics	Skill and Employability	3
15	Fluid Mechanics with Finite Volume Method	Skill and Employability	3
16	Hydraulic Machinery	Skill and Employability	2
17	Theory of Machines	Skill and Employability	3
18	Heat Transfer with FDM/FVM	Skill and Employability	3
19	Theories of Failure Using Finite Element Analysis	Skill and Employability	4
20	Optimization Techniques	Skill and Employability	2
21	Programming in Java (Same as Java Technologies)	Skill and Employability	3
22	Database Management Systems	Skill and Employability	3

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Annexure-B

List of existing courses where syllabus was changed

Basket/ Semester	Name of Course	No. of Modules/Topics revised	Revised Modules/Topics (details)
1	Domain - Manufacturing (Conventional, CNC and Additive)	1	Course type was changed with little modification in content.
2	Domain - Welding and Inspection	1	Course type was changed with little modification in content.
3	Domain - Automobile Engineering	2	Some practices have been included
4	Domain - Computational Fluid Dynamics	1	Course name was been changed with little modification in content.

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Annexure-C

List of Skill courses

Sl. No	Course Title	Credit	(T+P+P)
1	Introduction to Quantum Computing	4	0+3+1
2	Organic Farming	4	0+3+1
3	Mushroom Farming	4	0+3+1
4	Hydroponics Technology	4	0+3+1
5	Poultry Farming	4	0+3+1
6	Dairy Farming	4	0+3+1
7	Vermi composting Farming	4	0+3+1
8	Transformer Manufacturing, Repairing and Maintenance	4	0+3+1
9	Electrical Installation	4	0+3+1
10	Repair and Maintenance of Home Appliances	4	0+3+1
11	Refrigeration and air conditioning	4	0+3+1
12	Super critical Co2 plant operation	4	0+3+1
13	Business Plan Preparation	4	0+3+1
14	Composite fabrication practice	4	0+3+1
15	Powder coating practice	4	0+3+1
16	Farm appliances operation	4	0+3+1
17	Bio fertilizers preparation	4	0+3+1
18	PCB designing & fabrication	4	0+3+1
19	Introduction to Block Chain Technology	4	0+3+1
20	Introduction to Nutraceuticals	4	0+3+1
21	Introduction to NLP	4	0+3+1
22	Introduction to Computational Biology	4	0+3+1
23	Product Life Cycle Management through Gate process	4	0+3+1
24	New material development with Biovia	4	0+3+1
25	Spectral image processing using Python	4	0+3+1
26	Satellite data processing	4	0+3+1
27	Working with Graphene and carbon fibre	4	0+3+1
28	Adobe Tools and Illustrations	4	0+3+1
29	Digital Painting	4	0+3+1
30	Computer Installation and Maintenance	4	0+3+1

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List of Domain courses

Sl. No	Domain Course Title	Credit	(T+P+P)
1	Composite Design and Manufacturing	24	6+12+6

List of value added courses

Sl. No	Course Title	Hrs. of input
1	Natural Resource Management	30
2	Research Methodology and IPR	30
3	Urban Gardens using Hydroponics	30
4	Introduction to Python	30
5	MATLAB	30
6	Waste to Wealth	30
7	Technical Writing	30
8	Organic Farming	30
9	Disaster Management	30
10	Ethical Hacking	30
11	Web Development	30
12	Food & Nutrition	30
13	Clinical Practice	30
14	Innovation Management	30
15	Financial Literacy	30
16	Yoga and Meditation	30
17	Steps for Career Plan	30
18	MS Excel Basics	30
19	Quality Analysis	30
20	Ethical Writing Practice	30
21	Ansys	30
22	Video Making for Youtubers	30

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CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Engineering & Technology

Department of Mechanical Engineering

Time: 11.00 a.m. **Date: 11/07/2020**

Venue: Board Room, CUTM, Bhubaneswar

Board of Studies Meeting
Attendance Sheet

Sl. No.	Name of the BOS Member(Internal Faculty and External Resource)	Designation	Signature
1	Prof. S.S. Mohapatra	Professor, NIT Rourkela	Attended Online
2	Dr. A.M Mohanty	PRO VC,CUTM	Attended Online
3	Dr. P.K. Mohanty	Dean Academic	Attended Online
4	Dr. R.C Mohanty	Professor,SOET,Mechanical	Attended Online
5	Prof. Prajna Paramita Debata	HOD, Mechanical	Attended Online
6	Mr. Hari Krishna	Final year student (placed in Byjus through campus recruitment)	Attended Online
7	Saubhagya Ranjan Parida	Alumni(Working in Federal Bank)	Attended Online
8	Abhisek Chinara	Alumni(Working in Tata Motors)	Attended Online
9	Mr. Rama Mohan	Parent	Attended Online

Dean, SoET
Dean, SOET
Centurion University of Technology & Management
Odisha

Dean, Academics
Dean - Academic
Centurion University of Technology & Management
Bhubaneswar, Khurda, Odisha-752050

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CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Agricultural and Bio-Engineering

Department of Agricultural Engineering

Date: 11/07/2020

MINUTES OF BOARD OF STUDIES MEETING held on 11/07/2020

Virtual Mode

Time: 12.00 p.m.

The Board of Studies (BoS) meeting of Department of Agricultural Engineering was held on 11/07/2020 at 12 p.m. in online mode (due to the continuing Covid-19 Pandemic). The following members are present during the meeting.

1. Dr. Prasanta Kumar Mohanty, Dean Academics, CUTM
2. Dr. Sivala Kumar, Dean SoABE, CUTM
3. Dr. Khalid Khan, Retd Dean, OUAT
4. Mr. Bharat Agrawal, CEO, ABS KRISHI UDYOG, Odisha
5. Dr. Gitanjali Behera, HOD, Agricultural Engineering, CUTM
6. Dr. Prasanta Kumar Choudhury, Head Dairy Technology, SoABE, CUTM
7. Dr. Bhisma Narayan Rath, Head Phytopharmaceuticals, SoABE, CUTM
8. Dr. S. P. Nanda, Dean Administration, MSSSoA, CUTM
9. Dr. Devendra Reddy, Dean Academics, MSSSoA, CUTM

Dean SoABE have given a presentation on course structure of Agriculture Engineering. There was a thoroughly discussion on the syllabus of Agricultural Engineering and the following feedback was suggested by the Experts.
The following agenda items were taken up subsequently:

Agenda 1: **The minutes of the last meeting of the BoS held on 22/06/2019 were confirmed.**

Agenda 2: Revision of Curriculum for the programme B.Tech AG

- It was discussed and decided to follow the CBCS structure of 5 Basket systems of Syllabus of School of Engineering & Technology in the B. Tech Agriculture programme.
- Dr. Khalid Khan: A lot of emphasis has been given to Foundation course which will help the foundation knowledge building of Agricultural Engineering students. Now Agricultural engineering is going to play a vital role for post-COVID scenario. The curriculum designed by the Centurion University will surely help students for preparing for the future. The new syllabus contains all of core courses and foundation courses. One core agricultural engineering course is missing in Basket-4.B that is Post-harvest engineering of cereal, pulses and oil seeds which should be a compulsory course for students doing graduation in agricultural Engineering. Other courses like Engg. Properties of Agricultural Produce, Agricultural Structures & Environmental Control which involves so many components will be difficult to complete the course within 1-0-1 credit hour. Or else, the course has

been designed as per academic and industry's needs. Dean SoABE clarified the experts that the Course titled Post-harvest engineering of cereal, pulses and oil seeds is included in the domain course. Also, the courses like Engg. Properties of Agricultural Produce, Agricultural Structures & Environmental Control can be completed in 1-0-1 credit as the session plan has been designed in courseware as per the time allotment and will be justify all components present in the syllabus.

- Industry Expert: The department have taken up everything in the course syllabus to graduate a best student from the University. The student should be exposed to more field visit and industrial visit, so that the outcome will be best. Dean SoABE explained that we have already taking our students to field and industry visit to have a better practical understanding of the subjects.

***Agenda 3*: Discussion on modification of syllabus of Basket- 4, 5**

The Board approved the changes suggested in the core courses. List of new courses is given in Annexure A and existing courses where syllabus was changed in *(Annexure B)*

***Agenda 4:* Inclusion of courses on life skills and value addition**

It was suggested that students take up the various courses offered by the University in the areas of life skills and value addition for their overall improvement and well being.The same was agreed upon and approved by the Board members.*(Annexure C)*

The Dean, SoABE, extended sincere thanks to all members of the Board.

The meeting ended with a vote of thanks to the Chair.

Dean, SoABE

Dean, Academics

Dean - Academic
Centurion University of Technology & Management
Bhubaneswar, Khurda, Odisha-752050

HoD, Agricultural Engineering

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Annexure-A

List of new courses added

Sl. No	Course Title	Type(Skill/Employability/Entrepreneurship)	Credit
1	Differential Equations and Laplace Transformation	Skill	3
2	Linear Algebra & Vector Calculus	Skill	3
3	Complex Analysis, Numerical Methods	Skill	3
4	Discrete Mathematics	Skill	3
5	Probability & Statistics	Skill	3
6	Mechanics for Engineers	Skill	3
7	Optics and Optical Fibres	Skill	3
8	Applied Analytical Chemistry	Skill	3
9	Applied Engineering Materials	Skill	3
10	Environmental Studies	Entrepreneurship	2
11	Optimisation Techniques	Employability	2
12	Engineering Economics and Costing	Entrepreneurship	3
13	Project Management	Entrepreneurship	3
14	Gender, Human Rights and Ethics	Employability	3
15	Climate Change, Sustainability and Organisation	Employability	3
16	Job readiness	Skill	6
17	Industrial IOT and Automation	Employability	6
18	Data Analysis and Visualisation using Python	Entrepreneurship	4
19	Machine Learning using Python	Entrepreneurship	4
20	Robotic automation with ROS and C++	Employability	4
21	Design Thinking	Employability	2
22	System Integration with DYMOLA	Employability	2
23	Smart Engineering Project (G2M)	Employability	3
24	Theory of failure analysis using FPA	Employability	4
25	Computer Aided Engineering	Employability	3
26	Theory of Machine	Employability	3
27	Heat Transfer with FVM	Entrepreneurship	3
28	Fluid Mechanics with FVM	Skill	3
29	Hydraulic machinery	Skill	2
30	Thermodynamics	Employability and skill development	3
31	Electrical Machines Operation and Control	Employability and skill development	4
32	Digital Measurement & Instrumentation	Employability	3

33	Optimisation Techniques	Skill	2
34	Geotechnical Engg.	Employability	3
35	Design of structures	Skill	4
36	Digital Signal & Image Processing	Skill	3
37	Quantity Estimation and Costing	Employability	3
38	Sensor, Actuators and Robot Operating Systems	Skill	4
39	Farm Machinery Design	Employability	3
40	Piloting a Drone	Employability	3
41	PLM using Dassault Tools	Skill	3
42	Testing of Farm Machinery	Employability	3
43	Project and internship	Skill	10
44	Rainwater Harvesting and Artificial Recharge	Employability	3
45	Integrated watershed management	Employability	3
46	Sustainable Watershed	Employability	3
47	R programming in watershed hydrology	Skill	3
48	Modelling and Simulation of Watershed Processes	Employability	3
49	Geo-spatial application in watershed management	Employability	3
50	Project and internship	Employability	10
51	Processing Technology of Cereals and Millets	Employability	3
52	Processing Technology of Legumes and Oilseeds	Skill	3
53	Processing Technology of Fruits, Vegetables, Spices and Condiments	Skill	3
54	Product Development and Packaging Technologies	Skill	3
55	Food Standards and Regulations and HACCP Systems	Employability	3
56	Sensory Evaluation and Nutritional Labelling of Foods	Skill	3
57	AELP Linked Project and Internship	Employability	11

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Annexure-B

List of existing courses where syllabus was changed

Basket/ Semester	Name of Course	No. of Modules/Topics revised	Revised Modules/Topics (details)
1	Post-Harvest Engineering of Horticultural Crops	1	Credits modified
2	Principles of Agronomy	1	Aligned with Fundamentals of Agronomy
3	Principles of Soil Science	1	Aligned with Fundamentals of Soil Science
4	Principles of Horticultural Crops and Plant Protection	1	Aligned with Fundamentals of Horticulture
5	Soil and Water Conservation Engineering and Water Harvesting and Soil Conservation Structures	2	The both course was merged into Soil-Water Conservation Engineering and Structure, the credit was modified to 4 credits

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Annexure-C

List of Skill courses

Sl. No	Course Title	Credit	(T+P+P)
1	Introduction to Quantum Computing	4	0+3+1
2	Organic Farming	4	0+3+1
3	Mushroom Farming	4	0+3+1
4	Hydroponics Technology	4	0+3+1
5	Poultry Farming	4	0+3+1
6	Dairy Farming	4	0+3+1
7	Vermi composting Farming	4	0+3+1
8	Transformer Manufacturing, Repairing and Maintenance	4	0+3+1
9	Electrical Installation	4	0+3+1
10	Repair and Maintenance of Home Appliances	4	0+3+1
11	Refrigeration and air conditioning	4	0+3+1
12	Super critical Co2 plant operation	4	0+3+1
13	Business Plan Preparation	4	0+3+1
14	Composite fabrication practice	4	0+3+1
15	Powder coating practice	4	0+3+1
16	Farm appliances operation	4	0+3+1
17	Bio fertilizers preparation	4	0+3+1
18	PCB designing & fabrication	4	0+3+1
19	Introduction to Block Chain Technology	4	0+3+1
20	Introduction to Nutraceuticals	4	0+3+1
21	Introduction to NLP	4	0+3+1
22	Introduction to Computational Biology	4	0+3+1
23	Product Life Cycle Management through Gate process	4	0+3+1
24	New material development with Biovia	4	0+3+1
25	Spectral image processing using Python	4	0+3+1
26	Satellite data processing	4	0+3+1
27	Working with Graphene and carbon fibre	4	0+3+1
28	Adobe Tools and Illustrations	4	0+3+1
29	Digital Painting	4	0+3+1
30	Computer Installation and Maintenance	4	0+3+1

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List of Domain courses

Group A: Agriculture/ Agri Engineering/Phyto pharma/ Dairy tech/ fisheries/ biological sciences				
Group B: All other engineering/physical and mathematical science/vocational or skills				
Group C: Pharmacy and allied Health				
Group D: Management & media and communication				
Sl. No.	**Name of the Domain**	**Credit**	**Category**	**Year of introduction**
1	Advance Video Processing, Computer Vision and Machine Learning	30	A/B/D	2020
2	Aerial Survey and Remote Sensing Applications	18	A/B	2020
3	Agri Business Management	23	A/B/D	2020
4	Architectural and Structural Design	20	A/B	2020
5	Business Analytics	21	A/B/D	2020
6	Chip Design and Fabrication using VLSI	18	B	2020
7	Commodity and Food Storage	29	A/B/D	2020
8	Communication Systems	18	B	2020
9	Composite Design and Manufacturing	24	A/B	2020
10	Computational Fluid Dynamics	20	A/B	2020
11	Cyber Security	24	B	2020
12	Dairy Processing and Development	28	A/B	2020
13	Fish Processing Technology	29	A/B	2020
14	Food Processing	29	A/B/D	2020
15	Gaming and Immersive Learning (AR & VR)	20	A/B/D	2020
16	Go-To-Market	22	A/B/D	2020
17	Health Care Assistancy	25	A/B	2020
18	Manufacturing Execution System	18	B	2020
19	Nutraceuticals	29	A/C	2020
20	Protected Horticulture	29	A/B	2020

21	Renewable Energy Applications	22	A/B	2020
22	Smart Agriculture	29	A/B	2020
23	Smart Farm Machinery	28	A/B	2020
24	Soil and Water Conservation through Watershed	28	A/B	2020

List of value added courses

Sl. No	Course Title	Hrs. of input
1	Natural Resource Management	30
2	Research Methodology and IPR	30
3	Urban Gardens using Hydroponics	30
4	Introduction to Python	30
5	MATLAB	30
6	Waste to Wealth	30
7	Technical Writing	30
8	Organic Farming	30
9	Disaster Management	30
10	Ethical Hacking	30
11	Web Development	30
12	Food & Nutrition	30
13	Clinical Practice	30
14	Innovation Management	30
15	Financial Literacy	30
16	Yoga and Meditation	30
17	Steps for Career Plan	30
18	MS Excel Basics	30
19	Quality Analysis	30
20	Ethical Writing Practice	30
21	Ansys	30
22	Video Making for Youtubers	30

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CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Agricultural & Bio-Engineering

Department of Agricultural Engineering

Time: 12.00 p.m. **Date: 11/07/2020**

Venue: Board Room, CUTM, Bhubaneswar

Board of Studies Meeting
Attendance Sheet

Sl. No.	Name of the BOS Member(Internal Faculty and External Resource)	Organization	Signature
1	Dr. Supriya Pattanaik	CUTM	Attended Online
2	Dr. Anita Patra	CUTM	Attended Online
3	Dr. P.K. Mohanty	Dean, Academics	Attended Online
4	Dr. Sivala Kumar	Dean, SOABE	Attended Online
5	Dr. Khalid Khan	Retd. Dean, CAET, OUAT	Attended Online
6	Mr Bharat Agarwal	CEO, ABS KRISHI UDYOG, Odisha	Attended Online
7	Dr. Gitanjali Behera	CUTM	Attended Online
8	Dr. Prasant Kumar Choudhury	CUTM	Attended Online
9	Dr. SP Nanda	CUTM	Attended Online
10	Dr. Devendra Reddy	CUTM	Attended Online
11	Mr. Bhisma Narayan Rath	CUTM	Attended Online

Dean, SoABE

Dean, Academics
Dean - Academic
Centurion University of Technology & Management
Bhubaneswar, Khurda, Odisha-752050

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CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Forensic Sciences

Date: 14.07.2020

MINUTES OF BOARD OF STUDIES MEETING held on 11.07.2020

Venue: Virtual Mode

Time: 11.00 a.m.

The Board of Studies (BoS) meeting of School of Forensic Sciences was held on 11.07.2020 at 11 a.m. in Virtual mode through Zoom. The following members were present:

1. Dr. Gurudutta Pattnaik, Principal, SoPLS
2. Dr. Amulyaratna Behera, Assosciate Professor, SoFS & SoPLS
3. Mr. Mahesh Patnaik, Director, HVET
4. Mr. Sisir Panigrahy, Director, HVET
5. Dr. Aruna Kumar Swain, Assistant Director, SFSL Rasulgarh
6. Mr. Gyanranjan Panigrahy, Assistant Professor, BJB College
7. Ms. Shruti Rajwar, Assistant Professor, SoFS
8. Ms. Varsha Singh, Assistant Professor, SoFS

The Chairperson welcomed all members of the Board and briefly outlined the purpose of the meeting. Thereafter, the Dr. Gurudutta Pattnaik, **Principal, SoPLS and SoFS** presented acheivements and improvements of the department in the areas of academics and infrastructure.

The following agenda items were taken up subsequently:

Agenda 1: **The minutes of the last meeting of the BoS held on 30-06-2019 were confirmed.**

Agenda 2: **Discussion and approval on any revision required in the Curriculum of M.Sc. Forensic Science, M.Sc. Cyber Security & Digital Forensics and B.Sc. Forensic Science.**

- The Principal, SoFS gave a presentation on the feedback received on curriculum outlining the suggestions made by the various stakeholders.
- Syllabus of B.Sc. Forensic Science *(Annexure-I)*, M.Sc. Forensic Science *(Annexure-II)* and M.Sc. Cyber Security and Digital Forensics *(Annexure-III)* was revised.
- Board decided to merge Laboratory courses of M.Sc. Forensic Science with their respective Theory Cousrses.
- Board approved the courses to be taught in upcoming semesters.

Agenda 3: **Inclusion of courses on life skills and value addition**

- It was suggested that students take up various courses offered by the University in the areas of life skills and value addition for their overall improvement and well being. The same was agreed upon and approved by the Board members. *(Annexure-4)*

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Dr. Gurudutta Pattnaik, Principal, SoFS & SoPLS extended his sincere thanks to all members of the Board. The meeting ended with a vote of thanks to the Chair.

14/07/20

Principal, SoPLS & SoFS

Dean, Academics
Dean - Academic
Centurion University of Technology & Management
Bhubaneswar, Khurda, Odisha-752050

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ANNEXURE-I

- Revised courses of B.Sc. Forensic Science

Sl. No	Course Title	Type(Skill/Employability/Entrepreneurship	Credit
	Semester I		
1.	CUTM1659 - Basics of Forensic	Skill	6
2.	CUTM1660 - Crime and Society	Skill	6
3.	Ability enhancement Course	Skill	2
4.	Generic Elective	Skill	6
	Semester II		
5.	CUTM1661 - Criminal Law	Skill	6
6.	CUTM1662 - Forensic Psychology	Skill	6
7.	Ability enhancement Course	Skill	2
8.	Generic Elective	Skill	6
	Semester III		
9.	CUTM1663 -Forensic Dermatoglyphics	Employability & Skill	6
10.	CUTM1664 - Technological Methods in Forensic	Employability & Skill	6
11.	CUTM1665 - Criminalistics	Employability & Skill	6
12.	Ability Enhancement Elective (Skill Based) course	Skill	2
13.	Generic Elective	Skill	6
	Semester IV		
14.	CUTM1666-Forensic Chemistry	Employability & Skill	6
15.	CUTM1667 - Questioned Documents	Employability,	
16.	CUTM1668 - Forensic Biology	Employability & Skill	6
17.	Ability Enhancement Elective (Skill Based) course	Skill	2
18.	Generic Elective	Skill	6
	Semester V		
19.	CUTM1669 - Forensics Ballistics	Employability & Skill	6
20.	CUTM1670 - Forensic Toxicology	Employability & Skill	6
21.	Discipline Specific Elective (DSE)	Employability & Skill	6
22.	Discipline Specific Elective (DSE)	Employability & Skill	6
	Semester VI		
23.	CUTM1671 - Forensic Anthropology	Employability & Skill	6
24.	CUTM1672 - Forensic Medicine	Employability & Skill	6
25.	Discipline Specific Elective (DSE)	Employability & Skill	6
26.	Discipline Specific Elective (DSE)	Employability & Skill	6
	ABILITY ENHANCEMENT COURSE		
27.	CUTM1673 - English	Skill	2
28.	CUTM1010 - Environmental Science	Skill	2
	ABILITY ENHANCEMENT ELECTIVE (SKILL BASED) COURSE		
29.	CUTM1675 - Introduction to Biometry	Skill	2
30.	CUTM1676 - Handwriting Identification and Recognition	Skill	2
	DISCIPLINE SPECIFIC ELECTIVE (DSE COURSES)		
31.	CUFS2410 - Digital Forensics	Employability & Skill	6

32.	CUFS2411 - Economic Offences	Employability & Skill	6
33.	CUFS2412- Forensic Serology	Employability & Skill	6
34.	CUFS2413 - Accident Investigations	Employability & Skill	6
35.	CUFS2414 - DNA Forensics	Employability & Skill	6
36.	CUFS2415 - Audio Recognition and Video Analysis	Employability & Skill	6
37.	CUFS2416 - Explosive Analysis and Post Blast Investigation	Employability & Skill	6
38.	CUFS2417 - Quality control and Quality Assurance	Employability & Skill	6
GENERIC ELECTIVE (GE) **Subjects From other Disciplines (One each in Semester I, II, III, IV)**			

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ANNEXURE-II

- Revised courses of M.Sc. Forensic Science

Sl. No	Course Title	Type (Skill/Employability /Entrepreneurship	Credit
Semester I			
	CUTM1634 – Introduction to Forensics, Psychology, Law and Statistics	Skill	6
	CUTM1635 - Instrumental Techniques	Skill	6
	CUTM 1636 - Crime Scene Management and Forensic Physics	Skill & Employability	6
	CUTM1637 - Fingerprints and Questioned Documents	Skill, Employability & Entrepreneurship	6
	CUTM1638 - Business Communication	Skill	2
Semester II			
	CUTM1639 - Quality Management, Narcotic Drugs, Explosives, and Forensic Chemistry	Skill	6
	CUTM1640 - Forensic Biology and Forensic Medicine	Skill	6
	CUTM1641 - Forensic Serology and DNA Profiling	Skill & Employability	6
	CUTM1642 - Forensic Toxicology and Pharmacology	Skill & Employability	6
	CUTM1643 - Forensic Ballistics and Computer Forensics	Skill & Employability	6
Semester III			
	CUTM1656 - Assignment	Skill	06
	CUTM1657 - Seminar	Skill	06
SPECIALIZATION IN FORENSIC CHEMISTRY AND TOXICOLOGY			
	CUTM1647 - Pharmacology and Pharmaceutical Drug Analysis	Employability, Skill	6
	CUTM1648 - Concepts of Toxicology	Skill & Employability	6
	CUTM1649 - Modern and Applied Analytical Forensic Chemistry	Skill & Employability	6
SPECIALIZATION IN FORENSIC BIOLOGY			
	CUTM1644 - Molecular Biology and Genetics	Skill & Employability	6
	CUTM1645 - Biotechnology in Pharmaceutical Sciences	Skill & Employability	6
	CUTM1646 - Environmental Biotechnology	Skill & Employability	6
SPECIALIZATION IN FORENSIC PHYSICS			
	CUTM1650 - Advances in Physical Techniques	Employability	6
	CUTM1651 - Concepts of Conventional and Modern Ballistics	Employability	6
	CUTM1652 - Audio Recognition and Video Analysis	Employability	6
SPECIALIZATION IN FINGERPRINTS AND QUESTIONED DOCUMENT			

	CUTM1653 - Modern Trends in Fingerprint Sciences	Employability	6
	CUTM1654 - Questioned Document and Forensic Accounting	Skill, Employability & Entrepreneurship	6
	CUTM1655 - Forensic Photography and Biometric Traits	Skill & Employability	6
Semester IV			
	CUTM1658 - Project	Skill, Employability & Entrepreneurship	12

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ANNEXURE - III

- Revised courses of M.Sc. Cyber Security and Digital Forensics

Sl. No	Course Title	Type(Skill/Employability /Entrepreneurship	Credit
	Semester I		
1.	CUTM1618 - Principles of Information Security	Employability	4
2.	CUTM1619- Digital Forensics	Employability	6
3.	CUTM1620- Computer Networks	Employability & Skill	6
4.	CUTM1621- Cyber Crime & Investigations	Employability & Skill	4
5.	CUTM1622- Intellectual Property Rights	Employability	4
	Semester II		
6.	CUTM1623 - Number theory & Cryptography	Employability & Skill	4
7.	CUTM1624- Advanced Information Security	Employability & Skill	4
8.	CUTM1625 - Cyber Forensics	Employability & Skill	6
9.	CUTM1626- System and Network Security	Employability & Skill	6
10.	CUTM1627- Cyber Law	Entrepreneurship	4
	Semester III		
11.	CUTM1628- Mobile Security Analysis	Entrepreneurship	6
12.	CUTM1629- IT Governance, Risk and Compliance	Entrepreneurship	4
13.	CUT1630- Business Continuity Planning (BCP) And Disaster Recovery (Dr)	Skill	4
14.	CUTM1631 - Penetration Testing & Vulnerability Assessment	Employability	6
15.	CUTM1632- Digital Frauds	Employability	4
	Semester IV		
16.	CUTM1633 - Project/Dissertation	Employability	24

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ANNEXURE – IV

- Skill courses approved by BOS and to be offered in 2020-21

Sl. No.	Course Title	Credit
1	Introduction to Quantum Computing	4
2	Organic Farming	4
3	Mushroom Farming	4
4	Hydroponics Technology	4
5	Poultry Farming	4
6	Dairy Farming	4
7	Vermicomposting Farming	4
8	Transformer Manufacturing, Repairing and Maintenance	4
9	Electrical Installation	4
10	Repair and Maintenance of Home Appliances	4
11	Refrigeration and air conditioning	4
12	Super critical Co2 plant operation	4
13	Business Plan Preparation	4
14	Composite fabrication practice	4
15	Powder coating practice	4
16	Farm appliances operation	4
17	Bio fertilisers preparation	4
18	PCB designing & fabrication	4

- Value added courses approved by BOS in 2020-21

Sl. No.	**Course title**	**Duration of course**
1	Natural Resource Management	30 Hours
2	Research Methodology and IPR	30 Hours
3	Urban Gardens using Hydroponics	30 Hours
4	Introduction to Python	30 Hours
5	MATLAB	30 Hours
6	Waste to Wealth	30 Hours
7	Technical Writing	30 Hours
8	Organic Farming	30 Hours
9	Disaster Management	30 Hours
10	Ethical Hacking	30 Hours
11	Web Development	30 Hours
12	Food & Nutrition	30 Hours
13	Clinical Practice	30 Hours
14	Innovation Management	30 Hours
15	Financial Literacy	30 Hours

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16	Yoga and Meditation	30 Hours
17	Steps for Career Plan	30 Hours
18	MS Excel Basics	30 Hours
19	Quality Analysis	30 Hours
20	Ethical Writing Practice	30 Hours
21	Ansys	30 Hours
22	Video Making for Youtubers	30 Hours

Centurion University

CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Forensic Sciences

Time: 11.00 a.m.

Date: 11/07/2020

Venue: Virtual Mode

Board of Studies Meeting

Attendance Sheet

Sl. No.	Name of the BOS Member(Internal Faculty and External Resource)	Designation	Signature
1	Dr. Gurudutta Pattnaik	Principal, SoPLS & SoFS, CUTM	Attended Online
2	Mr. Mahesh Patnaik	Director, SoPLS and SoFS, CUTM	Attended Online
3	Mr. Gyanaranjan Panigrahy	Assistant Professor, BJB autonomous college.	Attended Online
4	Dr. Amulyaratna Behera	Assosciate Professor, SoFS & SoPLS	Attended Online
5	Dr. Aruna Kumar Swain	Assistant Director, SFSL Rasulgarh	Attended Online
6	Mr. Sisir Panigrahy,	Director, HVET	Attended Online
7	Ms. Shruti Rajwar	Assistant Professor, School of Forensic Sciences	Attended Online
8	Ms. Varsha Singh	Assistant Professor, School of Forensic Sciences	Attended Online

Principal, SoPLS and SoFS

Dean, Academics

Dean - Academic
Centurion University of Technology & Management
Bhubaneswar, Khurda. Odisha-752050

Centurion University

CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Forensic Sciences

Date: 14.07.2020

MINUTES OF BOARD OF STUDIES MEETING held on 11.07.2020

Venue: Virtual Mode

Time: 11.00 a.m.

The Board of Studies (BoS) meeting of School of Forensic Sciences was held on 11.07.2020 at 11 a.m. in Virtual mode through Zoom. The following members were present:

1. Dr. Gurudutta Pattnaik, Principal, SoPLS
2. Dr. Amulyaratna Behera, Assosciate Professor, SoFS & SoPLS
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4. Mr. Sisir Panigrahy, Director, HVET
5. Dr. Aruna Kumar Swain, Assistant Director, SFSL Rasulgarh
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8. Ms. Varsha Singh, Assistant Professor, SoFS

The Chairperson welcomed all members of the Board and briefly outlined the purpose of the meeting. Thereafter, the Dr. Gurudutta Pattnaik, **Principal, SoPLS and SoFS** presented acheivements and improvements of the department in the areas of academics and infrastructure.

The following agenda items were taken up subsequently:

Agenda 1: **The minutes of the last meeting of the BoS held on 30-06-2019 were confirmed.**

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- The Principal, SoFS gave a presentation on the feedback received on curriculum outlining the suggestions made by the various stakeholders.
- Syllabus of B.Sc. Forensic Science *(Annexure-I)*, M.Sc. Forensic Science *(Annexure-II)* and M.Sc. Cyber Security and Digital Forensics *(Annexure-III)* was revised.
- Board decided to merge Laboratory courses of M.Sc. Forensic Science with their respective Theory Cousrses.
- Board approved the courses to be taught in upcoming semesters.

Agenda 3: **Inclusion of courses on life skills and value addition**

- It was suggested that students take up various courses offered by the University in the areas of life skills and value addition for their overall improvement and well being. The same was agreed upon and approved by the Board members. *(Annexure-4)*

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Dr. Gurudutta Pattnaik, Principal, SoFS & SoPLS extended his sincere thanks to all members of the Board. The meeting ended with a vote of thanks to the Chair.

14/07/20

Principal, SoPLS & SoFS

Dean, Academics
Dean - Academic
Centurion University of Technology & Management
Bhubaneswar, Khurda, Odisha-752050

Centurion University

ANNEXURE-I

- Revised courses of B.Sc. Forensic Science

Sl. No	Course Title	Type(Skill/Employability/Entrepreneurship	Credit
	Semester I		
1.	CUTM1659 - Basics of Forensic	Skill	6
2.	CUTM1660 - Crime and Society	Skill	6
3.	Ability enhancement Course	Skill	2
4.	Generic Elective	Skill	6
	Semester II		
5.	CUTM1661 - Criminal Law	Skill	6
6.	CUTM1662 - Forensic Psychology	Skill	6
7.	Ability enhancement Course	Skill	2
8.	Generic Elective	Skill	6
	Semester III		
9.	CUTM1663 -Forensic Dermatoglyphics	Employability & Skill	6
10.	CUTM1664 - Technological Methods in Forensic	Employability & Skill	6
11.	CUTM1665 - Criminalistics	Employability & Skill	6
12.	Ability Enhancement Elective (Skill Based) course	Skill	2
13.	Generic Elective	Skill	6
	Semester IV		
14.	CUTM1666-Forensic Chemistry	Employability & Skill	6
15.	CUTM1667 - Questioned Documents	Employability,	
16.	CUTM1668 - Forensic Biology	Employability & Skill	6
17.	Ability Enhancement Elective (Skill Based) course	Skill	2
18.	Generic Elective	Skill	6
	Semester V		
19.	CUTM1669 - Forensics Ballistics	Employability & Skill	6
20.	CUTM1670 - Forensic Toxicology	Employability & Skill	6
21.	Discipline Specific Elective (DSE)	Employability & Skill	6
22.	Discipline Specific Elective (DSE)	Employability & Skill	6
	Semester VI		
23.	CUTM1671 - Forensic Anthropology	Employability & Skill	6
24.	CUTM1672 - Forensic Medicine	Employability & Skill	6
25.	Discipline Specific Elective (DSE)	Employability & Skill	6
26.	Discipline Specific Elective (DSE)	Employability & Skill	6
	ABILITY ENHANCEMENT COURSE		
27.	CUTM1673 - English	Skill	2
28.	CUTM1010 - Environmental Science	Skill	2
	ABILITY ENHANCEMENT ELECTIVE (SKILL BASED) COURSE		
29.	CUTM1675 - Introduction to Biometry	Skill	2
30.	CUTM1676 - Handwriting Identification and Recognition	Skill	2
	DISCIPLINE SPECIFIC ELECTIVE (DSE COURSES)		
31.	CUFS2410 - Digital Forensics	Employability & Skill	6

32.	CUFS2411 - Economic Offences	Employability & Skill	6
33.	CUFS2412- Forensic Serology	Employability & Skill	6
34.	CUFS2413 - Accident Investigations	Employability & Skill	6
35.	CUFS2414 - DNA Forensics	Employability & Skill	6
36.	CUFS2415 - Audio Recognition and Video Analysis	Employability & Skill	6
37.	CUFS2416 - Explosive Analysis and Post Blast Investigation	Employability & Skill	6
38.	CUFS2417 - Quality control and Quality Assurance	Employability & Skill	6
GENERIC ELECTIVE (GE) **Subjects From other Disciplines (One each in Semester I, II, III, IV)**			

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ANNEXURE-II

- Revised courses of M.Sc. Forensic Science

Sl. No	Course Title	Type (Skill/Employability /Entrepreneurship	Credit
Semester I			
	CUTM1634 – Introduction to Forensics, Psychology, Law and Statistics	Skill	6
	CUTM1635 - Instrumental Techniques	Skill	6
	CUTM 1636 - Crime Scene Management and Forensic Physics	Skill & Employability	6
	CUTM1637 - Fingerprints and Questioned Documents	Skill, Employability & Entrepreneurship	6
	CUTM1638 - Business Communication	Skill	2
Semester II			
	CUTM1639 - Quality Management, Narcotic Drugs, Explosives, and Forensic Chemistry	Skill	6
	CUTM1640 - Forensic Biology and Forensic Medicine	Skill	6
	CUTM1641 - Forensic Serology and DNA Profiling	Skill & Employability	6
	CUTM1642 - Forensic Toxicology and Pharmacology	Skill & Employability	6
	CUTM1643 - Forensic Ballistics and Computer Forensics	Skill & Employability	6
Semester III			
	CUTM1656 - Assignment	Skill	06
	CUTM1657 - Seminar	Skill	06
SPECIALIZATION IN FORENSIC CHEMISTRY AND TOXICOLOGY			
	CUTM1647 - Pharmacology and Pharmaceutical Drug Analysis	Employability, Skill	6
	CUTM1648 - Concepts of Toxicology	Skill & Employability	6
	CUTM1649 - Modern and Applied Analytical Forensic Chemistry	Skill & Employability	6
SPECIALIZATION IN FORENSIC BIOLOGY			
	CUTM1644 - Molecular Biology and Genetics	Skill & Employability	6
	CUTM1645 - Biotechnology in Pharmaceutical Sciences	Skill & Employability	6
	CUTM1646 - Environmental Biotechnology	Skill & Employability	6
SPECIALIZATION IN FORENSIC PHYSICS			
	CUTM1650 - Advances in Physical Techniques	Employability	6
	CUTM1651 - Concepts of Conventional and Modern Ballistics	Employability	6
	CUTM1652 - Audio Recognition and Video Analysis	Employability	6
SPECIALIZATION IN FINGERPRINTS AND QUESTIONED DOCUMENT			

	CUTM1653 - Modern Trends in Fingerprint Sciences	Employability	6
	CUTM1654 - Questioned Document and Forensic Accounting	Skill, Employability & Entrepreneurship	6
	CUTM1655 - Forensic Photography and Biometric Traits	Skill & Employability	6
Semester IV			
	CUTM1658 - Project	Skill, Employability & Entrepreneurship	12

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ANNEXURE - III

- Revised courses of M.Sc. Cyber Security and Digital Forensics

Sl. No	Course Title	Type(Skill/Employability /Entrepreneurship	Credit
	Semester I		
1.	CUTM1618 - Principles of Information Security	Employability	4
2.	CUTM1619- Digital Forensics	Employability	6
3.	CUTM1620- Computer Networks	Employability & Skill	6
4.	CUTM1621- Cyber Crime & Investigations	Employability & Skill	4
5.	CUTM1622- Intellectual Property Rights	Employability	4
	Semester II		
6.	CUTM1623 - Number theory & Cryptography	Employability & Skill	4
7.	CUTM1624- Advanced Information Security	Employability & Skill	4
8.	CUTM1625 - Cyber Forensics	Employability & Skill	6
9.	CUTM1626- System and Network Security	Employability & Skill	6
10.	CUTM1627- Cyber Law	Entrepreneurship	4
	Semester III		
11.	CUTM1628- Mobile Security Analysis	Entrepreneurship	6
12.	CUTM1629- IT Governance, Risk and Compliance	Entrepreneurship	4
13.	CUT1630- Business Continuity Planning (BCP) And Disaster Recovery (Dr)	Skill	4
14.	CUTM1631 - Penetration Testing & Vulnerability Assessment	Employability	6
15.	CUTM1632- Digital Frauds	Employability	4
	Semester IV		
16.	CUTM1633 - Project/Dissertation	Employability	24

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ANNEXURE – IV

- Skill courses approved by BOS and to be offered in 2020-21

Sl. No.	Course Title	Credit
1	Introduction to Quantum Computing	4
2	Organic Farming	4
3	Mushroom Farming	4
4	Hydroponics Technology	4
5	Poultry Farming	4
6	Dairy Farming	4
7	Vermicomposting Farming	4
8	Transformer Manufacturing, Repairing and Maintenance	4
9	Electrical Installation	4
10	Repair and Maintenance of Home Appliances	4
11	Refrigeration and air conditioning	4
12	Super critical Co2 plant operation	4
13	Business Plan Preparation	4
14	Composite fabrication practice	4
15	Powder coating practice	4
16	Farm appliances operation	4
17	Bio fertilisers preparation	4
18	PCB designing & fabrication	4

- Value added courses approved by BOS in 2020-21

Sl. No.	**Course title**	**Duration of course**
1	Natural Resource Management	30 Hours
2	Research Methodology and IPR	30 Hours
3	Urban Gardens using Hydroponics	30 Hours
4	Introduction to Python	30 Hours
5	MATLAB	30 Hours
6	Waste to Wealth	30 Hours
7	Technical Writing	30 Hours
8	Organic Farming	30 Hours
9	Disaster Management	30 Hours
10	Ethical Hacking	30 Hours
11	Web Development	30 Hours
12	Food & Nutrition	30 Hours
13	Clinical Practice	30 Hours
14	Innovation Management	30 Hours
15	Financial Literacy	30 Hours

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16	Yoga and Meditation	30 Hours
17	Steps for Career Plan	30 Hours
18	MS Excel Basics	30 Hours
19	Quality Analysis	30 Hours
20	Ethical Writing Practice	30 Hours
21	Ansys	30 Hours
22	Video Making for Youtubers	30 Hours

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CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Forensic Sciences

Time: 11.00 a.m.

Date: 11/07/2020

Venue: Virtual Mode

Board of Studies Meeting

Attendance Sheet

Sl. No.	Name of the BOS Member(Internal Faculty and External Resource)	Designation	Signature
1	Dr. Gurudutta Pattnaik	Principal, SoPLS & SoFS, CUTM	Attended Online
2	Mr. Mahesh Patnaik	Director, SoPLS and SoFS, CUTM	Attended Online
3	Mr. Gyanaranjan Panigrahy	Assistant Professor, BJB autonomous college.	Attended Online
4	Dr. Amulyaratna Behera	Assosciate Professor, SoFS & SoPLS	Attended Online
5	Dr. Aruna Kumar Swain	Assistant Director, SFSL Rasulgarh	Attended Online
6	Mr. Sisir Panigrahy,	Director, HVET	Attended Online
7	Ms. Shruti Rajwar	Assistant Professor, School of Forensic Sciences	Attended Online
8	Ms. Varsha Singh	Assistant Professor, School of Forensic Sciences	Attended Online

Principal, SoPLS and SoFS

Dean, Academics

Dean - Academic
Centurion University of Technology & Management
Bhubaneswar, Khurda. Odisha-752050

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CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Forensic Sciences

Date: 14.07.2020

MINUTES OF BOARD OF STUDIES MEETING held on 11.07.2020

Venue: Virtual Mode

Time: 11.00 a.m.

The Board of Studies (BoS) meeting of School of Forensic Sciences was held on 11.07.2020 at 11 a.m. in Virtual mode through Zoom. The following members were present:

1. Dr. Gurudutta Pattnaik, Principal, SoPLS
2. Dr. Amulyaratna Behera, Assosciate Professor, SoFS & SoPLS
3. Mr. Mahesh Patnaik, Director, HVET
4. Mr. Sisir Panigrahy, Director, HVET
5. Dr. Aruna Kumar Swain, Assistant Director, SFSL Rasulgarh
6. Mr. Gyanranjan Panigrahy, Assistant Professor, BJB College
7. Ms. Shruti Rajwar, Assistant Professor, SoFS
8. Ms. Varsha Singh, Assistant Professor, SoFS

The Chairperson welcomed all members of the Board and briefly outlined the purpose of the meeting. Thereafter, the Dr. Gurudutta Pattnaik, **Principal, SoPLS and SoFS** presented acheivements and improvements of the department in the areas of academics and infrastructure.

The following agenda items were taken up subsequently:

Agenda 1: **The minutes of the last meeting of the BoS held on 30-06-2019 were confirmed.**

Agenda 2: **Discussion and approval on any revision required in the Curriculum of M.Sc. Forensic Science, M.Sc. Cyber Security & Digital Forensics and B.Sc. Forensic Science.**

- The Principal, SoFS gave a presentation on the feedback received on curriculum outlining the suggestions made by the various stakeholders.
- Syllabus of B.Sc. Forensic Science *(Annexure-I)*, M.Sc. Forensic Science *(Annexure-II)* and M.Sc. Cyber Security and Digital Forensics *(Annexure-III)* was revised.
- Board decided to merge Laboratory courses of M.Sc. Forensic Science with their respective Theory Cousrses.
- Board approved the courses to be taught in upcoming semesters.

Agenda 3: **Inclusion of courses on life skills and value addition**

- It was suggested that students take up various courses offered by the University in the areas of life skills and value addition for their overall improvement and well being. The same was agreed upon and approved by the Board members. *(Annexure-4)*

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Dr. Gurudutta Pattnaik, Principal, SoFS & SoPLS extended his sincere thanks to all members of the Board. The meeting ended with a vote of thanks to the Chair.

14/07/20

Principal, SoPLS & SoFS

Dean, Academics
Dean - Academic
Centurion University of Technology & Management
Bhubaneswar, Khurda, Odisha-752050

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ANNEXURE-I

- Revised courses of B.Sc. Forensic Science

Sl. No	Course Title	Type(Skill/Employability/Entrepreneurship	Credit
	Semester I		
1.	CUTM1659 - Basics of Forensic	Skill	6
2.	CUTM1660 - Crime and Society	Skill	6
3.	Ability enhancement Course	Skill	2
4.	Generic Elective	Skill	6
	Semester II		
5.	CUTM1661 - Criminal Law	Skill	6
6.	CUTM1662 - Forensic Psychology	Skill	6
7.	Ability enhancement Course	Skill	2
8.	Generic Elective	Skill	6
	Semester III		
9.	CUTM1663 -Forensic Dermatoglyphics	Employability & Skill	6
10.	CUTM1664 - Technological Methods in Forensic	Employability & Skill	6
11.	CUTM1665 - Criminalistics	Employability & Skill	6
12.	Ability Enhancement Elective (Skill Based) course	Skill	2
13.	Generic Elective	Skill	6
	Semester IV		
14.	CUTM1666-Forensic Chemistry	Employability & Skill	6
15.	CUTM1667 - Questioned Documents	Employability,	
16.	CUTM1668 - Forensic Biology	Employability & Skill	6
17.	Ability Enhancement Elective (Skill Based) course	Skill	2
18.	Generic Elective	Skill	6
	Semester V		
19.	CUTM1669 - Forensics Ballistics	Employability & Skill	6
20.	CUTM1670 - Forensic Toxicology	Employability & Skill	6
21.	Discipline Specific Elective (DSE)	Employability & Skill	6
22.	Discipline Specific Elective (DSE)	Employability & Skill	6
	Semester VI		
23.	CUTM1671 - Forensic Anthropology	Employability & Skill	6
24.	CUTM1672 - Forensic Medicine	Employability & Skill	6
25.	Discipline Specific Elective (DSE)	Employability & Skill	6
26.	Discipline Specific Elective (DSE)	Employability & Skill	6
	ABILITY ENHANCEMENT COURSE		
27.	CUTM1673 - English	Skill	2
28.	CUTM1010 - Environmental Science	Skill	2
	ABILITY ENHANCEMENT ELECTIVE (SKILL BASED) COURSE		
29.	CUTM1675 - Introduction to Biometry	Skill	2
30.	CUTM1676 - Handwriting Identification and Recognition	Skill	2
	DISCIPLINE SPECIFIC ELECTIVE (DSE COURSES)		
31.	CUFS2410 - Digital Forensics	Employability & Skill	6

32.	CUFS2411 - Economic Offences	Employability & Skill	6
33.	CUFS2412- Forensic Serology	Employability & Skill	6
34.	CUFS2413 - Accident Investigations	Employability & Skill	6
35.	CUFS2414 - DNA Forensics	Employability & Skill	6
36.	CUFS2415 - Audio Recognition and Video Analysis	Employability & Skill	6
37.	CUFS2416 - Explosive Analysis and Post Blast Investigation	Employability & Skill	6
38.	CUFS2417 - Quality control and Quality Assurance	Employability & Skill	6
GENERIC ELECTIVE (GE) **Subjects From other Disciplines (One each in Semester I, II, III, IV)**			

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ANNEXURE-II

- Revised courses of M.Sc. Forensic Science

Sl. No	Course Title	Type (Skill/Employability /Entrepreneurship	Credit
Semester I			
	CUTM1634 – Introduction to Forensics, Psychology, Law and Statistics	Skill	6
	CUTM1635 - Instrumental Techniques	Skill	6
	CUTM 1636 - Crime Scene Management and Forensic Physics	Skill & Employability	6
	CUTM1637 - Fingerprints and Questioned Documents	Skill, Employability & Entrepreneurship	6
	CUTM1638 - Business Communication	Skill	2
Semester II			
	CUTM1639 - Quality Management, Narcotic Drugs, Explosives, and Forensic Chemistry	Skill	6
	CUTM1640 - Forensic Biology and Forensic Medicine	Skill	6
	CUTM1641 - Forensic Serology and DNA Profiling	Skill & Employability	6
	CUTM1642 - Forensic Toxicology and Pharmacology	Skill & Employability	6
	CUTM1643 - Forensic Ballistics and Computer Forensics	Skill & Employability	6
Semester III			
	CUTM1656 - Assignment	Skill	06
	CUTM1657 - Seminar	Skill	06
SPECIALIZATION IN FORENSIC CHEMISTRY AND TOXICOLOGY			
	CUTM1647 - Pharmacology and Pharmaceutical Drug Analysis	Employability, Skill	6
	CUTM1648 - Concepts of Toxicology	Skill & Employability	6
	CUTM1649 - Modern and Applied Analytical Forensic Chemistry	Skill & Employability	6
SPECIALIZATION IN FORENSIC BIOLOGY			
	CUTM1644 - Molecular Biology and Genetics	Skill & Employability	6
	CUTM1645 - Biotechnology in Pharmaceutical Sciences	Skill & Employability	6
	CUTM1646 - Environmental Biotechnology	Skill & Employability	6
SPECIALIZATION IN FORENSIC PHYSICS			
	CUTM1650 - Advances in Physical Techniques	Employability	6
	CUTM1651 - Concepts of Conventional and Modern Ballistics	Employability	6
	CUTM1652 - Audio Recognition and Video Analysis	Employability	6
SPECIALIZATION IN FINGERPRINTS AND QUESTIONED DOCUMENT			

	CUTM1653 - Modern Trends in Fingerprint Sciences	Employability	6
	CUTM1654 - Questioned Document and Forensic Accounting	Skill, Employability & Entrepreneurship	6
	CUTM1655 - Forensic Photography and Biometric Traits	Skill & Employability	6
Semester IV			
	CUTM1658 - Project	Skill, Employability & Entrepreneurship	12

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ANNEXURE - III

- Revised courses of M.Sc. Cyber Security and Digital Forensics

Sl. No	Course Title	Type(Skill/Employability /Entrepreneurship	Credit
	Semester I		
1.	CUTM1618 - Principles of Information Security	Employability	4
2.	CUTM1619- Digital Forensics	Employability	6
3.	CUTM1620- Computer Networks	Employability & Skill	6
4.	CUTM1621- Cyber Crime & Investigations	Employability & Skill	4
5.	CUTM1622- Intellectual Property Rights	Employability	4
	Semester II		
6.	CUTM1623 - Number theory & Cryptography	Employability & Skill	4
7.	CUTM1624- Advanced Information Security	Employability & Skill	4
8.	CUTM1625 - Cyber Forensics	Employability & Skill	6
9.	CUTM1626- System and Network Security	Employability & Skill	6
10.	CUTM1627- Cyber Law	Entrepreneurship	4
	Semester III		
11.	CUTM1628- Mobile Security Analysis	Entrepreneurship	6
12.	CUTM1629- IT Governance, Risk and Compliance	Entrepreneurship	4
13.	CUT1630- Business Continuity Planning (BCP) And Disaster Recovery (Dr)	Skill	4
14.	CUTM1631 - Penetration Testing & Vulnerability Assessment	Employability	6
15.	CUTM1632- Digital Frauds	Employability	4
	Semester IV		
16.	CUTM1633 - Project/Dissertation	Employability	24

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ANNEXURE – IV

- Skill courses approved by BOS and to be offered in 2020-21

Sl. No.	Course Title	Credit
1	Introduction to Quantum Computing	4
2	Organic Farming	4
3	Mushroom Farming	4
4	Hydroponics Technology	4
5	Poultry Farming	4
6	Dairy Farming	4
7	Vermicomposting Farming	4
8	Transformer Manufacturing, Repairing and Maintenance	4
9	Electrical Installation	4
10	Repair and Maintenance of Home Appliances	4
11	Refrigeration and air conditioning	4
12	Super critical Co2 plant operation	4
13	Business Plan Preparation	4
14	Composite fabrication practice	4
15	Powder coating practice	4
16	Farm appliances operation	4
17	Bio fertilisers preparation	4
18	PCB designing & fabrication	4

- Value added courses approved by BOS in 2020-21

Sl. No.	**Course title**	**Duration of course**
1	Natural Resource Management	30 Hours
2	Research Methodology and IPR	30 Hours
3	Urban Gardens using Hydroponics	30 Hours
4	Introduction to Python	30 Hours
5	MATLAB	30 Hours
6	Waste to Wealth	30 Hours
7	Technical Writing	30 Hours
8	Organic Farming	30 Hours
9	Disaster Management	30 Hours
10	Ethical Hacking	30 Hours
11	Web Development	30 Hours
12	Food & Nutrition	30 Hours
13	Clinical Practice	30 Hours
14	Innovation Management	30 Hours
15	Financial Literacy	30 Hours

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16	Yoga and Meditation	30 Hours
17	Steps for Career Plan	30 Hours
18	MS Excel Basics	30 Hours
19	Quality Analysis	30 Hours
20	Ethical Writing Practice	30 Hours
21	Ansys	30 Hours
22	Video Making for Youtubers	30 Hours

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CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Forensic Sciences

Time: 11.00 a.m.

Date: 11/07/2020

Venue: Virtual Mode

Board of Studies Meeting

Attendance Sheet

Sl. No.	Name of the BOS Member(Internal Faculty and External Resource)	Designation	Signature
1	Dr. Gurudutta Pattnaik	Principal, SoPLS & SoFS, CUTM	Attended Online
2	Mr. Mahesh Patnaik	Director, SoPLS and SoFS, CUTM	Attended Online
3	Mr. Gyanaranjan Panigrahy	Assistant Professor, BJB autonomous college.	Attended Online
4	Dr. Amulyaratna Behera	Assosciate Professor, SoFS & SoPLS	Attended Online
5	Dr. Aruna Kumar Swain	Assistant Director, SFSL Rasulgarh	Attended Online
6	Mr. Sisir Panigrahy,	Director, HVET	Attended Online
7	Ms. Shruti Rajwar	Assistant Professor, School of Forensic Sciences	Attended Online
8	Ms. Varsha Singh	Assistant Professor, School of Forensic Sciences	Attended Online

Principal, SoPLS and SoFS

Dean, Academics

Dean - Academic
Centurion University of Technology & Management
Bhubaneswar, Khurda. Odisha-752050

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CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Agricultural and Bio-Engineering

Department of Phytopharmaceuticals

Date: 11/07/2020

MINUTES OF BOARD OF STUDIES MEETING held on 11/07/2020

Virtual Mode

Time: 12.00 p.m.

The Board of Studies (BoS) meeting of Department of Phytopharmaceuticals was held on 11/07/2020 at 12 p.m. in online mode (due to the continuing Covid-19 Pandemic). The following members are present during the meeting.

1. Dr. Prasanta Kumar Mohanty, Dean Academics, CUTM
2. Dr. Sivala Kumar, Dean SoABE, CUTM
3. Dr. U V Babu, Head R&D, Himalaya Wellness, Bangalore, India.
4. Dr. R Kannan, Principal Scientist, Himalaya Wellness, Bangalore, India.
5. Mr. Amitesh Roy Choudhury, Corporate Advisor.
6. Dr. Gitanjali Behera, HOD, Agricultural Engineering, CUTM
7. Dr. Prasanta Kumar Choudhury, Head Dairy Technology, SoABE, CUTM
8. Dr. Bhisma Narayan Rath, Head Phytopharmaceuticals, SoABE, CUTM
9. Dr. S. P. Nanda, Dean Administration, MSSSoA, CUTM
10. Dr. Devendra Reddy, Dean Academics, MSSSoA, CUTM
11. Prince K Jha, 3rd Year B.Tech Phyto Student, CUTM

Dean SoABE have given a presentation on course structure of B.Tech Ag, Dairy Technology and Phyto-pharmaceutical department. There was a thorough discussion on the syllabus of B. Tech Phytopharmaceuticals and the following feedback was suggested by the Experts.
The following agenda items were taken up subsequently:

Agenda 1: **The minutes of the last meeting of the BoS held on 22/06/2019 were confirmed.**

Agenda 2: Revision of Curriculum for the programme B.Tech Phyto

- It was discussed and decided to follow the CBCS structure of 5 Basket systems of Syllabus of School of Engineering & Technology in the B.Tech Phytopharmaceuticals programme.
- Dr. U. V. Babu & Dr. R. Kannan (Himalaya Wellness: Congratulations CUTM for Phytopharma. Basket 4 is very suitable for industry & students will have all desired expertise. Pharmacognosy need addition for bioactive components. Need addition of phytochemistry and natural products analysis by NMR. Regulatory course changes to focus

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on GMP. Ensure students visit industry of students (To engage students in academic/industry interface.)

- Mr. Amitesh Roy Choudhary: CUTM is bridge between industry and academics. Don't give idea only for jobs, encourage entrepreneurship for students.
- Mr. Prince K Jha, Ms. Pragyan Paramita Puti: Agreed that majority of subjects are well planned and delivered. However, they are having biology background and were not comfortable in engineering subjects like (thermodynamics, mathematics).
- Industry Expert: The department have taken up everything in the course syllabus to graduate a best student from the University. The student should be exposed to more field visit and industrial visit, so that the outcome will be best. Dean SoABE explained that we have already taking our students to field and industry visit to have a better practical understanding of the subjects.
- The list of new courses added is given in Annexure A.

***Agenda 3*: Discussion on modification of syllabus of Basket- 4, 5**

The Board approved the changes suggested in the core courses. List of existing courses where syllabus was changed in (*Annexure B)*

***Agenda 4:* Inclusion of courses on life skills and value addition**

It was suggested that students take up the various courses offered by the University in the areas of life skills and value addition for their overall improvement and well being.The same was agreed upon and approved by the Board members.*(Annexure C).*

The Dean, SoABE, extended sincere thanks to all members of the Board. The meeting ended with a vote of thanks to the Chair.

Dean, SoABE

Dean, Academics
Dean - Academic
Centurion University of Technology & Management
Bhubaneswar, Khurda, Odisha-752050

HoD, Phytopharmacutical

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Annexure-A

List of new courses added

Sl. No	Course Title	Type(Skill/Employability/Entrepreneurship)	Credit
1	Computer Aided Drafting	Skill and Employability	3
2	Product Design and Development	Skill and Employability	2
3	Reverse Engineering and Rapid Prototype	Skill and Employability	4
4	Product Life Cycle Management	Skill and Employability	2
5	Manufacturing Process-process planning and Heat Treatment	Skill and Employability	3
6	Material in product design and development	Skill and Employability	2
7	Computer Aided Engineering	Skill and Employability	3
8	Quality Assurance	Skill and Employability	2
9	Applied Ergonomics	Skill and Employability	2
10	Computer Aided Manufacturing	Skill and Employability	2
11	CNC Programming & CNC Machining	Skill and Employability	2
12	Design of Tools, Jigs and Fixtures	Skill and Employability	3
13	Advance Metrology	Skill and Employability	2
14	Thermodynamics	Skill and Employability	3
15	Fluid Mechanics with Finite Volume Method	Skill and Employability	3
16	Hydraulic Machinery	Skill and Employability	2
17	Theory of Machines	Skill and Employability	3
18	Heat Transfer with FDM/FVM	Skill and Employability	3
19	Theories of Failure Using Finite Element Analysis	Skill and Employability	4
20	Optimization Techniques	Skill and Employability	2
21	Programming in Java (Same as Java Technologies)	Skill and Employability	3
22	Database Management Systems	Skill and Employability	3

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Annexure-B

List of existing courses where syllabus was changed

Basket/ Semester	Name of Course	No. of Modules/Topics revised	Revised Modules/Topics (details)
1	Post-Harvest Engineering of Horticultural Crops	1	Credits modified
2	Principles of Agronomy	1	Aligned with Fundamentals of Agronomy
3	Principles of Soil Science	1	Aligned with Fundamentals of Soil Science
4	Principles of Horticultural Crops and Plant Protection	1	Aligned with Fundamentals of Horticulture
5	Soil and Water Conservation Engineering and Water Harvesting and Soil Conservation Structures	2	The both course was merged into Soil-Water Conservation Engineering and Structure, the credit was modified to 4 credits

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Annexure-C

List of Skill courses

Sl. No	Course Title	Credit	(T+P+P)
1	Introduction to Quantum Computing	4	0+3+1
2	Organic Farming	4	0+3+1
3	Mushroom Farming	4	0+3+1
4	Hydroponics Technology	4	0+3+1
5	Poultry Farming	4	0+3+1
6	Dairy Farming	4	0+3+1
7	Vermi composting Farming	4	0+3+1
8	Transformer Manufacturing, Repairing and Maintenance	4	0+3+1
9	Electrical Installation	4	0+3+1
10	Repair and Maintenance of Home Appliances	4	0+3+1
11	Refrigeration and air conditioning	4	0+3+1
12	Super critical Co2 plant operation	4	0+3+1
13	Business Plan Preparation	4	0+3+1
14	Composite fabrication practice	4	0+3+1
15	Powder coating practice	4	0+3+1
16	Farm appliances operation	4	0+3+1
17	Bio fertilizers preparation	4	0+3+1
18	PCB designing & fabrication	4	0+3+1
19	Introduction to Block Chain Technology	4	0+3+1
20	Introduction to Nutraceuticals	4	0+3+1
21	Introduction to NLP	4	0+3+1
22	Introduction to Computational Biology	4	0+3+1
23	Product Life Cycle Management through Gate process	4	0+3+1
24	New material development with Biovia	4	0+3+1
25	Spectral image processing using Python	4	0+3+1
26	Satellite data processing	4	0+3+1
27	Working with Graphene and carbon fibre	4	0+3+1
28	Adobe Tools and Illustrations	4	0+3+1
29	Digital Painting	4	0+3+1
30	Computer Installation and Maintenance	4	0+3+1

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List of Domain courses

Group A: Agriculture/ Agri Engineering/Phyto pharma/ Dairy tech/ fisheries/ biological sciences				
Group B: All other engineering/physical and mathematical science/vocational or skills				
Group C: Pharmacy and allied Health				
Group D: Management & media and communication				
Sl. No.	**Name of the Domain**	**Credit**	**Category**	**Year of introduction**
1	Advance Video Processing, Computer Vision and Machine Learning	30	A/B/D	2020
2	Aerial Survey and Remote Sensing Applications	18	A/B	2020
3	Agri Business Management	23	A/B/D	2020
4	Architectural and Structural Design	20	A/B	2020
5	Business Analytics	21	A/B/D	2020
6	Chip Design and Fabrication using VLSI	18	B	2020
7	Commodity and Food Storage	29	A/B/D	2020
8	Communication Systems	18	B	2020
9	Composite Design and Manufacturing	24	A/B	2020
10	Computational Fluid Dynamics	20	A/B	2020
11	Cyber Security	24	B	2020
12	Dairy Processing and Development	28	A/B	2020
13	Fish Processing Technology	29	A/B	2020
14	Food Processing	29	A/B/D	2020
15	Gaming and Immersive Learning (AR & VR)	20	A/B/D	2020
16	Go-To-Market	22	A/B/D	2020
17	Health Care Assistancy	25	A/B	2020
18	Manufacturing Execution System	18	B	2020
19	Nutraceuticals	29	A/C	2020
20	Protected Horticulture	29	A/B	2020

21	Renewable Energy Applications	22	A/B	2020
22	Smart Agriculture	29	A/B	2020
23	Smart Farm Machinery	28	A/B	2020
24	Soil and Water Conservation through Watershed	28	A/B	2020

List of value added courses

Sl. No	Course Title	Hrs. of input
1	Natural Resource Management	30
2	Research Methodology and IPR	30
3	Urban Gardens using Hydroponics	30
4	Introduction to Python	30
5	MATLAB	30
6	Waste to Wealth	30
7	Technical Writing	30
8	Organic Farming	30
9	Disaster Management	30
10	Ethical Hacking	30
11	Web Development	30
12	Food & Nutrition	30
13	Clinical Practice	30
14	Innovation Management	30
15	Financial Literacy	30
16	Yoga and Meditation	30
17	Steps for Career Plan	30
18	MS Excel Basics	30
19	Quality Analysis	30
20	Ethical Writing Practice	30
21	Ansys	30
22	Video Making for Youtubers	30

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CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Agricultural & Bio-Engineering

Department of Agricultural Engineering

Time: 12.00 p.m. **Date: 11/07/2020**

Venue: Board Room, CUTM, Bhubaneswar

Board of Studies Meeting
Attendance Sheet

Sl. No.	Name of the BOS Member(Internal Faculty and External Resource)	Organization	Signature
1	Dr. Supriya Pattanaik	CUTM	Attended Online
2	Dr. Anita Patra	CUTM	Attended Online
3	Dr. P.K. Mohanty	Dean, Academics	Attended Online
4	Dr. Sivala Kumar	Dean, SOABE	Attended Online
5	Dr. U V Babu	Himalaya Drug Company	Attended Online
6	Dr. R Kannan	Himalaya Drug Company	Attended Online
7	Mr. Amitesh Roy Choudhary	Corporate Advisor	Attended Online
8	Dr. Gitanjali Behera	CUTM	Attended Online
9	Dr. Prasant Kumar Choudhury	CUTM	Attended Online
10	Dr. SP Nanda	CUTM	Attended Online
11	Dr. Devendra Reddy	CUTM	Attended Online
12	Mr. Bhisma Narayan Rath	CUTM	Attended Online
13	Prince K Jha	Student, CUTM	Attended Online

Dean, SoABE

Dean, Academics
Dean - Academic
Centurion University of Technology & Management
Bhubaneswar, Khurda, Odisha-752050

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CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Agricultural and Bio-Engineering

Department of Dairy Technology

Date: 11/07/2020

MINUTES OF BOARD OF STUDIES MEETING held on 11/07/2020

Virtual Mode

Time: 12.00 PM

The Board of Studies (BoS) meeting of Department of Dairy Technology was held on 11/07/2020 at 12 PM. in online mode (due to the continuing Covid-19 Pandemic). The following members are present during the meeting.

1. Dr. Prasanta Kumar Mohanty, Dean Academics, CUTM
2. Dr. Sivala Kumar, Dean SoABE, CUTM
3. Dr. Anil Kumar Puniya PS and Head, Dairy Microbiology, ICAR-NDRI, Karnal
4. Mr. Harinder Singh Grewal, Ex. General Manager (Retd.), Milkfed Punjab.
5. Dr. Gitanjali Behera, HOD, Agricultural Engineering, CUTM
6. Dr. Prasanta Kumar Choudhury, Head Dairy Technology, SoABE, CUTM
7. Dr. Bhisma Narayan Rath, Head Phytopharmaceuticals, SoABE, CUTM
8. Dr. S. P. Nanda, Dean Administration, MSSSoA, CUTM
9. Dr. Devendra Reddy, Dean Academics, MSSSoA, CUTM

Dean, SoABE have given a presentation on course structure of Dairy Technology. There was a thoroughly discussion on the syllabus of Dairy Technology and the following feedback was suggested by the Experts.
The following agenda items were taken up subsequently:

Agenda 1: **The minutes of the last meeting of the BoS held on 22/06/2019 were confirmed.**

Agenda 2: Revision of Curriculum for the programme B.Tech Dairy Technology

- It was discussed and decided to follow the CBCS structure of 5 Basket systems of Syllabus of School of Engineering & Technology in the B. Tech Dairy Technology programme.
- To the comments of Dr. Anil Kumar Puniya (Academic Expert) Dean, SoABE suggested that, most of the course and course contents have been referred from Dairy Technology course syllabus of ICAR-Fifth Dean's Committee recommendations. Few courses related to economics, extension and management have been removed and in place we have added some advance courses of humanities and management in Basket-II. The food technology courses have been included in food Processing domain course, which can be opted by students. In addition to that, to make students enable to smart technologies few more courses have been added in the form of Smart Stack in Basket-III. Hope this will not affect the passing students for higher studies.

- To the comments to Mr. Harinder Singh Grewal (Industry Expert), Dean SoABE explained that we have cattle yard facilities inside campus and students have opportunities to conduct practices related to cattle feeding and management. In the practice session all the farm practices are already included.
- In Summer training-I students have the exposure on milk production and procurement to be taken up in State Dairy Federations/Dairy Development Departments/Private Dairies/Animal Husbandry Department/Cattle farm/Progressive dairy farmers, where they have field exposure to these activities (Included in summer training-I).
- Chapters regarding Dairy economics, product balancing and preparation of daily balance sheet are added in the syllabus of Dairy Plant Management.
- We will work on the research and development activities. Also, we have included students major project to provide research exposure to students with the involvement of faculties and available institutional facilities.

***Agenda 3*: Discussion on modification of syllabus of Basket- 4, 5**

The Board approved the changes suggested in the core courses. List of new courses is given in Annexure A and existing courses where syllabus was changed in (*Annexure B)*

***Agenda 4:* Inclusion of courses on life skills and value addition**

It was suggested that students take up the various courses offered by the University in the areas of life skills and value addition for their overall improvement and well being.The same was agreed upon and approved by the Board members.*(Annexure C)*

The Dean, SoABE, extended sincere thanks to all members of the Board.

The meeting ended with a vote of thanks to the Chair.

Dean, SoABE

Dean, Academics

Dean - Academic
Centurion University of Technology & Management
Bhubaneswar, Khurda, Odisha-752050

HoD, Dairy Technology

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Annexure-A

List of new courses added

Sl. No	Course Title	Type (Skill/ Employability/ Entrepreneurship	Credit
1	Differential Equations and Linear Algebra	Skill	3
2	Laplace and Fourier Transforms	Skill	3
3	Complex Analysis, Numerical Methods	Skill	3
4	Discrete Mathematics	Skill	3
5	Probability & Statistics	Skill	3
6	Mechanics for Engineers	Skill	3
7	Optics and Optical Fibres	Skill	3
8	Applied Analytical Chemistry	Skill	3
9	Applied Engineering Materials	Skill	3
10	Environmental Studies	Entrepreneurship	2
11	Optimization Techniques	Employability	2
12	Engineering Economics and Costing	Entrepreneurship	3
13	Project Management	Entrepreneurship	3
14	Gender, Human Rights and Ethics	Employability	3
15	Climate Change, Sustainability and Organization	Employability	3
16	Job readiness	Skill	6
17	Industrial IOT and Automation	Employability	6
18	Data Analysis and Visualization using Python	Entrepreneurship	4
19	Machine Learning using Python	Entrepreneurship	4
20	Robotic automation with ROS and C++	Employability	4
21	Design Thinking	Employability	2
22	System Integration with DYMOLA	Employability	2
23	Smart Engineering Project (G2M)	Employability	3
24	Design of structures	Skill	4
25	Dairy and Food Engineering	Entrepreneurship	3
26	Milk Processing in Dairy Industry	Skill and Employability	3
27	Dairy Starters in Fermented Milk Products	Skill and Employability	3
28	Quality Assurance in Dairy Industry	Skill and Employability	3
29	Dairy Products Development	Skill and Employability	3
30	Synbiotic Dairy Foods	Skill and Employability	3
31	Quality Analysis of Milk and Milk Products	Skill and Employability	3
32	AELP Linked Project and Internship	Employability	10

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Annexure-B

List of existing courses where syllabus was changed

Basket/ Semester	Name of Course	No. of Modules/Topics revised	Revised Modules/Topics (details)
1	Fundamentals of Microbiology/General Microbiology	2	Aligned with CMB General Microbiology course
2	Biochemistry/Fundamentals of Plant Biochemistry		Aligned with B. Sc. Agriculture courses
3	Thermodynamics	2	Credits modified
4	Heat and Mass Transfer	1	Credits modified
5	Basic Electrical Engineering	2	Credits modified
6	Fluid Mechanics with FVM	3	Credits modified and FVM added
7	Dairy and Food Engineering	2	Dairy engineering and Food engineering merged

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Annexure-C

List of Skill courses

Sl. No	Course Title	Credit	(T+P+P)
1	Introduction to Quantum Computing	4	0+3+1
2	Organic Farming	4	0+3+1
3	Mushroom Farming	4	0+3+1
4	Hydroponics Technology	4	0+3+1
5	Poultry Farming	4	0+3+1
6	Dairy Farming	4	0+3+1
7	Vermi composting Farming	4	0+3+1
8	Transformer Manufacturing, Repairing and Maintenance	4	0+3+1
9	Electrical Installation	4	0+3+1
10	Repair and Maintenance of Home Appliances	4	0+3+1
11	Refrigeration and air conditioning	4	0+3+1
12	Super critical Co2 plant operation	4	0+3+1
13	Business Plan Preparation	4	0+3+1
14	Composite fabrication practice	4	0+3+1
15	Powder coating practice	4	0+3+1
16	Farm appliances operation	4	0+3+1
17	Bio fertilizers preparation	4	0+3+1
18	PCB designing & fabrication	4	0+3+1
19	Introduction to Block Chain Technology	4	0+3+1
20	Introduction to Nutraceuticals	4	0+3+1
21	Introduction to NLP	4	0+3+1
22	Introduction to Computational Biology	4	0+3+1
23	Product Life Cycle Management through Gate process	4	0+3+1
24	New material development with Biovia	4	0+3+1
25	Spectral image processing using Python	4	0+3+1
26	Satellite data processing	4	0+3+1
27	Working with Graphene and carbon fibre	4	0+3+1
28	Adobe Tools and Illustrations	4	0+3+1
29	Digital Painting	4	0+3+1
30	Computer Installation and Maintenance	4	0+3+1

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List of Domain courses

Group A: Agriculture/ Agri Engineering/Phyto pharma/ Dairy tech/ fisheries/ biological sciences				
Group B: All other engineering/physical and mathematical science/vocational or skills				
Group C: Pharmacy and allied Health				
Group D: Management & media and communication				
Sl. No.	**Name of the Domain**	**Credit**	**Category**	**Year of introduction**
1	Advance Video Processing, Computer Vision and Machine Learning	30	A/B/D	2020
2	Aerial Survey and Remote Sensing Applications	18	A/B	2020
3	Agri Business Management	23	A/B/D	2020
4	Architectural and Structural Design	20	A/B	2020
5	Business Analytics	21	A/B/D	2020
6	Chip Design and Fabrication using VLSI	18	B	2020
7	Commodity and Food Storage	29	A/B/D	2020
8	Communication Systems	18	B	2020
9	Composite Design and Manufacturing	24	A/B	2020
10	Computational Fluid Dynamics	20	A/B	2020
11	Cyber Security	24	B	2020
12	Dairy Processing and Development	28	A/B	2020
13	Fish Processing Technology	29	A/B	2020
14	Food Processing	29	A/B/D	2020
15	Gaming and Immersive Learning (AR & VR)	20	A/B/D	2020
16	Go-To-Market	22	A/B/D	2020
17	Health Care Assistancy	25	A/B	2020
18	Manufacturing Execution System	18	B	2020

19	Nutraceuticals	29	A/C	2020
20	Protected Horticulture	29	A/B	2020
21	Renewable Energy Applications	22	A/B	2020
22	Smart Agriculture	29	A/B	2020
23	Smart Farm Machinery	28	A/B	2020
24	Soil and Water Conservation through Watershed	28	A/B	2020

List of value added courses

Sl. No	Course Title	Hrs. of input
1	Natural Resource Management	30
2	Research Methodology and IPR	30
3	Urban Gardens using Hydroponics	30
4	Introduction to Python	30
5	MATLAB	30
6	Waste to Wealth	30
7	Technical Writing	30
8	Organic Farming	30
9	Disaster Management	30
10	Ethical Hacking	30
11	Web Development	30
12	Food & Nutrition	30
13	Clinical Practice	30
14	Innovation Management	30
15	Financial Literacy	30
16	Yoga and Meditation	30
17	Steps for Career Plan	30
18	MS Excel Basics	30
19	Quality Analysis	30
20	Ethical Writing Practice	30
21	Ansys	30
22	Video Making for Youtubers	30

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CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Agricultural & Bio-Engineering

Department of Dairy Technology

Time: 12.00 PM **Date: 11/07/2020**

Venue: Board Room, CUTM, Bhubaneswar

Board of Studies Meeting
Attendance Sheet

Sl. No.	Name of the BOS Member(Internal Faculty and External Resource)	Organization	Signature
1	Dr. Supriya Pattanaik	CUTM	Attended Online
2	Dr. Anita Patra	CUTM	Attended Online
3	Dr. P.K. Mohanty	Dean, Academics	Attended Online
4	Dr. Sivala Kumar	Dean, SOABE	Attended Online
5	Dr. Anil Kumar Puniya	PS and Head, Dairy Microbiology, ICAR-NDRI, Karnal	Attended online
6	Mr. Harinder Singh Grewal	Ex. General Manager (Retd.), Milkfed Punjab.	Attended online
7	Dr. Gitanjali Behera	CUTM	Attended Online
8	Dr. Prasant Kumar Choudhury	CUTM	Attended Online
9	Dr. SP Nanda	CUTM	Attended Online
10	Dr. Devendra Reddy	CUTM	Attended Online
11	Mr. Bhisma Narayan Rath	CUTM	Attended Online

Dean, SoABE

Dean, Academics
Dean - Academic
Centurion University of Technology & Management
Bhubaneswar, Khurda, Odisha-752050

CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Management

Date: 17.07.2020

MINUTES OF BOARD OF STUDIES MEETING held on 11.07.2020

Venue: Online Zoom Platform

Time: 3.00 pm

The Board of Studies (BoS) meeting of School of Management was held on 11.07.2020 at 3.00 p.m. on the online zoom platform. The following members were participated:

1. Dr. Anita Patra, Registrar, CUTM
2. Dr. Prasanta Kumar Mohanty, Dean, Academics, CUTM
3. Dr. Ranjan Kumar Bal, Retd. Professor, Utkal University
4. Mr. Aditya Sapru, Managing Director, Neumck Strategy and Advisory, Bangalore
5. Mr. N M Prusty, President Humanitarian Aid International, Chief Mentor and Director at Centre for Development and Disaster Managemenet Support Services (CDDMASS), Chairperson-Sphere India
6. Dr. Sunil Chaturvedi, Director-Pharma Network at SVKM's Pharma Schools Mumbai, Shirpur, Dhule, Hyd & NMIMS's SPPSPTM & SBM's MBA Pharma Management
7. Dr. Subhendu Mishra, PGP Coordinator, SoM, CUTM
8. Dr. Girija Nandini, PGP Coordinator, SoM, CUTM
9. Dr. Bibhunandini Das, UGP Coordinator, SoM, CUTM
10. Dr. Pramod Kumar Patjoshi, B. Com Program Coordinator, SoM, CUTM
11. Dr. Umakanta Nayak, Dean, SoM, CUTM

The Chairperson, CUTM welcomed all members of the Board and briefly outlined the purpose of the meeting. Thereafter, the Dean, SoM presented the achievements and improvements of the School in the areas of academics, research, consultancy and infrastructure.

The following agenda items were taken up subsequently:

Agenda 1: **The minutes of the last meeting of the BoS held on 22.06.2019 were confirmed.**

Agenda 2: **Discussion and approval on revision required in the Curriculum of MBA Program**

- The Dean, SoM presented the MBA curriculum based on the feedback and suggestions made by the various stakeholders. Board discussed the curriuculum throughly and approved the following suggestions for course revision to be implemented from the Academic Year 2020-21 (*Annexure-I*).
    - A basket structure was developed for students to acquire credits as per their choices
    - New courses were incorporated in baskets

Agenda 3: **Discussion and approval on revision required in the Curriculum of MBA – RUDM & ABM Program**

- MBA – RUDM & ABM curriculum was presented based on the feedback and suggestions made by the various stakeholders. Board discussed the curriuculum throughly and approved the

following suggestions for course revision to be implemented from the Academic Year 2020-21 (*Annexure-II*).

- The nomenclature of the program was changed to MBA- Rural and Urban Development Management & Agri-Business Management
- New courses were incorporated in the sullabus

Agenda 4: **Discussion and approval on revision required in the Curriculum of BBA program**

- BBA syllabus revision was presented based on the suggestions made by the various stakeholders . The Board accepted and approved the following changes to curriculum to be implemented from the Academic Year 2020-21 (*Annexure-III*).
  - A basket structure was introduced for students to acquire credits as per their choices
  - New courses were incorporated in baskets
  - Generic Elective Basket covered courses from Skill Basket of the University

Agenda 5: **Discussion and approval on revision required in the Curriculum of B.Com program**

- B.Com syllabus revision was presented based on the suggestions made by the various stakeholders . The Board accepted and approved the following changes to curriculum to be implemented from the Academic Year 2020-21 (*Annexure-IV*).
  - A basket structure was introduced for students to acquire credits as per their choices
  - New courses were incorporated in baskets

Agenda 6: **Inclusion of courses on life skills and value addition**

Various courses were presented to be offered by the University in the areas of life skills and value addition for the overall improvement and well being of students. The same was agreed upon and approved by the Board members. *(Annexure-V)*

The Dean, SoM extended sincere thanks to all members of the Board.

The meeting ended with a vote of thanks to the Chair.

Dean, SoM

Dean
School of Management
Centurion University, Odisha

Dean, Academics

Dean - Academic
Centurion University of Technology & Management
Bhubaneswar, Khurda, Odisha-752050

Annexure-I

MBA Course Structure with different baskets

MBA Programme			
Basket	**Basket Category**	**Minimum Credits to be acquired**	**Scope**
I	Foundation	30	Core
II	Digital Technologies	06	Choice
III	Management Potential Development	36	Core
IV	Sustainability	06	Core
V	Electives/ Domain Courses	24	Choice
VI	Summer Internship	04	Choice
	Total Credits	106	

List of new courses added in MBA

Sl. No	Course Title	Type (Skill/ Employability/ Entrepreneurship	Credit
Basket-I Foundation Courses			
1	Job Readiness	Employability	3
2	Quantitative Techniques	Employability	5
3	Micro Economics	Employability & Entrepreneurship	4
4	Economic Environment of Business	Employability	4
5	Principles of Management	Employability	2
6	Basics of Design Thinking	Employability & Entrepreneurship	2
7	Data Analysis and Visualization Using Python	Skill Development	4
Basket-II Digital Technologies			
8	Introduction to AI/ML	Employability	1
9	Introduction Data Analytics	Employability	1
10	Introduction Additive Manufacturing/3D Printing	Employability	1
11	Introduction to AR/VR	Employability	1
12	Introduction to Emerging Mobility Solutions	Employability	1
13	Introduction to Blockchain	Employability	1
14	Introduction to Robotics	Employability	1
Basket-III Management Potential Development			
15	Introduction to PLM (Platforms such as 3DS)	Employability, Entrepreneurship	2
16	Designing User/Customer Experience (UX/CX)	Skill Development	2
Basket-IV Sustainability			
17	Gender, Human Rights and Ethics	Employability	3
18	Climate Change, Sustainability and Organisation	Employability	3
Basket-V Electives/Domain			

19	Financial Analysis and Visualization	Employability	4
20	Robotics Process Automation (RPA) in Finance	Employability & Entrepreneurship	4
21	Services & Financial Services Marketing	Employability	4
22	Retail & Etail Management	Employability & Entrepreneurship	4
23	Business Analytics	Skill development	4

Annexure-II

List of new courses added in **MBA DM & ABM**

Sl. No	Course Title	Type (Skill/Employability/ Entrepreneurship)	Credit
Semester-I			
1	Micro Economics	Employability & Entrepreneurship	4
2	Contemporary Development Communication	Employability	4
3	Data Analysis using Excel and Python	Skill Development	4
4	Indian Society and Culture	Employability	2
5	Gender, Human Rights and Ethics	Employability	3
Semester-II			
6	Development Theory and Practice	Employability and Skill Development	4
7	Economic Environment for Business	Employability	4
8	Rural Marketing	Employability & Entrepreneurship	4
9	Climate change and Sustainable Development	Employability	3
10	Job Readiness: Employability	Employability	0
Semester-III			
11	Strategic Management	Employability	4
12	Community Organization and Development	Employability	2
13	Food Security and Right to Food	Employability	2
14	Organization Behaviour	Employability	4
Semester-IV			
15	Human Resource Management and Organisation Development	Employability, Entrepreneurship	4
16	Public Policy: Design, Analysis and Implementation	Employability and Skill Development	4
17	Social Entrepreneurship and CSR	Entrepreneurship	2
18	Digital and Social Media Marketing	Employability, Entrepreneurship	2
19	Local Governance systems	Employability	2

20	Community Owned and Managed Businesses	Employability	2
21	Management of Rural Health	Employability	2
22	Management of Rural Education	Employability	2
23	Sustainable Rural Livelihoods	Employability	2
24	Managing Watersheds	Employability & Skill	2
25	M&E of Development Projects	Employability & Entrepreneurship	2
26	Poverty reduction strategies	Employability	2
27	Issues in Tribal Development	Employability	2
28	Extension strategies for development	Employability	2
29	Fund Raising for Social Cause	Employability & Entrepreneurship	2

Annexure-III

BBA Course Structure

Basket	Basket Category	Minimum Credits to be acquired	Scope
I	Core Discipline	84	Core
II	Discipline Specific Elective	24	Choice
III	Generic/ Interdisciplinary Elective	24	Choice
IV	Skill Enhancement courses	06	Core
V	Ability Enhancement Courses (AECC)	10	Core
	Total Credits	148	

List of new courses added in BBA:

Sl. No	Course Title	Type (Skill/Employability/ Entrepreneurship)	Credit
Basket-I			
1	Fundamentals of Management	Employability and entrepreneurship	4
2	Quantitative Techniques for Management	Employability	6
3	Business Policy and Strategy	Employability & Entrepreneurship	6
Basket-II			
4	Advanced Managerial Accounting	Employability & Entrepreneurship	6
5	Financial Institutions, Markets & Services	Employability	6
6	Commercial Banking and ALM	Employability	6
7	Current Asset Management	Employability & Entrepreneurship	6
8	Financial Analysis and Visualization	Employability & Skill Development	6
9	Robotics Process Automation (RPA) in Finance	Employability & Skill Development	6
10	Rural Marketing	Employability & Skill Development	6
11	Sales and Distribution Management	Employability	6
12	Services & Financial Services Marketing	Employability	6

13	Digital Marketing & Marketing Communications	Employability	6
14	Retail & Etail Management	Employability & Entrepreneurship	6
15	B2B Marketing	Employability	6
Basket-III			
16	University Skill Basket	Skill Development	Each course of 4 credits
Basket-V			
17	Job Readiness	Employability	6
18	Environmental Science	Employability	4
		Total	**98**

Annexure-IV

B.Com Course Structure

Basket	Basket Category	Minimum Credits to be acquired	Scope
I	Core Discipline	84	Core
II	Discipline Specific Elective	24	Choice
III	Generic/ Interdisciplinary Elective	24	Choice
IV	Skill Enhancement courses	06	Core
V	Ability Enhancement Courses (AECC)	08	Core
	Total Credits	146	

List of new courses added in **B.Com:**

Sl. No	Course Title	Type (Skill/Employability/ Entrepreneurship)	Credit
1	Human Resource Management	Employability & Entrepreneurship	6
2	Principles of Marketing	Employability & Entrepreneurship	6
		Total	**12**

Annexure-V

Skill Courses approved by university

Sl. No.	Course Title	Credit
1	Introduction to Quantum Computing	4
2	Organic Farming	4
3	Mushroom Farming	4
4	Hydroponics Technology	4
5	Poultry Farming	4
6	Dairy Farming	4
7	Vermicomposting Farming	4
8	Transformer Manufacturing, Repairing and Maintenance	4
9	Electrical Installation	4
10	Repair and Maintenance of Home Appliances	4
11	Refrigeration and air conditioning	4
12	Super critical Co2 plant operation	4
13	Business Plan Preparation	4
14	Composite fabrication practice	4
15	Powder coating practice	4
16	Farm appliances operation	4
17	Bio fertilisers preparation	4
18	PCB designing & fabrication	4
19	Introduction to Block Chain Technology	4
20	Introduction to Nutraceuticals	4
21	Introduction to NLP	4
22	Introduction to Computational Biology	4
23	Product Life Cycle Management through Gate process	4
24	New material development with Biovia	4
25	Spectral image processing using Python	4
26	Satellite data processing	4
27	Working with Graphene and carbon fibre	4
28	Adobe Tools and Illustrations	4
29	Digital Painting	4
30	Computer Installation and Maintenance	4

Value Added courses approved by university

	Course Title	Credit
1	Natural Resource Management	30 Hours
2	Research Methodology and IPR	30 Hours

3	Urban Gardens using Hydroponics	30 Hours
4	Introduction to Python	30 Hours
5	MATLAB	30 Hours
6	Waste to Wealth	30 Hours
7	Technical Writing	30 Hours
8	Organic Farming	30 Hours
9	Disaster Management	30 Hours
10	Ethical Hacking	30 Hours
11	Web Development	30 Hours
12	Food & Nutrition	30 Hours
13	Clinical Practice	30 Hours
14	Innovation Management	30 Hours
15	Financial Literacy	30 Hours
16	Yoga and Meditation	30 Hours
17	Steps for Career Plan	30 Hours
18	MS Excel Basics	30 Hours
19	Quality Analysis	30 Hours
20	Ethical Writing Practice	30 Hours
21	Ansys	30 Hours
22	Video Making for Youtubers	30 Hours
23	Natural Resource Management	30 Hours

University-wide Domains for School of Management

1	DACU2200	Data Analytics- Visualisation	20
2	BACU2210	Business Analytics	18
3	MLCU2000	Data Science and Machine Learning	26
4	ARCU2060	Gaming and Immersive Learning (AR & VR)	20
5	GMCU2140	GO-TO-MARKET(3D Experience)	22
6	FPCU2310	Food Processing	29
7	ABCU2320	Agri Business Management	23
8	FSCU2330	Commodity and Food Storage	29

CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Management

Time: 3.00 pm Date: 11.07.2020

Venue: Online Zoom Platform

Board of Studies Meeting

Attendance Sheet

Sl.No.	Name of the Member	Designation	Signature
1	Dr. Prasanta Kumar Mohanty	Dean Academics, CUTM	Joined Online
2	Dr. Ranjan Kumar Bal	Retd. Professor, Utkal University	Joined Online
3	Mr. Aditya Sapru	Managing Director, Neumck Strategy and Advisory, Bangalore	Joined Online
4	Mr. N M Prusty	President Humanitarian Aid International, Chief Mentor and Director at Centre for Development and Disaster Managemenet Support Services (CDDMASS), Chairperson-Sphere India	Joined Online
5	Dr. Sunil Chaturvedi	Director-Pharma Network at SVKM's Pharma Schools Mumbai, Shirpur, Dhule, Hyd & NMIMS's SPPSPTM & SBM's MBA Pharma Management	Joined Online
6	Dr. Subhendu Mishra	PGP Coordinator, SoM, CUTM	Joined Online
7	Dr. Girija Nandini	PGP Coordinator, SoM, CUTM	Joined Online
8	Dr. Bibhunandini Das	UGP Coordinator, SoM, CUTM	Joined Online
9	Dr. Pramod Kumar Patjoshi	B. Com Program Coordinator, SoM, CUTM	Joined Online
10	Dr. Umakanta Nayak	Dean, SoM, CUTM	Joined Online

Dean, SoM

Dean
School of Management
Centurion University, Odisha

Dean, Academics

Dean - Academic
Centurion University of Technology & Management
Bhubaneswar, Khurda, Odisha-752050

CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Management

Date: 17.07.2020

MINUTES OF BOARD OF STUDIES MEETING held on 11.07.2020

Venue: Online Zoom Platform

Time: 3.00 pm

The Board of Studies (BoS) meeting of School of Management was held on 11.07.2020 at 3.00 p.m. on the online zoom platform. The following members were participated:

1. Dr. Anita Patra, Registrar, CUTM
2. Dr. Prasanta Kumar Mohanty, Dean, Academics, CUTM
3. Dr. Ranjan Kumar Bal, Retd. Professor, Utkal University
4. Mr. Aditya Sapru, Managing Director, Neumck Strategy and Advisory, Bangalore
5. Mr. N M Prusty, President Humanitarian Aid International, Chief Mentor and Director at Centre for Development and Disaster Managemenet Support Services (CDDMASS), Chairperson-Sphere India
6. Dr. Sunil Chaturvedi, Director-Pharma Network at SVKM's Pharma Schools Mumbai, Shirpur, Dhule, Hyd & NMIMS's SPPSPTM & SBM's MBA Pharma Management
7. Dr. Subhendu Mishra, PGP Coordinator, SoM, CUTM
8. Dr. Girija Nandini, PGP Coordinator, SoM, CUTM
9. Dr. Bibhunandini Das, UGP Coordinator, SoM, CUTM
10. Dr. Pramod Kumar Patjoshi, B. Com Program Coordinator, SoM, CUTM
11. Dr. Umakanta Nayak, Dean, SoM, CUTM

The Chairperson, CUTM welcomed all members of the Board and briefly outlined the purpose of the meeting. Thereafter, the Dean, SoM presented the achievements and improvements of the School in the areas of academics, research, consultancy and infrastructure.

The following agenda items were taken up subsequently:

Agenda 1: **The minutes of the last meeting of the BoS held on 22.06.2019 were confirmed.**

Agenda 2: **Discussion and approval on revision required in the Curriculum of MBA Program**

- The Dean, SoM presented the MBA curriculum based on the feedback and suggestions made by the various stakeholders. Board discussed the curriuculum throughly and approved the following suggestions for course revision to be implemented from the Academic Year 2020-21 (*Annexure-I*).
    - A basket structure was developed for students to acquire credits as per their choices
    - New courses were incorporated in baskets

Agenda 3: **Discussion and approval on revision required in the Curriculum of MBA – RUDM & ABM Program**

- MBA – RUDM & ABM curriculum was presented based on the feedback and suggestions made by the various stakeholders. Board discussed the curriuculum throughly and approved the

following suggestions for course revision to be implemented from the Academic Year 2020-21 (*Annexure-II*).

- The nomenclature of the program was changed to MBA- Rural and Urban Development Management & Agri-Business Management
- New courses were incorporated in the sullabus

Agenda 4: **Discussion and approval on revision required in the Curriculum of BBA program**

- BBA syllabus revision was presented based on the suggestions made by the various stakeholders . The Board accepted and approved the following changes to curriculum to be implemented from the Academic Year 2020-21 (*Annexure-III*).
  - A basket structure was introduced for students to acquire credits as per their choices
  - New courses were incorporated in baskets
  - Generic Elective Basket covered courses from Skill Basket of the University

Agenda 5: **Discussion and approval on revision required in the Curriculum of B.Com program**

- B.Com syllabus revision was presented based on the suggestions made by the various stakeholders . The Board accepted and approved the following changes to curriculum to be implemented from the Academic Year 2020-21 (*Annexure-IV*).
  - A basket structure was introduced for students to acquire credits as per their choices
  - New courses were incorporated in baskets

Agenda 6: **Inclusion of courses on life skills and value addition**

Various courses were presented to be offered by the University in the areas of life skills and value addition for the overall improvement and well being of students. The same was agreed upon and approved by the Board members. *(Annexure-V)*

The Dean, SoM extended sincere thanks to all members of the Board.

The meeting ended with a vote of thanks to the Chair.

Dean, SoM

Dean
School of Management
Centurion University, Odisha

Dean, Academics

Dean - Academic
Centurion University of Technology & Management
Bhubaneswar, Khurda, Odisha-752050

Annexure-I

MBA Course Structure with different baskets

MBA Programme			
Basket	**Basket Category**	**Minimum Credits to be acquired**	**Scope**
I	Foundation	30	Core
II	Digital Technologies	06	Choice
III	Management Potential Development	36	Core
IV	Sustainability	06	Core
V	Electives/ Domain Courses	24	Choice
VI	Summer Internship	04	Choice
	Total Credits	106	

List of new courses added in MBA

Sl. No	Course Title	Type (Skill/ Employability/ Entrepreneurship	Credit
Basket-I Foundation Courses			
1	Job Readiness	Employability	3
2	Quantitative Techniques	Employability	5
3	Micro Economics	Employability & Entrepreneurship	4
4	Economic Environment of Business	Employability	4
5	Principles of Management	Employability	2
6	Basics of Design Thinking	Employability & Entrepreneurship	2
7	Data Analysis and Visualization Using Python	Skill Development	4
Basket-II Digital Technologies			
8	Introduction to AI/ML	Employability	1
9	Introduction Data Analytics	Employability	1
10	Introduction Additive Manufacturing/3D Printing	Employability	1
11	Introduction to AR/VR	Employability	1
12	Introduction to Emerging Mobility Solutions	Employability	1
13	Introduction to Blockchain	Employability	1
14	Introduction to Robotics	Employability	1
Basket-III Management Potential Development			
15	Introduction to PLM (Platforms such as 3DS)	Employability, Entrepreneurship	2
16	Designing User/Customer Experience (UX/CX)	Skill Development	2
Basket-IV Sustainability			
17	Gender, Human Rights and Ethics	Employability	3
18	Climate Change, Sustainability and Organisation	Employability	3
Basket-V Electives/Domain			

19	Financial Analysis and Visualization	Employability	4
20	Robotics Process Automation (RPA) in Finance	Employability & Entrepreneurship	4
21	Services & Financial Services Marketing	Employability	4
22	Retail & Etail Management	Employability & Entrepreneurship	4
23	Business Analytics	Skill development	4

Annexure-II

List of new courses added in **MBA DM & ABM**

Sl. No	Course Title	Type (Skill/Employability/ Entrepreneurship)	Credit
Semester-I			
1	Micro Economics	Employability & Entrepreneurship	4
2	Contemporary Development Communication	Employability	4
3	Data Analysis using Excel and Python	Skill Development	4
4	Indian Society and Culture	Employability	2
5	Gender, Human Rights and Ethics	Employability	3
Semester-II			
6	Development Theory and Practice	Employability and Skill Development	4
7	Economic Environment for Business	Employability	4
8	Rural Marketing	Employability & Entrepreneurship	4
9	Climate change and Sustainable Development	Employability	3
10	Job Readiness: Employability	Employability	0
Semester-III			
11	Strategic Management	Employability	4
12	Community Organization and Development	Employability	2
13	Food Security and Right to Food	Employability	2
14	Organization Behaviour	Employability	4
Semester-IV			
15	Human Resource Management and Organisation Development	Employability, Entrepreneurship	4
16	Public Policy: Design, Analysis and Implementation	Employability and Skill Development	4
17	Social Entrepreneurship and CSR	Entrepreneurship	2
18	Digital and Social Media Marketing	Employability, Entrepreneurship	2
19	Local Governance systems	Employability	2

20	Community Owned and Managed Businesses	Employability	2
21	Management of Rural Health	Employability	2
22	Management of Rural Education	Employability	2
23	Sustainable Rural Livelihoods	Employability	2
24	Managing Watersheds	Employability & Skill	2
25	M&E of Development Projects	Employability & Entrepreneurship	2
26	Poverty reduction strategies	Employability	2
27	Issues in Tribal Development	Employability	2
28	Extension strategies for development	Employability	2
29	Fund Raising for Social Cause	Employability & Entrepreneurship	2

Annexure-III

BBA Course Structure

Basket	Basket Category	Minimum Credits to be acquired	Scope
I	Core Discipline	84	Core
II	Discipline Specific Elective	24	Choice
III	Generic/ Interdisciplinary Elective	24	Choice
IV	Skill Enhancement courses	06	Core
V	Ability Enhancement Courses (AECC)	10	Core
	Total Credits	148	

List of new courses added in BBA:

Sl. No	Course Title	Type (Skill/Employability/ Entrepreneurship)	Credit
Basket-I			
1	Fundamentals of Management	Employability and entrepreneurship	4
2	Quantitative Techniques for Management	Employability	6
3	Business Policy and Strategy	Employability & Entrepreneurship	6
Basket-II			
4	Advanced Managerial Accounting	Employability & Entrepreneurship	6
5	Financial Institutions, Markets & Services	Employability	6
6	Commercial Banking and ALM	Employability	6
7	Current Asset Management	Employability & Entrepreneurship	6
8	Financial Analysis and Visualization	Employability & Skill Development	6
9	Robotics Process Automation (RPA) in Finance	Employability & Skill Development	6
10	Rural Marketing	Employability & Skill Development	6
11	Sales and Distribution Management	Employability	6
12	Services & Financial Services Marketing	Employability	6

13	Digital Marketing & Marketing Communications	Employability	6
14	Retail & Etail Management	Employability & Entrepreneurship	6
15	B2B Marketing	Employability	6
Basket-III			
16	University Skill Basket	Skill Development	Each course of 4 credits
Basket-V			
17	Job Readiness	Employability	6
18	Environmental Science	Employability	4
		Total	**98**

Annexure-IV

B.Com Course Structure

Basket	Basket Category	Minimum Credits to be acquired	Scope
I	Core Discipline	84	Core
II	Discipline Specific Elective	24	Choice
III	Generic/ Interdisciplinary Elective	24	Choice
IV	Skill Enhancement courses	06	Core
V	Ability Enhancement Courses (AECC)	08	Core
	Total Credits	146	

List of new courses added in **B.Com:**

Sl. No	Course Title	Type (Skill/Employability/ Entrepreneurship)	Credit
1	Human Resource Management	Employability & Entrepreneurship	6
2	Principles of Marketing	Employability & Entrepreneurship	6
		Total	**12**

Annexure-V

Skill Courses approved by university

Sl. No.	Course Title	Credit
1	Introduction to Quantum Computing	4
2	Organic Farming	4
3	Mushroom Farming	4
4	Hydroponics Technology	4
5	Poultry Farming	4
6	Dairy Farming	4
7	Vermicomposting Farming	4
8	Transformer Manufacturing, Repairing and Maintenance	4
9	Electrical Installation	4
10	Repair and Maintenance of Home Appliances	4
11	Refrigeration and air conditioning	4
12	Super critical Co2 plant operation	4
13	Business Plan Preparation	4
14	Composite fabrication practice	4
15	Powder coating practice	4
16	Farm appliances operation	4
17	Bio fertilisers preparation	4
18	PCB designing & fabrication	4
19	Introduction to Block Chain Technology	4
20	Introduction to Nutraceuticals	4
21	Introduction to NLP	4
22	Introduction to Computational Biology	4
23	Product Life Cycle Management through Gate process	4
24	New material development with Biovia	4
25	Spectral image processing using Python	4
26	Satellite data processing	4
27	Working with Graphene and carbon fibre	4
28	Adobe Tools and Illustrations	4
29	Digital Painting	4
30	Computer Installation and Maintenance	4

Value Added courses approved by university

	Course Title	Credit
1	Natural Resource Management	30 Hours
2	Research Methodology and IPR	30 Hours

3	Urban Gardens using Hydroponics	30 Hours
4	Introduction to Python	30 Hours
5	MATLAB	30 Hours
6	Waste to Wealth	30 Hours
7	Technical Writing	30 Hours
8	Organic Farming	30 Hours
9	Disaster Management	30 Hours
10	Ethical Hacking	30 Hours
11	Web Development	30 Hours
12	Food & Nutrition	30 Hours
13	Clinical Practice	30 Hours
14	Innovation Management	30 Hours
15	Financial Literacy	30 Hours
16	Yoga and Meditation	30 Hours
17	Steps for Career Plan	30 Hours
18	MS Excel Basics	30 Hours
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20	Ethical Writing Practice	30 Hours
21	Ansys	30 Hours
22	Video Making for Youtubers	30 Hours
23	Natural Resource Management	30 Hours

University-wide Domains for School of Management

1	DACU2200	Data Analytics- Visualisation	20
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4	ARCU2060	Gaming and Immersive Learning (AR & VR)	20
5	GMCU2140	GO-TO-MARKET(3D Experience)	22
6	FPCU2310	Food Processing	29
7	ABCU2320	Agri Business Management	23
8	FSCU2330	Commodity and Food Storage	29

CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Management

Time: 3.00 pm Date: 11.07.2020

Venue: Online Zoom Platform

Board of Studies Meeting

Attendance Sheet

Sl.No.	Name of the Member	Designation	Signature
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9	Dr. Pramod Kumar Patjoshi	B. Com Program Coordinator, SoM, CUTM	Joined Online
10	Dr. Umakanta Nayak	Dean, SoM, CUTM	Joined Online

Dean, SoM

Dean
School of Management
Centurion University, Odisha

Dean, Academics

Dean - Academic
Centurion University of Technology & Management
Bhubaneswar, Khurda, Odisha-752050

CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Management

Date: 17.07.2020

MINUTES OF BOARD OF STUDIES MEETING held on 11.07.2020

Venue: Online Zoom Platform

Time: 3.00 pm

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1. Dr. Anita Patra, Registrar, CUTM
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3. Dr. Ranjan Kumar Bal, Retd. Professor, Utkal University
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7. Dr. Subhendu Mishra, PGP Coordinator, SoM, CUTM
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10. Dr. Pramod Kumar Patjoshi, B. Com Program Coordinator, SoM, CUTM
11. Dr. Umakanta Nayak, Dean, SoM, CUTM

The Chairperson, CUTM welcomed all members of the Board and briefly outlined the purpose of the meeting. Thereafter, the Dean, SoM presented the achievements and improvements of the School in the areas of academics, research, consultancy and infrastructure.

The following agenda items were taken up subsequently:

Agenda 1: **The minutes of the last meeting of the BoS held on 22.06.2019 were confirmed.**

Agenda 2: **Discussion and approval on revision required in the Curriculum of MBA Program**

- The Dean, SoM presented the MBA curriculum based on the feedback and suggestions made by the various stakeholders. Board discussed the curriuculum throughly and approved the following suggestions for course revision to be implemented from the Academic Year 2020-21 (*Annexure-I*).
    - A basket structure was developed for students to acquire credits as per their choices
    - New courses were incorporated in baskets

Agenda 3: **Discussion and approval on revision required in the Curriculum of MBA – RUDM & ABM Program**

- MBA – RUDM & ABM curriculum was presented based on the feedback and suggestions made by the various stakeholders. Board discussed the curriuculum throughly and approved the

following suggestions for course revision to be implemented from the Academic Year 2020-21 (*Annexure-II*).

- The nomenclature of the program was changed to MBA- Rural and Urban Development Management & Agri-Business Management
- New courses were incorporated in the sullabus

Agenda 4: **Discussion and approval on revision required in the Curriculum of BBA program**

- BBA syllabus revision was presented based on the suggestions made by the various stakeholders . The Board accepted and approved the following changes to curriculum to be implemented from the Academic Year 2020-21 (*Annexure-III*).
  - A basket structure was introduced for students to acquire credits as per their choices
  - New courses were incorporated in baskets
  - Generic Elective Basket covered courses from Skill Basket of the University

Agenda 5: **Discussion and approval on revision required in the Curriculum of B.Com program**

- B.Com syllabus revision was presented based on the suggestions made by the various stakeholders . The Board accepted and approved the following changes to curriculum to be implemented from the Academic Year 2020-21 (*Annexure-IV*).
  - A basket structure was introduced for students to acquire credits as per their choices
  - New courses were incorporated in baskets

Agenda 6: **Inclusion of courses on life skills and value addition**

Various courses were presented to be offered by the University in the areas of life skills and value addition for the overall improvement and well being of students. The same was agreed upon and approved by the Board members. *(Annexure-V)*

The Dean, SoM extended sincere thanks to all members of the Board.

The meeting ended with a vote of thanks to the Chair.

Dean, SoM

Dean
School of Management
Centurion University, Odisha

Dean, Academics

Dean - Academic
Centurion University of Technology & Management
Bhubaneswar, Khurda, Odisha-752050

Annexure-I

MBA Course Structure with different baskets

MBA Programme			
Basket	**Basket Category**	**Minimum Credits to be acquired**	**Scope**
I	Foundation	30	Core
II	Digital Technologies	06	Choice
III	Management Potential Development	36	Core
IV	Sustainability	06	Core
V	Electives/ Domain Courses	24	Choice
VI	Summer Internship	04	Choice
	Total Credits	106	

List of new courses added in MBA

Sl. No	Course Title	Type (Skill/ Employability/ Entrepreneurship	Credit
Basket-I Foundation Courses			
1	Job Readiness	Employability	3
2	Quantitative Techniques	Employability	5
3	Micro Economics	Employability & Entrepreneurship	4
4	Economic Environment of Business	Employability	4
5	Principles of Management	Employability	2
6	Basics of Design Thinking	Employability & Entrepreneurship	2
7	Data Analysis and Visualization Using Python	Skill Development	4
Basket-II Digital Technologies			
8	Introduction to AI/ML	Employability	1
9	Introduction Data Analytics	Employability	1
10	Introduction Additive Manufacturing/3D Printing	Employability	1
11	Introduction to AR/VR	Employability	1
12	Introduction to Emerging Mobility Solutions	Employability	1
13	Introduction to Blockchain	Employability	1
14	Introduction to Robotics	Employability	1
Basket-III Management Potential Development			
15	Introduction to PLM (Platforms such as 3DS)	Employability, Entrepreneurship	2
16	Designing User/Customer Experience (UX/CX)	Skill Development	2
Basket-IV Sustainability			
17	Gender, Human Rights and Ethics	Employability	3
18	Climate Change, Sustainability and Organisation	Employability	3
Basket-V Electives/Domain			

19	Financial Analysis and Visualization	Employability	4
20	Robotics Process Automation (RPA) in Finance	Employability & Entrepreneurship	4
21	Services & Financial Services Marketing	Employability	4
22	Retail & Etail Management	Employability & Entrepreneurship	4
23	Business Analytics	Skill development	4

Annexure-II

List of new courses added in **MBA DM & ABM**

Sl. No	Course Title	Type (Skill/Employability/ Entrepreneurship)	Credit
Semester-I			
1	Micro Economics	Employability & Entrepreneurship	4
2	Contemporary Development Communication	Employability	4
3	Data Analysis using Excel and Python	Skill Development	4
4	Indian Society and Culture	Employability	2
5	Gender, Human Rights and Ethics	Employability	3
Semester-II			
6	Development Theory and Practice	Employability and Skill Development	4
7	Economic Environment for Business	Employability	4
8	Rural Marketing	Employability & Entrepreneurship	4
9	Climate change and Sustainable Development	Employability	3
10	Job Readiness: Employability	Employability	0
Semester-III			
11	Strategic Management	Employability	4
12	Community Organization and Development	Employability	2
13	Food Security and Right to Food	Employability	2
14	Organization Behaviour	Employability	4
Semester-IV			
15	Human Resource Management and Organisation Development	Employability, Entrepreneurship	4
16	Public Policy: Design, Analysis and Implementation	Employability and Skill Development	4
17	Social Entrepreneurship and CSR	Entrepreneurship	2
18	Digital and Social Media Marketing	Employability, Entrepreneurship	2
19	Local Governance systems	Employability	2

20	Community Owned and Managed Businesses	Employability	2
21	Management of Rural Health	Employability	2
22	Management of Rural Education	Employability	2
23	Sustainable Rural Livelihoods	Employability	2
24	Managing Watersheds	Employability & Skill	2
25	M&E of Development Projects	Employability & Entrepreneurship	2
26	Poverty reduction strategies	Employability	2
27	Issues in Tribal Development	Employability	2
28	Extension strategies for development	Employability	2
29	Fund Raising for Social Cause	Employability & Entrepreneurship	2

Annexure-III

BBA Course Structure

Basket	Basket Category	Minimum Credits to be acquired	Scope
I	Core Discipline	84	Core
II	Discipline Specific Elective	24	Choice
III	Generic/ Interdisciplinary Elective	24	Choice
IV	Skill Enhancement courses	06	Core
V	Ability Enhancement Courses (AECC)	10	Core
	Total Credits	148	

List of new courses added in BBA:

Sl. No	Course Title	Type (Skill/Employability/ Entrepreneurship)	Credit
Basket-I			
1	Fundamentals of Management	Employability and entrepreneurship	4
2	Quantitative Techniques for Management	Employability	6
3	Business Policy and Strategy	Employability & Entrepreneurship	6
Basket-II			
4	Advanced Managerial Accounting	Employability & Entrepreneurship	6
5	Financial Institutions, Markets & Services	Employability	6
6	Commercial Banking and ALM	Employability	6
7	Current Asset Management	Employability & Entrepreneurship	6
8	Financial Analysis and Visualization	Employability & Skill Development	6
9	Robotics Process Automation (RPA) in Finance	Employability & Skill Development	6
10	Rural Marketing	Employability & Skill Development	6
11	Sales and Distribution Management	Employability	6
12	Services & Financial Services Marketing	Employability	6

13	Digital Marketing & Marketing Communications	Employability	6
14	Retail & Etail Management	Employability & Entrepreneurship	6
15	B2B Marketing	Employability	6
Basket-III			
16	University Skill Basket	Skill Development	Each course of 4 credits
Basket-V			
17	Job Readiness	Employability	6
18	Environmental Science	Employability	4
		Total	**98**

Annexure-IV

B.Com Course Structure

Basket	Basket Category	Minimum Credits to be acquired	Scope
I	Core Discipline	84	Core
II	Discipline Specific Elective	24	Choice
III	Generic/ Interdisciplinary Elective	24	Choice
IV	Skill Enhancement courses	06	Core
V	Ability Enhancement Courses (AECC)	08	Core
	Total Credits	146	

List of new courses added in **B.Com:**

Sl. No	Course Title	Type (Skill/Employability/ Entrepreneurship)	Credit
1	Human Resource Management	Employability & Entrepreneurship	6
2	Principles of Marketing	Employability & Entrepreneurship	6
		Total	**12**

Annexure-V

Skill Courses approved by university

Sl. No.	Course Title	Credit
1	Introduction to Quantum Computing	4
2	Organic Farming	4
3	Mushroom Farming	4
4	Hydroponics Technology	4
5	Poultry Farming	4
6	Dairy Farming	4
7	Vermicomposting Farming	4
8	Transformer Manufacturing, Repairing and Maintenance	4
9	Electrical Installation	4
10	Repair and Maintenance of Home Appliances	4
11	Refrigeration and air conditioning	4
12	Super critical Co2 plant operation	4
13	Business Plan Preparation	4
14	Composite fabrication practice	4
15	Powder coating practice	4
16	Farm appliances operation	4
17	Bio fertilisers preparation	4
18	PCB designing & fabrication	4
19	Introduction to Block Chain Technology	4
20	Introduction to Nutraceuticals	4
21	Introduction to NLP	4
22	Introduction to Computational Biology	4
23	Product Life Cycle Management through Gate process	4
24	New material development with Biovia	4
25	Spectral image processing using Python	4
26	Satellite data processing	4
27	Working with Graphene and carbon fibre	4
28	Adobe Tools and Illustrations	4
29	Digital Painting	4
30	Computer Installation and Maintenance	4

Value Added courses approved by university

	Course Title	Credit
1	Natural Resource Management	30 Hours
2	Research Methodology and IPR	30 Hours

3	Urban Gardens using Hydroponics	30 Hours
4	Introduction to Python	30 Hours
5	MATLAB	30 Hours
6	Waste to Wealth	30 Hours
7	Technical Writing	30 Hours
8	Organic Farming	30 Hours
9	Disaster Management	30 Hours
10	Ethical Hacking	30 Hours
11	Web Development	30 Hours
12	Food & Nutrition	30 Hours
13	Clinical Practice	30 Hours
14	Innovation Management	30 Hours
15	Financial Literacy	30 Hours
16	Yoga and Meditation	30 Hours
17	Steps for Career Plan	30 Hours
18	MS Excel Basics	30 Hours
19	Quality Analysis	30 Hours
20	Ethical Writing Practice	30 Hours
21	Ansys	30 Hours
22	Video Making for Youtubers	30 Hours
23	Natural Resource Management	30 Hours

University-wide Domains for School of Management

1	DACU2200	Data Analytics- Visualisation	20
2	BACU2210	Business Analytics	18
3	MLCU2000	Data Science and Machine Learning	26
4	ARCU2060	Gaming and Immersive Learning (AR & VR)	20
5	GMCU2140	GO-TO-MARKET(3D Experience)	22
6	FPCU2310	Food Processing	29
7	ABCU2320	Agri Business Management	23
8	FSCU2330	Commodity and Food Storage	29

CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Management

Time: 3.00 pm Date: 11.07.2020

Venue: Online Zoom Platform

Board of Studies Meeting

Attendance Sheet

Sl.No.	Name of the Member	Designation	Signature
1	Dr. Prasanta Kumar Mohanty	Dean Academics, CUTM	Joined Online
2	Dr. Ranjan Kumar Bal	Retd. Professor, Utkal University	Joined Online
3	Mr. Aditya Sapru	Managing Director, Neumck Strategy and Advisory, Bangalore	Joined Online
4	Mr. N M Prusty	President Humanitarian Aid International, Chief Mentor and Director at Centre for Development and Disaster Managemenet Support Services (CDDMASS), Chairperson-Sphere India	Joined Online
5	Dr. Sunil Chaturvedi	Director-Pharma Network at SVKM's Pharma Schools Mumbai, Shirpur, Dhule, Hyd & NMIMS's SPPSPTM & SBM's MBA Pharma Management	Joined Online
6	Dr. Subhendu Mishra	PGP Coordinator, SoM, CUTM	Joined Online
7	Dr. Girija Nandini	PGP Coordinator, SoM, CUTM	Joined Online
8	Dr. Bibhunandini Das	UGP Coordinator, SoM, CUTM	Joined Online
9	Dr. Pramod Kumar Patjoshi	B. Com Program Coordinator, SoM, CUTM	Joined Online
10	Dr. Umakanta Nayak	Dean, SoM, CUTM	Joined Online

Dean, SoM

Dean
School of Management
Centurion University, Odisha

Dean, Academics

Dean - Academic
Centurion University of Technology & Management
Bhubaneswar, Khurda, Odisha-752050

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CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

MS Swaminathan School of Agriculture

Date: 11.07.2020

MINUTES OF BOARD OF STUDIES MEETING held on 11.07.2020(Online mode)

Time: 11.00 a.m.

The Board of Studies (BoS) meeting of MS Swaminathan School of Agriculture was held on 11.07.2020 in online mode. The following members were present:

1. Prof.P.K.Mahapatro
2. Prof.B K Mishra
3. Dr R N Sahoo
4. Dr K K Singh
5. K. Satya Krishna Prasad
6. Mr. Morup Namgail,
7. Prof. M.Devender Reddy
8. Prof. Satya Prasad Nanda
9. HOD Agronomy
10. HOD Plant Pathology
11. HOD Entomology
12. HOD Soil Science
13. HOD Extension
14. HOD GBP
15. HOD Biotechnology
16. HOD Plant Physiology
17. HOD Horticulture
18. Alumni

The Chairperson welcomed all members of the Board and briefly outlined the purpose of the meeting. Thereafter, the Dean of the MS Swaminathan School of Agriculture presented the achievements and improvements of the department in the areas of academics, research, consultancy and infrastructure.

The following agenda items were taken up subsequently:

Agenda 1: **The minutes of the last meeting of the BoS held on 22.06.2019 were confirmed.**

Agenda 2: **Discussion and approval on any revision required in the Curriculum of B.Sc Agriculture**

All the external BoS members appreciated the structure and course outline of different courses and domains. They mentioned that the courses are well structured, organized and application oriented as per academics and industry is concerned. They also appreciated the on-line class delivery initiative of the University.

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Dr. K. K. Singh suggested that the course should emphasize on modern technological intervention such as AI Technology, Digital Mapping, Soil Analysis replaced by dry method. Students should be able to adjust themselves for new innovations in the field of Agriculture.

K. Satya Krishna Prasad, Vice President, Crop Operations and Sustainability, ITC Limited suggested the need of industry experiences and support which will lead CUTM to compete with other such university offering BSc Agriculture Course. In addition to it, the course should promote future entrepreneurs.

Mr. Morup Namgail, Head Agri-Tech, IFFCO provided the outlook of current industry hiring and suggested to give emphasis on Digital Marketing Skills and Promoting personality development of the students. He also suggested that the domain courses should be a team work with specific target to achieve.

Prof. P K Mahapatro, Retd. Dean, OUAT, appreciated and lauded the faculty and management for developing the core courses and domains. He suggested to introduce Artificial intelligence in curriculum which has a great importance in Agriculture.

Prof. R. N. Sahu, Principal Scientist, IARI, New Delhi suggested to prepare a curriculum through which we can compete with the real world class universities around us. He emphasized to minimize the content and orient students towards entrepreneurship and start ups. He suggested to introduce data analytics, IOT & sensors in Agriculture and allied courses.

Prof. Anita Patra, Registrar,CUTM clarified the members that the students will be exposed to digital marketing when they register for domain

Discussion and Resolutions taken (Syllabus/Evaluation systems etc.);

Agenda 3: **Inclusion of courses on life skills and value addition**

It was suggested that students take up the various courses offered by the University in the areas of life skills and value addition for their overall improvement and well being. The same was agreed upon and approved by the Board members.

Discussion and Resolutions taken (Syllabus/Evaluation systems etc.);

1. Focus should be given to modern technologies like AI, IOT, Sensors, digital mapping etc.

2. Students should be more and more exposed towards industries and gain industrial experience, entrepreneurship skills and start ups.

3. Students should be trained in Digital Marketing Skills and in improving the personality

- Type of curriculum; CBCS/Elective/NEP:
- Percentage of courses added to new curriculum:
- List of existing courses where syllabus was changed

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The Dean , MS Swaminathan School of Agriculture. extended sincere thanks to all members of the Board.

The meeting ended with a vote of thanks to the Chair.

Convenor of BoS & Dean, MSSSoA

Dean Administration

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CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

M S Swaminathan School of Agriculture

Time: 11.00 a.m. **Date:** 11.07 2020

Venue: Online

Board of Studies Meeting

Attendance Sheet

Sl.No.	Name of the Member	Designation	Signature
1	Dr.K.K.Singh	Zuari Agro Chemicals *Limited*	attended online
2	Prof. K. Satya Krishna Prasad	Vice President, Crop Operations and Sustainability, ITC Limited	attended online
3	Mr. Morup Namgail	Head Agri-Tech, IFFCO	attended online
4	Prof.P.K.Mahapatro	Retd. Dean, OUAT	attended online
5	Prof.R.N.Sahu	Principal Scientist, IARI, New Delhi	attended online
6	Dr.K.V.Ramana Rao	Scientist-G, Science & Engineering Research Board DST, New Delhi	attended online
7	Prof. M.Devender Reddy	Dean (Academics), MSSSoA, CUTM,Paralakhemundi Campus	attended online
8	Prof. Satya Prasad Nanda	Dean (Admin.) MSSSoA, CUTM, Paralakhemundi Campus	*attended online*
9	Prof.K. Satya Krishna Prasad	Dean, School of Fisheries, CUTM, Paralakhemundi Campus	attended online

10	Prof. Sambid Swain	Head, School of Fisheries, CUTM, Paralakhemundi Campus	attended online
11	Mr.D.Sarath Kumar	2nd Year M.Sc.Ag	attended online
12	Ms. G. Nalini Naidu	1stYear M.Sc.Ag	attended online
13	Mr.Bikash Kumar Agarwala	4th Year B.Sc.Ag	attended online
15	Mr. Alok Behera	Alumni	attended online
16	Mr. L.Sagar	Alumni	attended online
17	Mr. Ashish Mishra	Alumni	attended online
18	Ms.G.Prameela	Alumni	attended online
19	M Suresh	Alumni	attended online
20	HOD Agronomy	Dr. Sagar Maitra	attended online
21	HOD Plant Pathology	Dr. B Praveen	attended online
22	HOD Entomology	V Lipsa Dash	attended online
23	HOD Soil Science	Dr. Rahul Adhikary	attended online
24	HOD Extension	Dr. C. Padhy	attended online
25	HOD GBP	Dr. Pravin Kumar	attended online
26	HOD Biotechnology	Dr Pushpalata G	attended online
27	HOD Plant Physiology	Dr Raghu G	attended online
28	HOD Horticulture	Dr. Anant Tamang	attended online

Dean Administration

Dean Academics

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CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Paramedics and Allied Health Sciences

Date: 11/07/2020

MINUTES OF BOARD OF STUDIES MEETING held on 11/07/2020

Venue: Hybrid mode (Board Room, CUTM, Bhubaneswar and online)

Time: 11.00 AM

The Board of Studies (BoS) meeting of School of Paramedics and Allied Health Sciences was held on **11/07/2020** at 11 AM in hybrid mode.

The following members were present:

Dr. Bhargavram (MD, Professor of Opthalmology)

Dr. Ajay Kumar Singh (MD, Professor of Ophthalmology)

Dr. Santosh Kumar Behera (Senior Scientist)

Dr. Debasish Sahoo (MD, Professor in Microbiology)

Dr. Debi Prasad Rath (MD, Professor in Pathology)

Dr. Ardhendu Praharaj (Ph. D. in Microbiology)

Dr. Harihar Praharaj (MD, Professor of Medicine)

Dr.Chandra Mouli (MD, Professor of Radiology)

Dr.Teja, Anesthesian

Prof. Sourav Karmakar (Asst. Prof. SoPAHS)

Ms. SNS Neelima (Asst. Prof. SoPAHS)

Mr. M.Vinay Dinakaran (Asst. Prof. SoPAHS)

Ms. N.Anuhya (Asst. Prof. SoPAHS)

Dr.M.L.N.Acharyulu (Associate Dean, SoPAHS)

Dr.CH.Nooka Raju (Associate Prof., SoPAHS)

Mr. Rajesh Sukkala (Asst. Prof. SoPAHS)

Dr. Ashish Kumar Sen (Adjunct Faculty, SoPAHS)

Dr. Monali P. Mishra (Assistant Prof., SoPAHS)

Ms. Sonali Dash (Assistant Prof., SoPAHS)

Ms. Susmita Chakrabarty (Lecturer, SoPAHS)

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Prof. Sunil Kumar Jha (Dean, SoPAHS)

Dr. Soumya Jal (HoD, SoPAHS)

Dr. P.K. Mohanty, Dean (Acad) CUTM

All the members were welcomed to the online session by the Chairperson and were briefed regarding the purpose of the meeting. Thereafter, the Dean of SoPAHS presented on the achievements, improvements of the department in terms of academics and infrastructure.

Following are the programs offered by SoPAHS:

MSc Medical Laboratory Technology (MSc MLT)
MSc Applied and Clinical Microbiology (MSc CMB)
BSc Medical Laboratory Technology (BSc MLT)
BSc Clinical Microbiology (BSc CMB)
BSc Medical Radiation Technology (BSc MRT)
BSc Optometry (BSc Optom)

Agenda of the meeting:

Agenda 1: **The minutes of the last meeting of the BoS held on 22.06.2019 were confirmed.**

Agenda 2: **Discussion and approval on the content of syllabus for various courses of SoPAHS. Implementation of CBCS pattern.**

At first, the Dean of the school presented the feedback received from several stakeholders, on the curriculum of its various departments. With respect to the feedback received from the stakeholders, the committee discussed and approved for incorporation/ modifications in the curriculum for the Academic session 2020-21.

- The committee approved to introduce the following programmes in SoPAHS:
  BSc Anaesthesia Technology;
  BSc Operation Theatre Technology;
  BSc Emergency Medicine Technology
- The curriculum was framed adopting the CBCS pattern.
- Based on the feedback from stakeholders, the curriculum was framed in a manner to incorporate Project/ Practical based learning. The Project and Practical components of relevant subjects were embedded along with their theory component. Much of practical exposure/ hands on training/ research and project exposure is emphasized.
- The curriculum developed is available on http://courseware.cutm.ac.in/ (links/ notes/ videos for relevant notes are also available). It was adapted in a way to ease flip class technique and enhance Virtual learning along with real time learning, which was highly appreciated by the board members.
- New courses added into the curriculum are provided in *Annexure A*.

Agenda 3: **Inclusion of courses on life skills and value addition**

For their overall development and wellbeing of the students, it was advised that students enroll in the various life skills and value-adding courses that are offered by the university. The Board members agreed and gave their approval to the same.

Details of the life skill and value added courses introduced are mentioned in *Annexure B*.

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The Dean, SoPAHS extended sincere thanks to all the members of the Board.

The meeting ended with a vote of thanks to the Chair.

Dean, SoPAHS

Prof. Sunil Kumar Jha
DEAN
School of Paramedics & Allied Health Sciences
Centurion University of Technology & Management
Bhubaneswar, Odisha-752050

Dean, Academics

Dean - Academic
Centurion University of Technology & Management
Bhubaneswar, Khurda, Odisha-752050

11/7/20

HOD, SoPAHS

Dr. Soumya Jal
Associate Professor & HOD
School of Paramedics & Allied Health Sciences
Centurion University of Technology & Management
Ramachandrapur, Bhubaneswar - 752050

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Annexure A

List of new courses added

Sl. No	Course Title	Type (Skill/ Employability/ Entrepreneurship)	Credit
	MSc MLT		
1.	Human Anatomy and Physiology	Employability	3
2.	Analytical Techniques	Entrepreneurship	4
3.	Biological Chemistry	Employability	3
4.	Clinical Hematology	Entrepreneurship	4
5.	Clinical Pathology	Entrepreneurship	4
6.	Cell and Molecular Biology	Employability	3
7.	Clinical Biochemistry	Employability	3
8.	Histology	Employability	4
9.	Medical Laboratory Technology	Entrepreneurship	5
10.	Blood Banking	Entrepreneurship	4
11.	Health Programme in India	Entrepreneurship	3
12.	Medical Microbiology	Employability	4
13.	Immunology & Parasitology	Employability	5
14.	Advanced Hematology	Entrepreneurship	4
15.	Research Methodology	Employability	3
16.	Mini Project	Employability	2
17.	Internship	Employability	12
18.	Project	Employability	12
19.	Environmental Studies	Employability	2
20.	Job Readiness	Employability	3
21.	Proficiency in English	Employability	2
	MSc CMB		
1.	Human Anatomy and Physiology	Employability	3
2.	Analytical Techniques	Entrepreneurship	4
3.	Biological Chemistry	Employability	3
4.	Clinical Hematology	Entrepreneurship	4
5.	Clinical Pathology	Entrepreneurship	4
6.	Cell and Molecular Biology	Employability	3
7.	Clinical Biochemistry	Employability	3
8.	Histology	Employability	4
9.	General Microbiology	Employability	4
10.	Systematic Bacteriology	Employability	4
11.	Applied microbiology	Employability	3
12.	Medical Parasitology and Mycology	Employability	5
13.	Immunology & Virology	Employability	5
14.	Clinical Bacteriology	Employability	4
15.	Research Methodology	Employability	3

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16.	Mini Project	Employability	2
17.	Internship	Employability	12
18.	Project	Employability	12
19.	Environmental Studies	Employability	2
20.	Job Readiness	Employability	3
21.	Proficiency in English	Employability	2
	BSc MLT		
1.	Human Anatomy and Physiology	Employability	3
2.	Cell Biology	Employability	4
3.	Medical Instrumentation and Technique	Entrepreneurship	4
4.	Biochemistry	Employability	4
5.	Clinical Pathology	Entrepreneurship	4
6.	Immunology	Employability	5
7.	Molecular Biology	Entrepreneurship	4
8.	Haematology	Entrepreneurship	5
9.	Microbiology	Employability	5
10.	Medical Law and Ethics	Employability	3
11.	Histology	Employability	4
12.	Advanced Hematology	Entrepreneurship	4
13.	Research Methodology	Employability	3
14.	Analytical Biochemistry	Employability	5
15.	Applied Haematology	Entrepreneurship	5
16.	Immunopathology	Employability	4
17.	Parasitology	Employability	5
18.	Basic Computer and Information Science	Employability	2
19.	Blood Banking	Entrepreneurship	4
20.	Medical Laboratory Management	Entrepreneurship	5
21.	Introduction to Quality and Patient Safety	Employability	5
22.	Mycology & Virology	Employability	5
23.	Mini Project	Employability	2
24.	Internship	Employability	12
25.	Project	Employability	12
26.	Environmental Studies	Employability	2
27.	Job Readiness	Employability	3
28.	Proficiency in English	Employability	2
	BSc CMB		
1.	Human Anatomy and Physiology	Employability	3
2.	Cell Biology	Employability	4
3.	Medical Instrumentation and Technique	Entrepreneurship	4
4.	Biochemistry	Employability	4
5.	Clinical Pathology	Entrepreneurship	4
6.	Immunology	Employability	5
7.	Molecular Biology	Entrepreneurship	4

8.	Haematology	Entrepreneurship	5
9.	Microbiology	Employability	5
10.	Medical Law and Ethics	Employability	3
11.	Systemic Bacteriology	Employability	4
12.	Systemic Virology & Mycology	Employability	5
13.	Research Methodology	Employability	3
14.	Analytical Biochemistry	Employability	5
15.	Public Heath Microbiology	Employability	4
16.	Pharmaceutical Microbiology	Employability	4
17.	Industrial Microbiology	Employability	4
18.	Basic Computer and Information Science	Employability	2
19.	Epidemiology	Employability	3
20.	Diagnostic Bacteriology	Entrepreneurship	5
21.	Diagnostic Mycology	Entrepreneurship	4
22.	Diagnostic Virology	Entrepreneurship	4
23.	Diagnostic Parasitology	Entrepreneurship	4
24.	Mini Project	Employability	2
25.	Internship	Employability	12
26.	Project	Employability	12
27.	Environmental Studies	Employability	2
28.	Job Readiness	Employability	3
29.	Proficiency in English	Employability	2
	BSc MRT		
1.	General Anatomy	Employability	5
2.	General Physiology	Employability	5
3.	Basic Biochemistry	Employability	5
4.	Biology	Employability	5
5.	Cell Biology	Employability	5
6.	Mathematics	Employability	5
7.	Basic Radiation Physics	Employability	4
8.	Fundamental Medical Imaging	Entrepreneurship	6
9.	Principles of Radiation Therapy	Employability	4
10.	Basic Medical Instrumentation & Technique	Entrepreneurship	4
11.	Applied Radiation Physics & Radiation Protection	Employability	4
12.	Radiographic Technique - 1	Employability	5
13.	Basic Equipment in Radiotherapy	Employability	4
14.	Mammography and Ultrasound	Entrepreneurship	4
15.	Applied Equipment of Radio Diagnosis	Employability	4
16.	Radiotherapy and Brachy Therapy in Malignant & Non-malignant Disease	Employability	4
17.	Radiographic Technique - 2	Employability	5
18.	Physics of CT & MRI	Employability	4
19.	Interventional Radiology and	Employability	5

	Drug Diagnostic Radiology		
20.	Computerized Tomography (CT Scanning) Method & Procedure	Employability	4
21.	Basic of Magnetic Resonance Imaging	Employability	4
22.	Image Interpretation of X-Ray Mammography, CT & MRI	Entrepreneurship	5
23.	Medical Law and Ethics	Employability	3
24.	Orientation in Clinical Sciences Course contents	Employability	4
25.	Basic Computer and Information Science	Employability	2
26.	Project	Employability	18
27.	Internship	Employability	18
28.	Environmental Studies	Employability	2
29.	Job Readiness	Employability	3
30.	Proficiency in English	Employability	2
	BSc Optometry		
1.	Biology	Employability	4
2.	Maths	Employability	4
3.	Cell Biology	Employability	4
4.	General Anatomy	Employability	5
5.	General Physiology	Employability	5
6.	Basic Biochemistry	Employability	5
7.	GEOMETRIC OPTICS	Employability	5
8.	BASIC COMPUTER AND INFORMATION SCIENCE	Employability	2
9.	OCULAR ANATOMY	Employability	4
10.	OCULAR PHYSIOLOGY	Employability	4
11.	INTRODUCTION TO OPTOMETRY	Employability	2
12.	PHYSICAL OPTICS	Entrepreneurship	4
13.	VISUAL OPTICS –I	Entrepreneurship	5
14.	OPTOMETRIC OPTICS –I	Entrepreneurship	5
15.	OCULAR DISEASES –I	Entrepreneurship	4
16.	OCULAR MICROBIOLOGY & PATHOLOGY	Employability	4
17.	CLINICAL EXAMINATION OF VISUAL SYSTEM LAB	Entrepreneurship	2
18.	VISUAL OPTICS –II	Entrepreneurship	5
19.	OPTOMETRIC OPTICS –II & DISPENCING OPTICS	Employability	5
20.	OCULAR DISEASES –II	Employability	4
21.	CONTACT LENSES-I	Entrepreneurship	5
22.	CONTACT LENSES-II	Entrepreneurship	5
23.	BINOCULAR VISION –I	Entrepreneurship	5
24.	LOW VISION & REHABILITATION	Entrepreneurship	4
25.	BASIC & OCULAR PHARMACOLOGY	Employability	4
26.	BINOCULAR VISION –II	Entrepreneurship	5
27.	PEDIATRIC & GERIATRIC	Employability	4

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	OPTOMETRY		
28.	SYSTEMIC DISEASES & EYE	Employability	4
29.	OCCUPATIONAL OPTOMETRY	Entrepreneurship	3
30.	LAW & OPTOMETRY	Employability	3
31.	PUBLIC HEALTH& COMMUNITY OPTOMETRY	Employability	3
32.	OPTOMETRIC INSTRUMENTS	Entrepreneurship	4
33.	PROJECT	Employability	18
34.	INTERNSHIP	Employability	20
35.	Environmental Studies	Employability	2
36.	Job Readiness	Employability	3
37.	Proficiency in English	Employability	2

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Annexure B

List of Skill courses (Basket) approved

Sl. No	Course Title	Credit	(T+P+P)
1.	Refraction Technology (CUTM3057)	4	0+3+1
2.	Emergency Medical Technology (CUTM3058)	4	0+3+1
3.	Medical Lab Technology (CUTM3059)	4	0+3+1
4.	Operation Theatre Technology (CUTM3060)	4	0+3+1
5.	Radiology Technology (CUTM3061)	4	0+3+1
6.	Phlebotomy Technology (CUTM3062)	4	0+3+1
7.	First Aid Service (CUTM3063)	4	0+3+1
8.	General Duty Assistance Service (CUTM3064)	4	0+3+1
9.	X- ray Technology (CUTM3065)	4	0+3+1

List of value-added courses approved

Sl. No	Course Title	Hrs. of input
1.	Gender, Human Rights and Ethics (CUVA4040)	30 hrs

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CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Paramedics and Allied Health Sciences

Time: 11.00 AM

Date: 11.07.2020

Venue: Hybrid mode (Board Room, CUTM, Bhubaneswar and online)

Board of Studies Meeting

Attendance Sheet

Sl. No.	Name of the BOS Member (Internal Faculty and External Resource)	Designation	Signature
1	Dr. Santosh Kumar Behera	Regional Medical Research Center	Attended online
2	Dr. Debasish Sahoo	SOA University	Attended online
3	Dr. Debi Prasad Rath	CARE Hospital	Attended online
4	Dr. Ardhendu Praharaj	District Microbiology Lab, Nabarangpur	Attended online
5	Dr. Harihar Praharaj	Directorate of Medical Education and Training, Odisha	Attended online
6	Dr. Bhargavram	MD, Professor of Opthalmology, Sandhya Eye Hospital, Andhra Pradesh	Attended online
7	Dr. Ajay Kumar Singh	MD, Professor of Ophthalmology, DHC Khordha	Attended online
8	Dr.Chandra Mouli	Radiology Dept., GVP Institute of Health Care and Medical Technology,Marika valasa, Visakhapatnam,A.P	Attended online
9	Dr.M.Bhargava Ram	Opthamologist, Sandhya Eye Hospital, Maddilapale, Visakhapatnam	Attended online
10	Dr.Teja	Anesthesian	Attended online
11	Dr. Monali P. Mishra	Assistant Prof., SoPAHS (CUTM)	Attended online
12	Ms. Sonali Dash	Assistant Prof., SoPAHS (CUTM)	Attended online
13	Ms. Susmita Chakrabarty	Lecturer, SoPAHS (CUTM)	Attended online
14	Prof. Sourav Karmakar	Asst. Prof. & HoD, SoPAHS (CUTM)	Attended online
15	Ms. SNS Neelima	Asst. Prof. SoPAHS (CUTM)	Attended online
16	Dr.CH.Nooka Raju	Associate Prof., SoPAHS (CUTM)	Attended online
17	Mr. M.Vinay Dinakaran	Asst. Prof. SoPAHS (CUTM)	Attended online

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18	Ms. N.Anuhya	Asst. Prof. SoPAHS (CUTM)	Attended online
19	Dr.M.L.N.Acharyulu	Associate Dean, SoPAHS (CUTM)	Attended online

Dean, SoPAHS
Prof. Sunil Kumar Jha
DEAN
School of Paramedics & Allied Health Sciences
Centurion University of Technology & Management
Bhubaneswar, Odisha-752050

Dean, Academics
Dean - Academic
Centurion University of Technology & Management
Bhubaneswar, Khurda, Odisha-752050

Dr. Soumya Jal
HOD, SoPAHS
Associate Professor & HOD
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CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Paramedics and Allied Health Sciences

Date: 11/07/2020

MINUTES OF BOARD OF STUDIES MEETING held on 11/07/2020

Venue: Hybrid mode (Board Room, CUTM, Bhubaneswar and online)

Time: 11.00 AM

The Board of Studies (BoS) meeting of School of Paramedics and Allied Health Sciences was held on **11/07/2020** at 11 AM in hybrid mode.

The following members were present:

Dr. Bhargavram (MD, Professor of Opthalmology)

Dr. Ajay Kumar Singh (MD, Professor of Ophthalmology)

Dr. Santosh Kumar Behera (Senior Scientist)

Dr. Debasish Sahoo (MD, Professor in Microbiology)

Dr. Debi Prasad Rath (MD, Professor in Pathology)

Dr. Ardhendu Praharaj (Ph. D. in Microbiology)

Dr. Harihar Praharaj (MD, Professor of Medicine)

Dr.Chandra Mouli (MD, Professor of Radiology)

Dr.Teja, Anesthesian

Prof. Sourav Karmakar (Asst. Prof. SoPAHS)

Ms. SNS Neelima (Asst. Prof. SoPAHS)

Mr. M.Vinay Dinakaran (Asst. Prof. SoPAHS)

Ms. N.Anuhya (Asst. Prof. SoPAHS)

Dr.M.L.N.Acharyulu (Associate Dean, SoPAHS)

Dr.CH.Nooka Raju (Associate Prof., SoPAHS)

Mr. Rajesh Sukkala (Asst. Prof. SoPAHS)

Dr. Ashish Kumar Sen (Adjunct Faculty, SoPAHS)

Dr. Monali P. Mishra (Assistant Prof., SoPAHS)

Ms. Sonali Dash (Assistant Prof., SoPAHS)

Ms. Susmita Chakrabarty (Lecturer, SoPAHS)

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Prof. Sunil Kumar Jha (Dean, SoPAHS)

Dr. Soumya Jal (HoD, SoPAHS)

Dr. P.K. Mohanty, Dean (Acad) CUTM

All the members were welcomed to the online session by the Chairperson and were briefed regarding the purpose of the meeting. Thereafter, the Dean of SoPAHS presented on the achievements, improvements of the department in terms of academics and infrastructure.

Following are the programs offered by SoPAHS:

MSc Medical Laboratory Technology (MSc MLT)
MSc Applied and Clinical Microbiology (MSc CMB)
BSc Medical Laboratory Technology (BSc MLT)
BSc Clinical Microbiology (BSc CMB)
BSc Medical Radiation Technology (BSc MRT)
BSc Optometry (BSc Optom)

Agenda of the meeting:

Agenda 1: **The minutes of the last meeting of the BoS held on 22.06.2019 were confirmed.**

Agenda 2: **Discussion and approval on the content of syllabus for various courses of SoPAHS. Implementation of CBCS pattern.**

At first, the Dean of the school presented the feedback received from several stakeholders, on the curriculum of its various departments. With respect to the feedback received from the stakeholders, the committee discussed and approved for incorporation/ modifications in the curriculum for the Academic session 2020-21.

- The committee approved to introduce the following programmes in SoPAHS:
  BSc Anaesthesia Technology;
  BSc Operation Theatre Technology;
  BSc Emergency Medicine Technology
- The curriculum was framed adopting the CBCS pattern.
- Based on the feedback from stakeholders, the curriculum was framed in a manner to incorporate Project/ Practical based learning. The Project and Practical components of relevant subjects were embedded along with their theory component. Much of practical exposure/ hands on training/ research and project exposure is emphasized.
- The curriculum developed is available on http://courseware.cutm.ac.in/ (links/ notes/ videos for relevant notes are also available). It was adapted in a way to ease flip class technique and enhance Virtual learning along with real time learning, which was highly appreciated by the board members.
- New courses added into the curriculum are provided in *Annexure A*.

Agenda 3: **Inclusion of courses on life skills and value addition**

For their overall development and wellbeing of the students, it was advised that students enroll in the various life skills and value-adding courses that are offered by the university. The Board members agreed and gave their approval to the same.

Details of the life skill and value added courses introduced are mentioned in *Annexure B*.

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The Dean, SoPAHS extended sincere thanks to all the members of the Board.

The meeting ended with a vote of thanks to the Chair.

Dean, SoPAHS

Prof. Sunil Kumar Jha
DEAN
School of Paramedics & Allied Health Sciences
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Dean, Academics

Dean - Academic
Centurion University of Technology & Management
Bhubaneswar, Khurda, Odisha-752050

11/7/20

HOD, SoPAHS

Dr. Soumya Jal
Associate Professor & HOD
School of Paramedics & Allied Health Sciences
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Annexure A

List of new courses added

Sl. No	Course Title	Type (Skill/ Employability/ Entrepreneurship)	Credit
	MSc MLT		
1.	Human Anatomy and Physiology	Employability	3
2.	Analytical Techniques	Entrepreneurship	4
3.	Biological Chemistry	Employability	3
4.	Clinical Hematology	Entrepreneurship	4
5.	Clinical Pathology	Entrepreneurship	4
6.	Cell and Molecular Biology	Employability	3
7.	Clinical Biochemistry	Employability	3
8.	Histology	Employability	4
9.	Medical Laboratory Technology	Entrepreneurship	5
10.	Blood Banking	Entrepreneurship	4
11.	Health Programme in India	Entrepreneurship	3
12.	Medical Microbiology	Employability	4
13.	Immunology & Parasitology	Employability	5
14.	Advanced Hematology	Entrepreneurship	4
15.	Research Methodology	Employability	3
16.	Mini Project	Employability	2
17.	Internship	Employability	12
18.	Project	Employability	12
19.	Environmental Studies	Employability	2
20.	Job Readiness	Employability	3
21.	Proficiency in English	Employability	2
	MSc CMB		
1.	Human Anatomy and Physiology	Employability	3
2.	Analytical Techniques	Entrepreneurship	4
3.	Biological Chemistry	Employability	3
4.	Clinical Hematology	Entrepreneurship	4
5.	Clinical Pathology	Entrepreneurship	4
6.	Cell and Molecular Biology	Employability	3
7.	Clinical Biochemistry	Employability	3
8.	Histology	Employability	4
9.	General Microbiology	Employability	4
10.	Systematic Bacteriology	Employability	4
11.	Applied microbiology	Employability	3
12.	Medical Parasitology and Mycology	Employability	5
13.	Immunology & Virology	Employability	5
14.	Clinical Bacteriology	Employability	4
15.	Research Methodology	Employability	3

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16.	Mini Project	Employability	2
17.	Internship	Employability	12
18.	Project	Employability	12
19.	Environmental Studies	Employability	2
20.	Job Readiness	Employability	3
21.	Proficiency in English	Employability	2
	BSc MLT		
1.	Human Anatomy and Physiology	Employability	3
2.	Cell Biology	Employability	4
3.	Medical Instrumentation and Technique	Entrepreneurship	4
4.	Biochemistry	Employability	4
5.	Clinical Pathology	Entrepreneurship	4
6.	Immunology	Employability	5
7.	Molecular Biology	Entrepreneurship	4
8.	Haematology	Entrepreneurship	5
9.	Microbiology	Employability	5
10.	Medical Law and Ethics	Employability	3
11.	Histology	Employability	4
12.	Advanced Hematology	Entrepreneurship	4
13.	Research Methodology	Employability	3
14.	Analytical Biochemistry	Employability	5
15.	Applied Haematology	Entrepreneurship	5
16.	Immunopathology	Employability	4
17.	Parasitology	Employability	5
18.	Basic Computer and Information Science	Employability	2
19.	Blood Banking	Entrepreneurship	4
20.	Medical Laboratory Management	Entrepreneurship	5
21.	Introduction to Quality and Patient Safety	Employability	5
22.	Mycology & Virology	Employability	5
23.	Mini Project	Employability	2
24.	Internship	Employability	12
25.	Project	Employability	12
26.	Environmental Studies	Employability	2
27.	Job Readiness	Employability	3
28.	Proficiency in English	Employability	2
	BSc CMB		
1.	Human Anatomy and Physiology	Employability	3
2.	Cell Biology	Employability	4
3.	Medical Instrumentation and Technique	Entrepreneurship	4
4.	Biochemistry	Employability	4
5.	Clinical Pathology	Entrepreneurship	4
6.	Immunology	Employability	5
7.	Molecular Biology	Entrepreneurship	4

8.	Haematology	Entrepreneurship	5
9.	Microbiology	Employability	5
10.	Medical Law and Ethics	Employability	3
11.	Systemic Bacteriology	Employability	4
12.	Systemic Virology & Mycology	Employability	5
13.	Research Methodology	Employability	3
14.	Analytical Biochemistry	Employability	5
15.	Public Heath Microbiology	Employability	4
16.	Pharmaceutical Microbiology	Employability	4
17.	Industrial Microbiology	Employability	4
18.	Basic Computer and Information Science	Employability	2
19.	Epidemiology	Employability	3
20.	Diagnostic Bacteriology	Entrepreneurship	5
21.	Diagnostic Mycology	Entrepreneurship	4
22.	Diagnostic Virology	Entrepreneurship	4
23.	Diagnostic Parasitology	Entrepreneurship	4
24.	Mini Project	Employability	2
25.	Internship	Employability	12
26.	Project	Employability	12
27.	Environmental Studies	Employability	2
28.	Job Readiness	Employability	3
29.	Proficiency in English	Employability	2
	BSc MRT		
1.	General Anatomy	Employability	5
2.	General Physiology	Employability	5
3.	Basic Biochemistry	Employability	5
4.	Biology	Employability	5
5.	Cell Biology	Employability	5
6.	Mathematics	Employability	5
7.	Basic Radiation Physics	Employability	4
8.	Fundamental Medical Imaging	Entrepreneurship	6
9.	Principles of Radiation Therapy	Employability	4
10.	Basic Medical Instrumentation & Technique	Entrepreneurship	4
11.	Applied Radiation Physics & Radiation Protection	Employability	4
12.	Radiographic Technique - 1	Employability	5
13.	Basic Equipment in Radiotherapy	Employability	4
14.	Mammography and Ultrasound	Entrepreneurship	4
15.	Applied Equipment of Radio Diagnosis	Employability	4
16.	Radiotherapy and Brachy Therapy in Malignant & Non-malignant Disease	Employability	4
17.	Radiographic Technique - 2	Employability	5
18.	Physics of CT & MRI	Employability	4
19.	Interventional Radiology and	Employability	5

	Drug Diagnostic Radiology		
20.	Computerized Tomography (CT Scanning) Method & Procedure	Employability	4
21.	Basic of Magnetic Resonance Imaging	Employability	4
22.	Image Interpretation of X-Ray Mammography, CT & MRI	Entrepreneurship	5
23.	Medical Law and Ethics	Employability	3
24.	Orientation in Clinical Sciences Course contents	Employability	4
25.	Basic Computer and Information Science	Employability	2
26.	Project	Employability	18
27.	Internship	Employability	18
28.	Environmental Studies	Employability	2
29.	Job Readiness	Employability	3
30.	Proficiency in English	Employability	2
	BSc Optometry		
1.	Biology	Employability	4
2.	Maths	Employability	4
3.	Cell Biology	Employability	4
4.	General Anatomy	Employability	5
5.	General Physiology	Employability	5
6.	Basic Biochemistry	Employability	5
7.	GEOMETRIC OPTICS	Employability	5
8.	BASIC COMPUTER AND INFORMATION SCIENCE	Employability	2
9.	OCULAR ANATOMY	Employability	4
10.	OCULAR PHYSIOLOGY	Employability	4
11.	INTRODUCTION TO OPTOMETRY	Employability	2
12.	PHYSICAL OPTICS	Entrepreneurship	4
13.	VISUAL OPTICS –I	Entrepreneurship	5
14.	OPTOMETRIC OPTICS –I	Entrepreneurship	5
15.	OCULAR DISEASES –I	Entrepreneurship	4
16.	OCULAR MICROBIOLOGY & PATHOLOGY	Employability	4
17.	CLINICAL EXAMINATION OF VISUAL SYSTEM LAB	Entrepreneurship	2
18.	VISUAL OPTICS –II	Entrepreneurship	5
19.	OPTOMETRIC OPTICS –II & DISPENCING OPTICS	Employability	5
20.	OCULAR DISEASES –II	Employability	4
21.	CONTACT LENSES-I	Entrepreneurship	5
22.	CONTACT LENSES-II	Entrepreneurship	5
23.	BINOCULAR VISION –I	Entrepreneurship	5
24.	LOW VISION & REHABILITATION	Entrepreneurship	4
25.	BASIC & OCULAR PHARMACOLOGY	Employability	4
26.	BINOCULAR VISION –II	Entrepreneurship	5
27.	PEDIATRIC & GERIATRIC	Employability	4

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	OPTOMETRY		
28.	SYSTEMIC DISEASES & EYE	Employability	4
29.	OCCUPATIONAL OPTOMETRY	Entrepreneurship	3
30.	LAW & OPTOMETRY	Employability	3
31.	PUBLIC HEALTH& COMMUNITY OPTOMETRY	Employability	3
32.	OPTOMETRIC INSTRUMENTS	Entrepreneurship	4
33.	PROJECT	Employability	18
34.	INTERNSHIP	Employability	20
35.	Environmental Studies	Employability	2
36.	Job Readiness	Employability	3
37.	Proficiency in English	Employability	2

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Annexure B

List of Skill courses (Basket) approved

Sl. No	Course Title	Credit	(T+P+P)
1.	Refraction Technology (CUTM3057)	4	0+3+1
2.	Emergency Medical Technology (CUTM3058)	4	0+3+1
3.	Medical Lab Technology (CUTM3059)	4	0+3+1
4.	Operation Theatre Technology (CUTM3060)	4	0+3+1
5.	Radiology Technology (CUTM3061)	4	0+3+1
6.	Phlebotomy Technology (CUTM3062)	4	0+3+1
7.	First Aid Service (CUTM3063)	4	0+3+1
8.	General Duty Assistance Service (CUTM3064)	4	0+3+1
9.	X- ray Technology (CUTM3065)	4	0+3+1

List of value-added courses approved

Sl. No	Course Title	Hrs. of input
1.	Gender, Human Rights and Ethics (CUVA4040)	30 hrs

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CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Paramedics and Allied Health Sciences

Time: 11.00 AM

Date: 11.07.2020

Venue: Hybrid mode (Board Room, CUTM, Bhubaneswar and online)

Board of Studies Meeting

Attendance Sheet

Sl. No.	Name of the BOS Member (Internal Faculty and External Resource)	Designation	Signature
1	Dr. Santosh Kumar Behera	Regional Medical Research Center	Attended online
2	Dr. Debasish Sahoo	SOA University	Attended online
3	Dr. Debi Prasad Rath	CARE Hospital	Attended online
4	Dr. Ardhendu Praharaj	District Microbiology Lab, Nabarangpur	Attended online
5	Dr. Harihar Praharaj	Directorate of Medical Education and Training, Odisha	Attended online
6	Dr. Bhargavram	MD, Professor of Opthalmology, Sandhya Eye Hospital, Andhra Pradesh	Attended online
7	Dr. Ajay Kumar Singh	MD, Professor of Ophthalmology, DHC Khordha	Attended online
8	Dr.Chandra Mouli	Radiology Dept., GVP Institute of Health Care and Medical Technology,Marika valasa, Visakhapatnam,A.P	Attended online
9	Dr.M.Bhargava Ram	Opthamologist, Sandhya Eye Hospital, Maddilapale, Visakhapatnam	Attended online
10	Dr.Teja	Anesthesian	Attended online
11	Dr. Monali P. Mishra	Assistant Prof., SoPAHS (CUTM)	Attended online
12	Ms. Sonali Dash	Assistant Prof., SoPAHS (CUTM)	Attended online
13	Ms. Susmita Chakrabarty	Lecturer, SoPAHS (CUTM)	Attended online
14	Prof. Sourav Karmakar	Asst. Prof. & HoD, SoPAHS (CUTM)	Attended online
15	Ms. SNS Neelima	Asst. Prof. SoPAHS (CUTM)	Attended online
16	Dr.CH.Nooka Raju	Associate Prof., SoPAHS (CUTM)	Attended online
17	Mr. M.Vinay Dinakaran	Asst. Prof. SoPAHS (CUTM)	Attended online

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18	Ms. N.Anuhya	Asst. Prof. SoPAHS (CUTM)	Attended online
19	Dr.M.L.N.Acharyulu	Associate Dean, SoPAHS (CUTM)	Attended online

Dean, SoPAHS
Prof. Sunil Kumar Jha
DEAN
School of Paramedics & Allied Health Sciences
Centurion University of Technology & Management
Bhubaneswar, Odisha-752050

Dean, Academics
Dean - Academic
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Dr. Soumya Jal
HOD, SoPAHS
Associate Professor & HOD
School of Paramedics & Allied Health Sciences
Centurion University of Technology & Management
Ramachandrapur, Bhubaneswar - 752050

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CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Paramedics and Allied Health Sciences

Date: 11/07/2020

MINUTES OF BOARD OF STUDIES MEETING held on 11/07/2020

Venue: Hybrid mode (Board Room, CUTM, Bhubaneswar and online)

Time: 11.00 AM

The Board of Studies (BoS) meeting of School of Paramedics and Allied Health Sciences was held on **11/07/2020** at 11 AM in hybrid mode.

The following members were present:

Dr. Bhargavram (MD, Professor of Opthalmology)

Dr. Ajay Kumar Singh (MD, Professor of Ophthalmology)

Dr. Santosh Kumar Behera (Senior Scientist)

Dr. Debasish Sahoo (MD, Professor in Microbiology)

Dr. Debi Prasad Rath (MD, Professor in Pathology)

Dr. Ardhendu Praharaj (Ph. D. in Microbiology)

Dr. Harihar Praharaj (MD, Professor of Medicine)

Dr.Chandra Mouli (MD, Professor of Radiology)

Dr.Teja, Anesthesian

Prof. Sourav Karmakar (Asst. Prof. SoPAHS)

Ms. SNS Neelima (Asst. Prof. SoPAHS)

Mr. M.Vinay Dinakaran (Asst. Prof. SoPAHS)

Ms. N.Anuhya (Asst. Prof. SoPAHS)

Dr.M.L.N.Acharyulu (Associate Dean, SoPAHS)

Dr.CH.Nooka Raju (Associate Prof., SoPAHS)

Mr. Rajesh Sukkala (Asst. Prof. SoPAHS)

Dr. Ashish Kumar Sen (Adjunct Faculty, SoPAHS)

Dr. Monali P. Mishra (Assistant Prof., SoPAHS)

Ms. Sonali Dash (Assistant Prof., SoPAHS)

Ms. Susmita Chakrabarty (Lecturer, SoPAHS)

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Prof. Sunil Kumar Jha (Dean, SoPAHS)

Dr. Soumya Jal (HoD, SoPAHS)

Dr. P.K. Mohanty, Dean (Acad) CUTM

All the members were welcomed to the online session by the Chairperson and were briefed regarding the purpose of the meeting. Thereafter, the Dean of SoPAHS presented on the achievements, improvements of the department in terms of academics and infrastructure.

Following are the programs offered by SoPAHS:

MSc Medical Laboratory Technology (MSc MLT)
MSc Applied and Clinical Microbiology (MSc CMB)
BSc Medical Laboratory Technology (BSc MLT)
BSc Clinical Microbiology (BSc CMB)
BSc Medical Radiation Technology (BSc MRT)
BSc Optometry (BSc Optom)

Agenda of the meeting:

Agenda 1: **The minutes of the last meeting of the BoS held on 22.06.2019 were confirmed.**

Agenda 2: **Discussion and approval on the content of syllabus for various courses of SoPAHS. Implementation of CBCS pattern.**

At first, the Dean of the school presented the feedback received from several stakeholders, on the curriculum of its various departments. With respect to the feedback received from the stakeholders, the committee discussed and approved for incorporation/ modifications in the curriculum for the Academic session 2020-21.

- The committee approved to introduce the following programmes in SoPAHS:
  BSc Anaesthesia Technology;
  BSc Operation Theatre Technology;
  BSc Emergency Medicine Technology
- The curriculum was framed adopting the CBCS pattern.
- Based on the feedback from stakeholders, the curriculum was framed in a manner to incorporate Project/ Practical based learning. The Project and Practical components of relevant subjects were embedded along with their theory component. Much of practical exposure/ hands on training/ research and project exposure is emphasized.
- The curriculum developed is available on http://courseware.cutm.ac.in/ (links/ notes/ videos for relevant notes are also available). It was adapted in a way to ease flip class technique and enhance Virtual learning along with real time learning, which was highly appreciated by the board members.
- New courses added into the curriculum are provided in *Annexure A*.

Agenda 3: **Inclusion of courses on life skills and value addition**

For their overall development and wellbeing of the students, it was advised that students enroll in the various life skills and value-adding courses that are offered by the university. The Board members agreed and gave their approval to the same.

Details of the life skill and value added courses introduced are mentioned in *Annexure B*.

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The Dean, SoPAHS extended sincere thanks to all the members of the Board.

The meeting ended with a vote of thanks to the Chair.

Dean, SoPAHS

Prof. Sunil Kumar Jha
DEAN
School of Paramedics & Allied Health Sciences
Centurion University of Technology & Management
Bhubaneswar, Odisha-752050

Dean, Academics

Dean - Academic
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11/7/20

HOD, SoPAHS

Dr. Soumya Jal
Associate Professor & HOD
School of Paramedics & Allied Health Sciences
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Annexure A

List of new courses added

Sl. No	Course Title	Type (Skill/ Employability/ Entrepreneurship)	Credit
	MSc MLT		
1.	Human Anatomy and Physiology	Employability	3
2.	Analytical Techniques	Entrepreneurship	4
3.	Biological Chemistry	Employability	3
4.	Clinical Hematology	Entrepreneurship	4
5.	Clinical Pathology	Entrepreneurship	4
6.	Cell and Molecular Biology	Employability	3
7.	Clinical Biochemistry	Employability	3
8.	Histology	Employability	4
9.	Medical Laboratory Technology	Entrepreneurship	5
10.	Blood Banking	Entrepreneurship	4
11.	Health Programme in India	Entrepreneurship	3
12.	Medical Microbiology	Employability	4
13.	Immunology & Parasitology	Employability	5
14.	Advanced Hematology	Entrepreneurship	4
15.	Research Methodology	Employability	3
16.	Mini Project	Employability	2
17.	Internship	Employability	12
18.	Project	Employability	12
19.	Environmental Studies	Employability	2
20.	Job Readiness	Employability	3
21.	Proficiency in English	Employability	2
	MSc CMB		
1.	Human Anatomy and Physiology	Employability	3
2.	Analytical Techniques	Entrepreneurship	4
3.	Biological Chemistry	Employability	3
4.	Clinical Hematology	Entrepreneurship	4
5.	Clinical Pathology	Entrepreneurship	4
6.	Cell and Molecular Biology	Employability	3
7.	Clinical Biochemistry	Employability	3
8.	Histology	Employability	4
9.	General Microbiology	Employability	4
10.	Systematic Bacteriology	Employability	4
11.	Applied microbiology	Employability	3
12.	Medical Parasitology and Mycology	Employability	5
13.	Immunology & Virology	Employability	5
14.	Clinical Bacteriology	Employability	4
15.	Research Methodology	Employability	3

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16.	Mini Project	Employability	2
17.	Internship	Employability	12
18.	Project	Employability	12
19.	Environmental Studies	Employability	2
20.	Job Readiness	Employability	3
21.	Proficiency in English	Employability	2
	BSc MLT		
1.	Human Anatomy and Physiology	Employability	3
2.	Cell Biology	Employability	4
3.	Medical Instrumentation and Technique	Entrepreneurship	4
4.	Biochemistry	Employability	4
5.	Clinical Pathology	Entrepreneurship	4
6.	Immunology	Employability	5
7.	Molecular Biology	Entrepreneurship	4
8.	Haematology	Entrepreneurship	5
9.	Microbiology	Employability	5
10.	Medical Law and Ethics	Employability	3
11.	Histology	Employability	4
12.	Advanced Hematology	Entrepreneurship	4
13.	Research Methodology	Employability	3
14.	Analytical Biochemistry	Employability	5
15.	Applied Haematology	Entrepreneurship	5
16.	Immunopathology	Employability	4
17.	Parasitology	Employability	5
18.	Basic Computer and Information Science	Employability	2
19.	Blood Banking	Entrepreneurship	4
20.	Medical Laboratory Management	Entrepreneurship	5
21.	Introduction to Quality and Patient Safety	Employability	5
22.	Mycology & Virology	Employability	5
23.	Mini Project	Employability	2
24.	Internship	Employability	12
25.	Project	Employability	12
26.	Environmental Studies	Employability	2
27.	Job Readiness	Employability	3
28.	Proficiency in English	Employability	2
	BSc CMB		
1.	Human Anatomy and Physiology	Employability	3
2.	Cell Biology	Employability	4
3.	Medical Instrumentation and Technique	Entrepreneurship	4
4.	Biochemistry	Employability	4
5.	Clinical Pathology	Entrepreneurship	4
6.	Immunology	Employability	5
7.	Molecular Biology	Entrepreneurship	4

8.	Haematology	Entrepreneurship	5
9.	Microbiology	Employability	5
10.	Medical Law and Ethics	Employability	3
11.	Systemic Bacteriology	Employability	4
12.	Systemic Virology & Mycology	Employability	5
13.	Research Methodology	Employability	3
14.	Analytical Biochemistry	Employability	5
15.	Public Heath Microbiology	Employability	4
16.	Pharmaceutical Microbiology	Employability	4
17.	Industrial Microbiology	Employability	4
18.	Basic Computer and Information Science	Employability	2
19.	Epidemiology	Employability	3
20.	Diagnostic Bacteriology	Entrepreneurship	5
21.	Diagnostic Mycology	Entrepreneurship	4
22.	Diagnostic Virology	Entrepreneurship	4
23.	Diagnostic Parasitology	Entrepreneurship	4
24.	Mini Project	Employability	2
25.	Internship	Employability	12
26.	Project	Employability	12
27.	Environmental Studies	Employability	2
28.	Job Readiness	Employability	3
29.	Proficiency in English	Employability	2
	BSc MRT		
1.	General Anatomy	Employability	5
2.	General Physiology	Employability	5
3.	Basic Biochemistry	Employability	5
4.	Biology	Employability	5
5.	Cell Biology	Employability	5
6.	Mathematics	Employability	5
7.	Basic Radiation Physics	Employability	4
8.	Fundamental Medical Imaging	Entrepreneurship	6
9.	Principles of Radiation Therapy	Employability	4
10.	Basic Medical Instrumentation & Technique	Entrepreneurship	4
11.	Applied Radiation Physics & Radiation Protection	Employability	4
12.	Radiographic Technique - 1	Employability	5
13.	Basic Equipment in Radiotherapy	Employability	4
14.	Mammography and Ultrasound	Entrepreneurship	4
15.	Applied Equipment of Radio Diagnosis	Employability	4
16.	Radiotherapy and Brachy Therapy in Malignant & Non-malignant Disease	Employability	4
17.	Radiographic Technique - 2	Employability	5
18.	Physics of CT & MRI	Employability	4
19.	Interventional Radiology and	Employability	5

	Drug Diagnostic Radiology		
20.	Computerized Tomography (CT Scanning) Method & Procedure	Employability	4
21.	Basic of Magnetic Resonance Imaging	Employability	4
22.	Image Interpretation of X-Ray Mammography, CT & MRI	Entrepreneurship	5
23.	Medical Law and Ethics	Employability	3
24.	Orientation in Clinical Sciences Course contents	Employability	4
25.	Basic Computer and Information Science	Employability	2
26.	Project	Employability	18
27.	Internship	Employability	18
28.	Environmental Studies	Employability	2
29.	Job Readiness	Employability	3
30.	Proficiency in English	Employability	2
	BSc Optometry		
1.	Biology	Employability	4
2.	Maths	Employability	4
3.	Cell Biology	Employability	4
4.	General Anatomy	Employability	5
5.	General Physiology	Employability	5
6.	Basic Biochemistry	Employability	5
7.	GEOMETRIC OPTICS	Employability	5
8.	BASIC COMPUTER AND INFORMATION SCIENCE	Employability	2
9.	OCULAR ANATOMY	Employability	4
10.	OCULAR PHYSIOLOGY	Employability	4
11.	INTRODUCTION TO OPTOMETRY	Employability	2
12.	PHYSICAL OPTICS	Entrepreneurship	4
13.	VISUAL OPTICS –I	Entrepreneurship	5
14.	OPTOMETRIC OPTICS –I	Entrepreneurship	5
15.	OCULAR DISEASES –I	Entrepreneurship	4
16.	OCULAR MICROBIOLOGY & PATHOLOGY	Employability	4
17.	CLINICAL EXAMINATION OF VISUAL SYSTEM LAB	Entrepreneurship	2
18.	VISUAL OPTICS –II	Entrepreneurship	5
19.	OPTOMETRIC OPTICS –II & DISPENCING OPTICS	Employability	5
20.	OCULAR DISEASES –II	Employability	4
21.	CONTACT LENSES-I	Entrepreneurship	5
22.	CONTACT LENSES-II	Entrepreneurship	5
23.	BINOCULAR VISION –I	Entrepreneurship	5
24.	LOW VISION & REHABILITATION	Entrepreneurship	4
25.	BASIC & OCULAR PHARMACOLOGY	Employability	4
26.	BINOCULAR VISION –II	Entrepreneurship	5
27.	PEDIATRIC & GERIATRIC	Employability	4

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	OPTOMETRY		
28.	SYSTEMIC DISEASES & EYE	Employability	4
29.	OCCUPATIONAL OPTOMETRY	Entrepreneurship	3
30.	LAW & OPTOMETRY	Employability	3
31.	PUBLIC HEALTH& COMMUNITY OPTOMETRY	Employability	3
32.	OPTOMETRIC INSTRUMENTS	Entrepreneurship	4
33.	PROJECT	Employability	18
34.	INTERNSHIP	Employability	20
35.	Environmental Studies	Employability	2
36.	Job Readiness	Employability	3
37.	Proficiency in English	Employability	2

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Annexure B

List of Skill courses (Basket) approved

Sl. No	Course Title	Credit	(T+P+P)
1.	Refraction Technology (CUTM3057)	4	0+3+1
2.	Emergency Medical Technology (CUTM3058)	4	0+3+1
3.	Medical Lab Technology (CUTM3059)	4	0+3+1
4.	Operation Theatre Technology (CUTM3060)	4	0+3+1
5.	Radiology Technology (CUTM3061)	4	0+3+1
6.	Phlebotomy Technology (CUTM3062)	4	0+3+1
7.	First Aid Service (CUTM3063)	4	0+3+1
8.	General Duty Assistance Service (CUTM3064)	4	0+3+1
9.	X- ray Technology (CUTM3065)	4	0+3+1

List of value-added courses approved

Sl. No	Course Title	Hrs. of input
1.	Gender, Human Rights and Ethics (CUVA4040)	30 hrs

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CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Paramedics and Allied Health Sciences

Time: 11.00 AM

Date: 11.07.2020

Venue: Hybrid mode (Board Room, CUTM, Bhubaneswar and online)

Board of Studies Meeting

Attendance Sheet

Sl. No.	Name of the BOS Member (Internal Faculty and External Resource)	Designation	Signature
1	Dr. Santosh Kumar Behera	Regional Medical Research Center	Attended online
2	Dr. Debasish Sahoo	SOA University	Attended online
3	Dr. Debi Prasad Rath	CARE Hospital	Attended online
4	Dr. Ardhendu Praharaj	District Microbiology Lab, Nabarangpur	Attended online
5	Dr. Harihar Praharaj	Directorate of Medical Education and Training, Odisha	Attended online
6	Dr. Bhargavram	MD, Professor of Opthalmology, Sandhya Eye Hospital, Andhra Pradesh	Attended online
7	Dr. Ajay Kumar Singh	MD, Professor of Ophthalmology, DHC Khordha	Attended online
8	Dr.Chandra Mouli	Radiology Dept., GVP Institute of Health Care and Medical Technology,Marika valasa, Visakhapatnam,A.P	Attended online
9	Dr.M.Bhargava Ram	Opthamologist, Sandhya Eye Hospital, Maddilapale, Visakhapatnam	Attended online
10	Dr.Teja	Anesthesian	Attended online
11	Dr. Monali P. Mishra	Assistant Prof., SoPAHS (CUTM)	Attended online
12	Ms. Sonali Dash	Assistant Prof., SoPAHS (CUTM)	Attended online
13	Ms. Susmita Chakrabarty	Lecturer, SoPAHS (CUTM)	Attended online
14	Prof. Sourav Karmakar	Asst. Prof. & HoD, SoPAHS (CUTM)	Attended online
15	Ms. SNS Neelima	Asst. Prof. SoPAHS (CUTM)	Attended online
16	Dr.CH.Nooka Raju	Associate Prof., SoPAHS (CUTM)	Attended online
17	Mr. M.Vinay Dinakaran	Asst. Prof. SoPAHS (CUTM)	Attended online

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18	Ms. N.Anuhya	Asst. Prof. SoPAHS (CUTM)	Attended online
19	Dr.M.L.N.Acharyulu	Associate Dean, SoPAHS (CUTM)	Attended online

Dean, SoPAHS
Prof. Sunil Kumar Jha
DEAN
School of Paramedics & Allied Health Sciences
Centurion University of Technology & Management
Bhubaneswar, Odisha-752050

Dean, Academics
Dean - Academic
Centurion University of Technology & Management
Bhubaneswar, Khurda, Odisha-752050

Dr. Soumya Jal
HOD, SoPAHS
Associate Professor & HOD
School of Paramedics & Allied Health Sciences
Centurion University of Technology & Management
Ramachandrapur, Bhubaneswar - 752050

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CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Paramedics and Allied Health Sciences

Date: 11/07/2020

MINUTES OF BOARD OF STUDIES MEETING held on 11/07/2020

Venue: Hybrid mode (Board Room, CUTM, Bhubaneswar and online)

Time: 11.00 AM

The Board of Studies (BoS) meeting of School of Paramedics and Allied Health Sciences was held on **11/07/2020** at 11 AM in hybrid mode.

The following members were present:

Dr. Bhargavram (MD, Professor of Opthalmology)

Dr. Ajay Kumar Singh (MD, Professor of Ophthalmology)

Dr. Santosh Kumar Behera (Senior Scientist)

Dr. Debasish Sahoo (MD, Professor in Microbiology)

Dr. Debi Prasad Rath (MD, Professor in Pathology)

Dr. Ardhendu Praharaj (Ph. D. in Microbiology)

Dr. Harihar Praharaj (MD, Professor of Medicine)

Dr.Chandra Mouli (MD, Professor of Radiology)

Dr.Teja, Anesthesian

Prof. Sourav Karmakar (Asst. Prof. SoPAHS)

Ms. SNS Neelima (Asst. Prof. SoPAHS)

Mr. M.Vinay Dinakaran (Asst. Prof. SoPAHS)

Ms. N.Anuhya (Asst. Prof. SoPAHS)

Dr.M.L.N.Acharyulu (Associate Dean, SoPAHS)

Dr.CH.Nooka Raju (Associate Prof., SoPAHS)

Mr. Rajesh Sukkala (Asst. Prof. SoPAHS)

Dr. Ashish Kumar Sen (Adjunct Faculty, SoPAHS)

Dr. Monali P. Mishra (Assistant Prof., SoPAHS)

Ms. Sonali Dash (Assistant Prof., SoPAHS)

Ms. Susmita Chakrabarty (Lecturer, SoPAHS)

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Prof. Sunil Kumar Jha (Dean, SoPAHS)

Dr. Soumya Jal (HoD, SoPAHS)

Dr. P.K. Mohanty, Dean (Acad) CUTM

All the members were welcomed to the online session by the Chairperson and were briefed regarding the purpose of the meeting. Thereafter, the Dean of SoPAHS presented on the achievements, improvements of the department in terms of academics and infrastructure.

Following are the programs offered by SoPAHS:

MSc Medical Laboratory Technology (MSc MLT)
MSc Applied and Clinical Microbiology (MSc CMB)
BSc Medical Laboratory Technology (BSc MLT)
BSc Clinical Microbiology (BSc CMB)
BSc Medical Radiation Technology (BSc MRT)
BSc Optometry (BSc Optom)

Agenda of the meeting:

Agenda 1: **The minutes of the last meeting of the BoS held on 22.06.2019 were confirmed.**

Agenda 2: **Discussion and approval on the content of syllabus for various courses of SoPAHS. Implementation of CBCS pattern.**

At first, the Dean of the school presented the feedback received from several stakeholders, on the curriculum of its various departments. With respect to the feedback received from the stakeholders, the committee discussed and approved for incorporation/ modifications in the curriculum for the Academic session 2020-21.

- The committee approved to introduce the following programmes in SoPAHS:
  BSc Anaesthesia Technology;
  BSc Operation Theatre Technology;
  BSc Emergency Medicine Technology
- The curriculum was framed adopting the CBCS pattern.
- Based on the feedback from stakeholders, the curriculum was framed in a manner to incorporate Project/ Practical based learning. The Project and Practical components of relevant subjects were embedded along with their theory component. Much of practical exposure/ hands on training/ research and project exposure is emphasized.
- The curriculum developed is available on http://courseware.cutm.ac.in/ (links/ notes/ videos for relevant notes are also available). It was adapted in a way to ease flip class technique and enhance Virtual learning along with real time learning, which was highly appreciated by the board members.
- New courses added into the curriculum are provided in *Annexure A*.

Agenda 3: **Inclusion of courses on life skills and value addition**

For their overall development and wellbeing of the students, it was advised that students enroll in the various life skills and value-adding courses that are offered by the university. The Board members agreed and gave their approval to the same.

Details of the life skill and value added courses introduced are mentioned in *Annexure B*.

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The Dean, SoPAHS extended sincere thanks to all the members of the Board.

The meeting ended with a vote of thanks to the Chair.

Dean, SoPAHS

Prof. Sunil Kumar Jha
DEAN
School of Paramedics & Allied Health Sciences
Centurion University of Technology & Management
Bhubaneswar, Odisha-752050

Dean, Academics

Dean - Academic
Centurion University of Technology & Management
Bhubaneswar, Khurda, Odisha-752050

11/7/20

HOD, SoPAHS

Dr. Soumya Jal
Associate Professor & HOD
School of Paramedics & Allied Health Sciences
Centurion University of Technology & Management
Ramachandrapur, Bhubaneswar - 752050

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Annexure A

List of new courses added

Sl. No	Course Title	Type (Skill/ Employability/ Entrepreneurship)	Credit
	MSc MLT		
1.	Human Anatomy and Physiology	Employability	3
2.	Analytical Techniques	Entrepreneurship	4
3.	Biological Chemistry	Employability	3
4.	Clinical Hematology	Entrepreneurship	4
5.	Clinical Pathology	Entrepreneurship	4
6.	Cell and Molecular Biology	Employability	3
7.	Clinical Biochemistry	Employability	3
8.	Histology	Employability	4
9.	Medical Laboratory Technology	Entrepreneurship	5
10.	Blood Banking	Entrepreneurship	4
11.	Health Programme in India	Entrepreneurship	3
12.	Medical Microbiology	Employability	4
13.	Immunology & Parasitology	Employability	5
14.	Advanced Hematology	Entrepreneurship	4
15.	Research Methodology	Employability	3
16.	Mini Project	Employability	2
17.	Internship	Employability	12
18.	Project	Employability	12
19.	Environmental Studies	Employability	2
20.	Job Readiness	Employability	3
21.	Proficiency in English	Employability	2
	MSc CMB		
1.	Human Anatomy and Physiology	Employability	3
2.	Analytical Techniques	Entrepreneurship	4
3.	Biological Chemistry	Employability	3
4.	Clinical Hematology	Entrepreneurship	4
5.	Clinical Pathology	Entrepreneurship	4
6.	Cell and Molecular Biology	Employability	3
7.	Clinical Biochemistry	Employability	3
8.	Histology	Employability	4
9.	General Microbiology	Employability	4
10.	Systematic Bacteriology	Employability	4
11.	Applied microbiology	Employability	3
12.	Medical Parasitology and Mycology	Employability	5
13.	Immunology & Virology	Employability	5
14.	Clinical Bacteriology	Employability	4
15.	Research Methodology	Employability	3

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16.	Mini Project	Employability	2
17.	Internship	Employability	12
18.	Project	Employability	12
19.	Environmental Studies	Employability	2
20.	Job Readiness	Employability	3
21.	Proficiency in English	Employability	2
	BSc MLT		
1.	Human Anatomy and Physiology	Employability	3
2.	Cell Biology	Employability	4
3.	Medical Instrumentation and Technique	Entrepreneurship	4
4.	Biochemistry	Employability	4
5.	Clinical Pathology	Entrepreneurship	4
6.	Immunology	Employability	5
7.	Molecular Biology	Entrepreneurship	4
8.	Haematology	Entrepreneurship	5
9.	Microbiology	Employability	5
10.	Medical Law and Ethics	Employability	3
11.	Histology	Employability	4
12.	Advanced Hematology	Entrepreneurship	4
13.	Research Methodology	Employability	3
14.	Analytical Biochemistry	Employability	5
15.	Applied Haematology	Entrepreneurship	5
16.	Immunopathology	Employability	4
17.	Parasitology	Employability	5
18.	Basic Computer and Information Science	Employability	2
19.	Blood Banking	Entrepreneurship	4
20.	Medical Laboratory Management	Entrepreneurship	5
21.	Introduction to Quality and Patient Safety	Employability	5
22.	Mycology & Virology	Employability	5
23.	Mini Project	Employability	2
24.	Internship	Employability	12
25.	Project	Employability	12
26.	Environmental Studies	Employability	2
27.	Job Readiness	Employability	3
28.	Proficiency in English	Employability	2
	BSc CMB		
1.	Human Anatomy and Physiology	Employability	3
2.	Cell Biology	Employability	4
3.	Medical Instrumentation and Technique	Entrepreneurship	4
4.	Biochemistry	Employability	4
5.	Clinical Pathology	Entrepreneurship	4
6.	Immunology	Employability	5
7.	Molecular Biology	Entrepreneurship	4

8.	Haematology	Entrepreneurship	5
9.	Microbiology	Employability	5
10.	Medical Law and Ethics	Employability	3
11.	Systemic Bacteriology	Employability	4
12.	Systemic Virology & Mycology	Employability	5
13.	Research Methodology	Employability	3
14.	Analytical Biochemistry	Employability	5
15.	Public Heath Microbiology	Employability	4
16.	Pharmaceutical Microbiology	Employability	4
17.	Industrial Microbiology	Employability	4
18.	Basic Computer and Information Science	Employability	2
19.	Epidemiology	Employability	3
20.	Diagnostic Bacteriology	Entrepreneurship	5
21.	Diagnostic Mycology	Entrepreneurship	4
22.	Diagnostic Virology	Entrepreneurship	4
23.	Diagnostic Parasitology	Entrepreneurship	4
24.	Mini Project	Employability	2
25.	Internship	Employability	12
26.	Project	Employability	12
27.	Environmental Studies	Employability	2
28.	Job Readiness	Employability	3
29.	Proficiency in English	Employability	2
	BSc MRT		
1.	General Anatomy	Employability	5
2.	General Physiology	Employability	5
3.	Basic Biochemistry	Employability	5
4.	Biology	Employability	5
5.	Cell Biology	Employability	5
6.	Mathematics	Employability	5
7.	Basic Radiation Physics	Employability	4
8.	Fundamental Medical Imaging	Entrepreneurship	6
9.	Principles of Radiation Therapy	Employability	4
10.	Basic Medical Instrumentation & Technique	Entrepreneurship	4
11.	Applied Radiation Physics & Radiation Protection	Employability	4
12.	Radiographic Technique - 1	Employability	5
13.	Basic Equipment in Radiotherapy	Employability	4
14.	Mammography and Ultrasound	Entrepreneurship	4
15.	Applied Equipment of Radio Diagnosis	Employability	4
16.	Radiotherapy and Brachy Therapy in Malignant & Non-malignant Disease	Employability	4
17.	Radiographic Technique - 2	Employability	5
18.	Physics of CT & MRI	Employability	4
19.	Interventional Radiology and	Employability	5

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	Drug Diagnostic Radiology		
20.	Computerized Tomography (CT Scanning) Method & Procedure	Employability	4
21.	Basic of Magnetic Resonance Imaging	Employability	4
22.	Image Interpretation of X-Ray Mammography, CT & MRI	Entrepreneurship	5
23.	Medical Law and Ethics	Employability	3
24.	Orientation in Clinical Sciences Course contents	Employability	4
25.	Basic Computer and Information Science	Employability	2
26.	Project	Employability	18
27.	Internship	Employability	18
28.	Environmental Studies	Employability	2
29.	Job Readiness	Employability	3
30.	Proficiency in English	Employability	2
	BSc Optometry		
1.	Biology	Employability	4
2.	Maths	Employability	4
3.	Cell Biology	Employability	4
4.	General Anatomy	Employability	5
5.	General Physiology	Employability	5
6.	Basic Biochemistry	Employability	5
7.	GEOMETRIC OPTICS	Employability	5
8.	BASIC COMPUTER AND INFORMATION SCIENCE	Employability	2
9.	OCULAR ANATOMY	Employability	4
10.	OCULAR PHYSIOLOGY	Employability	4
11.	INTRODUCTION TO OPTOMETRY	Employability	2
12.	PHYSICAL OPTICS	Entrepreneurship	4
13.	VISUAL OPTICS –I	Entrepreneurship	5
14.	OPTOMETRIC OPTICS –I	Entrepreneurship	5
15.	OCULAR DISEASES –I	Entrepreneurship	4
16.	OCULAR MICROBIOLOGY & PATHOLOGY	Employability	4
17.	CLINICAL EXAMINATION OF VISUAL SYSTEM LAB	Entrepreneurship	2
18.	VISUAL OPTICS –II	Entrepreneurship	5
19.	OPTOMETRIC OPTICS –II & DISPENCING OPTICS	Employability	5
20.	OCULAR DISEASES –II	Employability	4
21.	CONTACT LENSES-I	Entrepreneurship	5
22.	CONTACT LENSES-II	Entrepreneurship	5
23.	BINOCULAR VISION –I	Entrepreneurship	5
24.	LOW VISION & REHABILITATION	Entrepreneurship	4
25.	BASIC & OCULAR PHARMACOLOGY	Employability	4
26.	BINOCULAR VISION –II	Entrepreneurship	5
27.	PEDIATRIC & GERIATRIC	Employability	4

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	OPTOMETRY		
28.	SYSTEMIC DISEASES & EYE	Employability	4
29.	OCCUPATIONAL OPTOMETRY	Entrepreneurship	3
30.	LAW & OPTOMETRY	Employability	3
31.	PUBLIC HEALTH& COMMUNITY OPTOMETRY	Employability	3
32.	OPTOMETRIC INSTRUMENTS	Entrepreneurship	4
33.	PROJECT	Employability	18
34.	INTERNSHIP	Employability	20
35.	Environmental Studies	Employability	2
36.	Job Readiness	Employability	3
37.	Proficiency in English	Employability	2

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Annexure B

List of Skill courses (Basket) approved

Sl. No	Course Title	Credit	(T+P+P)
1.	Refraction Technology (CUTM3057)	4	0+3+1
2.	Emergency Medical Technology (CUTM3058)	4	0+3+1
3.	Medical Lab Technology (CUTM3059)	4	0+3+1
4.	Operation Theatre Technology (CUTM3060)	4	0+3+1
5.	Radiology Technology (CUTM3061)	4	0+3+1
6.	Phlebotomy Technology (CUTM3062)	4	0+3+1
7.	First Aid Service (CUTM3063)	4	0+3+1
8.	General Duty Assistance Service (CUTM3064)	4	0+3+1
9.	X- ray Technology (CUTM3065)	4	0+3+1

List of value-added courses approved

Sl. No	Course Title	Hrs. of input
1.	Gender, Human Rights and Ethics (CUVA4040)	30 hrs

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CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Paramedics and Allied Health Sciences

Time: 11.00 AM

Date: 11.07.2020

Venue: Hybrid mode (Board Room, CUTM, Bhubaneswar and online)

Board of Studies Meeting

Attendance Sheet

Sl. No.	Name of the BOS Member (Internal Faculty and External Resource)	Designation	Signature
1	Dr. Santosh Kumar Behera	Regional Medical Research Center	Attended online
2	Dr. Debasish Sahoo	SOA University	Attended online
3	Dr. Debi Prasad Rath	CARE Hospital	Attended online
4	Dr. Ardhendu Praharaj	District Microbiology Lab, Nabarangpur	Attended online
5	Dr. Harihar Praharaj	Directorate of Medical Education and Training, Odisha	Attended online
6	Dr. Bhargavram	MD, Professor of Opthalmology, Sandhya Eye Hospital, Andhra Pradesh	Attended online
7	Dr. Ajay Kumar Singh	MD, Professor of Ophthalmology, DHC Khordha	Attended online
8	Dr.Chandra Mouli	Radiology Dept., GVP Institute of Health Care and Medical Technology,Marika valasa, Visakhapatnam,A.P	Attended online
9	Dr.M.Bhargava Ram	Opthamologist, Sandhya Eye Hospital, Maddilapale, Visakhapatnam	Attended online
10	Dr.Teja	Anesthesian	Attended online
11	Dr. Monali P. Mishra	Assistant Prof., SoPAHS (CUTM)	Attended online
12	Ms. Sonali Dash	Assistant Prof., SoPAHS (CUTM)	Attended online
13	Ms. Susmita Chakrabarty	Lecturer, SoPAHS (CUTM)	Attended online
14	Prof. Sourav Karmakar	Asst. Prof. & HoD, SoPAHS (CUTM)	Attended online
15	Ms. SNS Neelima	Asst. Prof. SoPAHS (CUTM)	Attended online
16	Dr.CH.Nooka Raju	Associate Prof., SoPAHS (CUTM)	Attended online
17	Mr. M.Vinay Dinakaran	Asst. Prof. SoPAHS (CUTM)	Attended online

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18	Ms. N.Anuhya	Asst. Prof. SoPAHS (CUTM)	Attended online
19	Dr.M.L.N.Acharyulu	Associate Dean, SoPAHS (CUTM)	Attended online

Dean, SoPAHS
Prof. Sunil Kumar Jha
DEAN
School of Paramedics & Allied Health Sciences
Centurion University of Technology & Management
Bhubaneswar, Odisha-752050

Dean, Academics
Dean - Academic
Centurion University of Technology & Management
Bhubaneswar, Khurda, Odisha-752050

Dr. Soumya Jal
HOD, SoPAHS
Associate Professor & HOD
School of Paramedics & Allied Health Sciences
Centurion University of Technology & Management
Ramachandrapur, Bhubaneswar - 752050

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CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Paramedics and Allied Health Sciences

Date: 11/07/2020

MINUTES OF BOARD OF STUDIES MEETING held on 11/07/2020

Venue: Hybrid mode (Board Room, CUTM, Bhubaneswar and online)

Time: 11.00 AM

The Board of Studies (BoS) meeting of School of Paramedics and Allied Health Sciences was held on **11/07/2020** at 11 AM in hybrid mode.

The following members were present:

Dr. Bhargavram (MD, Professor of Opthalmology)

Dr. Ajay Kumar Singh (MD, Professor of Ophthalmology)

Dr. Santosh Kumar Behera (Senior Scientist)

Dr. Debasish Sahoo (MD, Professor in Microbiology)

Dr. Debi Prasad Rath (MD, Professor in Pathology)

Dr. Ardhendu Praharaj (Ph. D. in Microbiology)

Dr. Harihar Praharaj (MD, Professor of Medicine)

Dr.Chandra Mouli (MD, Professor of Radiology)

Dr.Teja, Anesthesian

Prof. Sourav Karmakar (Asst. Prof. SoPAHS)

Ms. SNS Neelima (Asst. Prof. SoPAHS)

Mr. M.Vinay Dinakaran (Asst. Prof. SoPAHS)

Ms. N.Anuhya (Asst. Prof. SoPAHS)

Dr.M.L.N.Acharyulu (Associate Dean, SoPAHS)

Dr.CH.Nooka Raju (Associate Prof., SoPAHS)

Mr. Rajesh Sukkala (Asst. Prof. SoPAHS)

Dr. Ashish Kumar Sen (Adjunct Faculty, SoPAHS)

Dr. Monali P. Mishra (Assistant Prof., SoPAHS)

Ms. Sonali Dash (Assistant Prof., SoPAHS)

Ms. Susmita Chakrabarty (Lecturer, SoPAHS)

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Prof. Sunil Kumar Jha (Dean, SoPAHS)

Dr. Soumya Jal (HoD, SoPAHS)

Dr. P.K. Mohanty, Dean (Acad) CUTM

All the members were welcomed to the online session by the Chairperson and were briefed regarding the purpose of the meeting. Thereafter, the Dean of SoPAHS presented on the achievements, improvements of the department in terms of academics and infrastructure.

Following are the programs offered by SoPAHS:

MSc Medical Laboratory Technology (MSc MLT)
MSc Applied and Clinical Microbiology (MSc CMB)
BSc Medical Laboratory Technology (BSc MLT)
BSc Clinical Microbiology (BSc CMB)
BSc Medical Radiation Technology (BSc MRT)
BSc Optometry (BSc Optom)

Agenda of the meeting:

Agenda 1: **The minutes of the last meeting of the BoS held on 22.06.2019 were confirmed.**

Agenda 2: **Discussion and approval on the content of syllabus for various courses of SoPAHS. Implementation of CBCS pattern.**

At first, the Dean of the school presented the feedback received from several stakeholders, on the curriculum of its various departments. With respect to the feedback received from the stakeholders, the committee discussed and approved for incorporation/ modifications in the curriculum for the Academic session 2020-21.

- The committee approved to introduce the following programmes in SoPAHS:
  BSc Anaesthesia Technology;
  BSc Operation Theatre Technology;
  BSc Emergency Medicine Technology
- The curriculum was framed adopting the CBCS pattern.
- Based on the feedback from stakeholders, the curriculum was framed in a manner to incorporate Project/ Practical based learning. The Project and Practical components of relevant subjects were embedded along with their theory component. Much of practical exposure/ hands on training/ research and project exposure is emphasized.
- The curriculum developed is available on http://courseware.cutm.ac.in/ (links/ notes/ videos for relevant notes are also available). It was adapted in a way to ease flip class technique and enhance Virtual learning along with real time learning, which was highly appreciated by the board members.
- New courses added into the curriculum are provided in *Annexure A*.

Agenda 3: **Inclusion of courses on life skills and value addition**

For their overall development and wellbeing of the students, it was advised that students enroll in the various life skills and value-adding courses that are offered by the university. The Board members agreed and gave their approval to the same.

Details of the life skill and value added courses introduced are mentioned in *Annexure B*.

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The Dean, SoPAHS extended sincere thanks to all the members of the Board.

The meeting ended with a vote of thanks to the Chair.

Dean, SoPAHS

Prof. Sunil Kumar Jha
DEAN
School of Paramedics & Allied Health Sciences
Centurion University of Technology & Management
Bhubaneswar, Odisha-752050

Dean, Academics

Dean - Academic
Centurion University of Technology & Management
Bhubaneswar, Khurda, Odisha-752050

11/7/20

HOD, SoPAHS

Dr. Soumya Jal
Associate Professor & HOD
School of Paramedics & Allied Health Sciences
Centurion University of Technology & Management
Ramachandrapur, Bhubaneswar - 752050

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Annexure A

List of new courses added

Sl. No	Course Title	Type (Skill/ Employability/ Entrepreneurship)	Credit
	MSc MLT		
1.	Human Anatomy and Physiology	Employability	3
2.	Analytical Techniques	Entrepreneurship	4
3.	Biological Chemistry	Employability	3
4.	Clinical Hematology	Entrepreneurship	4
5.	Clinical Pathology	Entrepreneurship	4
6.	Cell and Molecular Biology	Employability	3
7.	Clinical Biochemistry	Employability	3
8.	Histology	Employability	4
9.	Medical Laboratory Technology	Entrepreneurship	5
10.	Blood Banking	Entrepreneurship	4
11.	Health Programme in India	Entrepreneurship	3
12.	Medical Microbiology	Employability	4
13.	Immunology & Parasitology	Employability	5
14.	Advanced Hematology	Entrepreneurship	4
15.	Research Methodology	Employability	3
16.	Mini Project	Employability	2
17.	Internship	Employability	12
18.	Project	Employability	12
19.	Environmental Studies	Employability	2
20.	Job Readiness	Employability	3
21.	Proficiency in English	Employability	2
	MSc CMB		
1.	Human Anatomy and Physiology	Employability	3
2.	Analytical Techniques	Entrepreneurship	4
3.	Biological Chemistry	Employability	3
4.	Clinical Hematology	Entrepreneurship	4
5.	Clinical Pathology	Entrepreneurship	4
6.	Cell and Molecular Biology	Employability	3
7.	Clinical Biochemistry	Employability	3
8.	Histology	Employability	4
9.	General Microbiology	Employability	4
10.	Systematic Bacteriology	Employability	4
11.	Applied microbiology	Employability	3
12.	Medical Parasitology and Mycology	Employability	5
13.	Immunology & Virology	Employability	5
14.	Clinical Bacteriology	Employability	4
15.	Research Methodology	Employability	3

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16.	Mini Project	Employability	2
17.	Internship	Employability	12
18.	Project	Employability	12
19.	Environmental Studies	Employability	2
20.	Job Readiness	Employability	3
21.	Proficiency in English	Employability	2
	BSc MLT		
1.	Human Anatomy and Physiology	Employability	3
2.	Cell Biology	Employability	4
3.	Medical Instrumentation and Technique	Entrepreneurship	4
4.	Biochemistry	Employability	4
5.	Clinical Pathology	Entrepreneurship	4
6.	Immunology	Employability	5
7.	Molecular Biology	Entrepreneurship	4
8.	Haematology	Entrepreneurship	5
9.	Microbiology	Employability	5
10.	Medical Law and Ethics	Employability	3
11.	Histology	Employability	4
12.	Advanced Hematology	Entrepreneurship	4
13.	Research Methodology	Employability	3
14.	Analytical Biochemistry	Employability	5
15.	Applied Haematology	Entrepreneurship	5
16.	Immunopathology	Employability	4
17.	Parasitology	Employability	5
18.	Basic Computer and Information Science	Employability	2
19.	Blood Banking	Entrepreneurship	4
20.	Medical Laboratory Management	Entrepreneurship	5
21.	Introduction to Quality and Patient Safety	Employability	5
22.	Mycology & Virology	Employability	5
23.	Mini Project	Employability	2
24.	Internship	Employability	12
25.	Project	Employability	12
26.	Environmental Studies	Employability	2
27.	Job Readiness	Employability	3
28.	Proficiency in English	Employability	2
	BSc CMB		
1.	Human Anatomy and Physiology	Employability	3
2.	Cell Biology	Employability	4
3.	Medical Instrumentation and Technique	Entrepreneurship	4
4.	Biochemistry	Employability	4
5.	Clinical Pathology	Entrepreneurship	4
6.	Immunology	Employability	5
7.	Molecular Biology	Entrepreneurship	4

8.	Haematology	Entrepreneurship	5
9.	Microbiology	Employability	5
10.	Medical Law and Ethics	Employability	3
11.	Systemic Bacteriology	Employability	4
12.	Systemic Virology & Mycology	Employability	5
13.	Research Methodology	Employability	3
14.	Analytical Biochemistry	Employability	5
15.	Public Heath Microbiology	Employability	4
16.	Pharmaceutical Microbiology	Employability	4
17.	Industrial Microbiology	Employability	4
18.	Basic Computer and Information Science	Employability	2
19.	Epidemiology	Employability	3
20.	Diagnostic Bacteriology	Entrepreneurship	5
21.	Diagnostic Mycology	Entrepreneurship	4
22.	Diagnostic Virology	Entrepreneurship	4
23.	Diagnostic Parasitology	Entrepreneurship	4
24.	Mini Project	Employability	2
25.	Internship	Employability	12
26.	Project	Employability	12
27.	Environmental Studies	Employability	2
28.	Job Readiness	Employability	3
29.	Proficiency in English	Employability	2
	BSc MRT		
1.	General Anatomy	Employability	5
2.	General Physiology	Employability	5
3.	Basic Biochemistry	Employability	5
4.	Biology	Employability	5
5.	Cell Biology	Employability	5
6.	Mathematics	Employability	5
7.	Basic Radiation Physics	Employability	4
8.	Fundamental Medical Imaging	Entrepreneurship	6
9.	Principles of Radiation Therapy	Employability	4
10.	Basic Medical Instrumentation & Technique	Entrepreneurship	4
11.	Applied Radiation Physics & Radiation Protection	Employability	4
12.	Radiographic Technique - 1	Employability	5
13.	Basic Equipment in Radiotherapy	Employability	4
14.	Mammography and Ultrasound	Entrepreneurship	4
15.	Applied Equipment of Radio Diagnosis	Employability	4
16.	Radiotherapy and Brachy Therapy in Malignant & Non-malignant Disease	Employability	4
17.	Radiographic Technique - 2	Employability	5
18.	Physics of CT & MRI	Employability	4
19.	Interventional Radiology and	Employability	5

	Drug Diagnostic Radiology		
20.	Computerized Tomography (CT Scanning) Method & Procedure	Employability	4
21.	Basic of Magnetic Resonance Imaging	Employability	4
22.	Image Interpretation of X-Ray Mammography, CT & MRI	Entrepreneurship	5
23.	Medical Law and Ethics	Employability	3
24.	Orientation in Clinical Sciences Course contents	Employability	4
25.	Basic Computer and Information Science	Employability	2
26.	Project	Employability	18
27.	Internship	Employability	18
28.	Environmental Studies	Employability	2
29.	Job Readiness	Employability	3
30.	Proficiency in English	Employability	2
	BSc Optometry		
1.	Biology	Employability	4
2.	Maths	Employability	4
3.	Cell Biology	Employability	4
4.	General Anatomy	Employability	5
5.	General Physiology	Employability	5
6.	Basic Biochemistry	Employability	5
7.	GEOMETRIC OPTICS	Employability	5
8.	BASIC COMPUTER AND INFORMATION SCIENCE	Employability	2
9.	OCULAR ANATOMY	Employability	4
10.	OCULAR PHYSIOLOGY	Employability	4
11.	INTRODUCTION TO OPTOMETRY	Employability	2
12.	PHYSICAL OPTICS	Entrepreneurship	4
13.	VISUAL OPTICS –I	Entrepreneurship	5
14.	OPTOMETRIC OPTICS –I	Entrepreneurship	5
15.	OCULAR DISEASES –I	Entrepreneurship	4
16.	OCULAR MICROBIOLOGY & PATHOLOGY	Employability	4
17.	CLINICAL EXAMINATION OF VISUAL SYSTEM LAB	Entrepreneurship	2
18.	VISUAL OPTICS –II	Entrepreneurship	5
19.	OPTOMETRIC OPTICS –II & DISPENCING OPTICS	Employability	5
20.	OCULAR DISEASES –II	Employability	4
21.	CONTACT LENSES-I	Entrepreneurship	5
22.	CONTACT LENSES-II	Entrepreneurship	5
23.	BINOCULAR VISION –I	Entrepreneurship	5
24.	LOW VISION & REHABILITATION	Entrepreneurship	4
25.	BASIC & OCULAR PHARMACOLOGY	Employability	4
26.	BINOCULAR VISION –II	Entrepreneurship	5
27.	PEDIATRIC & GERIATRIC	Employability	4

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	OPTOMETRY		
28.	SYSTEMIC DISEASES & EYE	Employability	4
29.	OCCUPATIONAL OPTOMETRY	Entrepreneurship	3
30.	LAW & OPTOMETRY	Employability	3
31.	PUBLIC HEALTH& COMMUNITY OPTOMETRY	Employability	3
32.	OPTOMETRIC INSTRUMENTS	Entrepreneurship	4
33.	PROJECT	Employability	18
34.	INTERNSHIP	Employability	20
35.	Environmental Studies	Employability	2
36.	Job Readiness	Employability	3
37.	Proficiency in English	Employability	2

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Annexure B

List of Skill courses (Basket) approved

Sl. No	Course Title	Credit	(T+P+P)
1.	Refraction Technology (CUTM3057)	4	0+3+1
2.	Emergency Medical Technology (CUTM3058)	4	0+3+1
3.	Medical Lab Technology (CUTM3059)	4	0+3+1
4.	Operation Theatre Technology (CUTM3060)	4	0+3+1
5.	Radiology Technology (CUTM3061)	4	0+3+1
6.	Phlebotomy Technology (CUTM3062)	4	0+3+1
7.	First Aid Service (CUTM3063)	4	0+3+1
8.	General Duty Assistance Service (CUTM3064)	4	0+3+1
9.	X- ray Technology (CUTM3065)	4	0+3+1

List of value-added courses approved

Sl. No	Course Title	Hrs. of input
1.	Gender, Human Rights and Ethics (CUVA4040)	30 hrs

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CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Paramedics and Allied Health Sciences

Time: 11.00 AM

Date: 11.07.2020

Venue: Hybrid mode (Board Room, CUTM, Bhubaneswar and online)

Board of Studies Meeting

Attendance Sheet

Sl. No.	Name of the BOS Member (Internal Faculty and External Resource)	Designation	Signature
1	Dr. Santosh Kumar Behera	Regional Medical Research Center	Attended online
2	Dr. Debasish Sahoo	SOA University	Attended online
3	Dr. Debi Prasad Rath	CARE Hospital	Attended online
4	Dr. Ardhendu Praharaj	District Microbiology Lab, Nabarangpur	Attended online
5	Dr. Harihar Praharaj	Directorate of Medical Education and Training, Odisha	Attended online
6	Dr. Bhargavram	MD, Professor of Opthalmology, Sandhya Eye Hospital, Andhra Pradesh	Attended online
7	Dr. Ajay Kumar Singh	MD, Professor of Ophthalmology, DHC Khordha	Attended online
8	Dr.Chandra Mouli	Radiology Dept., GVP Institute of Health Care and Medical Technology,Marika valasa, Visakhapatnam,A.P	Attended online
9	Dr.M.Bhargava Ram	Opthamologist, Sandhya Eye Hospital, Maddilapale, Visakhapatnam	Attended online
10	Dr.Teja	Anesthesian	Attended online
11	Dr. Monali P. Mishra	Assistant Prof., SoPAHS (CUTM)	Attended online
12	Ms. Sonali Dash	Assistant Prof., SoPAHS (CUTM)	Attended online
13	Ms. Susmita Chakrabarty	Lecturer, SoPAHS (CUTM)	Attended online
14	Prof. Sourav Karmakar	Asst. Prof. & HoD, SoPAHS (CUTM)	Attended online
15	Ms. SNS Neelima	Asst. Prof. SoPAHS (CUTM)	Attended online
16	Dr.CH.Nooka Raju	Associate Prof., SoPAHS (CUTM)	Attended online
17	Mr. M.Vinay Dinakaran	Asst. Prof. SoPAHS (CUTM)	Attended online

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18	Ms. N.Anuhya	Asst. Prof. SoPAHS (CUTM)	Attended online
19	Dr.M.L.N.Acharyulu	Associate Dean, SoPAHS (CUTM)	Attended online

Dean, SoPAHS
Prof. Sunil Kumar Jha
DEAN
School of Paramedics & Allied Health Sciences
Centurion University of Technology & Management
Bhubaneswar, Odisha-752050

Dean, Academics
Dean - Academic
Centurion University of Technology & Management
Bhubaneswar, Khurda, Odisha-752050

Dr. Soumya Jal
HOD, SoPAHS
Associate Professor & HOD
School of Paramedics & Allied Health Sciences
Centurion University of Technology & Management
Ramachandrapur, Bhubaneswar - 752050

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CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Applied Sciences

Department of Physics

Date: 11.07.2020

MINUTES OF BOARD OF STUDIES MEETING held on 11.07.2020

Venue: Conducted in online mode

Time: 11.00 a.m.

The Board of Studies (BoS) meeting of Department of Physics was conducted in online mode on **11.07.2020** at 11 a.m. The following are the board members:

1. Dr. P. K. Jain, Scientist -G, Center Head for Carbon materials division of ARCI, HYD, External expert
2. Dr. J K Rath, Director, Mechem Private Ltd, Bhubaneswar, External expert
3. Dr. Debadhyana Behera, Dept. of Physics, Ravenshaw University, External expert.
4. Prof. Dipankar Bhattacharyay, Dean SoAS.
5. Prof. Mohammed Siddique, Associate Dean- SoAS
6. Dr. Tapan Dash, HoD, Department of Physics, CUTM BBSR
7. Dr. Subrata Sarangi, Professor, Dept of Physics, UCTM, BBSR
8. Ms. Sushree Subhadarsi Bhole, MSc Alumni
9. Few M.Sc and B.Sc students of CUTM.

At the outset, Dean SoAS welcomed the invited (external) experts from industry and academia and addressed all the participants. HE outlined the broad contours of academic developments with respect to emerging research and skill integration areas and pointed out how the University has aligned its curricula keeping in view these developments. He also outlined how the University examination system is being reformed aligning it with the current trends and evolving methods of pedagogy and academic delivery. The steps being taken to execute all academic programs of the University in Covid-19 conditions were also pointed out by him.

The following agenda items were taken up subsequently:

Agenda 1: **The minutes of the last meeting of the BoS held on 30.06.2019 were confirmed.**

Agenda 2: **Revision of Curriculum for the programme B.Sc. Physics and M.Sc. Physics.**

- Based on the feedback received on curriculum outlining the suggestions made by the various stakeholders, it was suggested that the revised curriculum for B.Sc. and M.Sc. programmes is to be implemented from the academic year 2020-21.

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- The detailed course outline and Syllabus of Department of Physics was presented by Prof. Mohammed Siddique, Associate Dean, SoAS.
- The external experts (industrial and academic) appreciated the general approach of the University dividing the curriculum into Core, Domain and Skill Courses and noted with satisfaction, the syllabi being upto-date and with due stress on practice and skill.
- They also noted with satisfaction that the syllabi of all BSc core courses was aligned to the UGC prescribed curriculum. It was also suggested that a BSc level, the foundation (or core) courses with basic concepts should be taught well including appropriate proportions of theory, practice, projects. Advanced topics like Graphene, Nano-materials, etc may be included as electives and at introductory level only.
- The experts also appreciated the advanced and focused nature of the MSc Core courses. Inclusion of advanced Materials Science topics such as Graphene, Composite Materials etc. was highly appreciated. Inclusion of Internship components into the MSc curriculum was also strongly suggested.
- The Board of study members recommended and approved the syllabus for both B.Sc. and M.Sc. programs *(Annexure-1)* to be taught in the upcoming semesters.

Agenda 3: : **Regarding domain courses**

- It was decided that students will take the domain courses offered by the University. Out of the different category of Domain courses Group B category is for Physics students. *(Annexure-2)*

Agenda 4: : **Regarding skills and value added courses**

It was suggested that students will take the skill and value added courses offered by the University. The same was approved by the Board members. *(Annexure-3 &4)*

The HoD, Department of Physics. extended his sincere thanks to all members of the Board.

The meeting was adjourned with Vote of Thanks by the Registrar Prof. Anita Patra. She thanked all the external members present in the meeting for sparing their valuable time from their busy schedule and make it successful.

Dean, Academics

Dean - Academic
Centurion University of Technology & Management
Bhubaneswar, Khurda, Odisha-752050

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Annexure-1

List of new courses approved

B.Sc. Physics

Sl. No	Course Title	Type(Skill/Employability /Entrepreneurship	Credit
1	Mathematical Physics-I	Skill	6
2	Mechanics	Skill	6
3	Thermal Physics	Employability & Skill	6
4	Waves and Optics	Employability & Skill	6
5	Mathematical Physics-II	Skill	6
6	Electricity and Magnetism	Employability & Skill	6
7	Analog System and Application	Employability & Skill	6
8	Mathematical Physics-III	Skill	6
9	Elements of Modern Physics	Employability & Skill	6
10	Digital Systems and Applications	Employability & Skill	6
11	Quantum Mechanics and Applications	Employability & Skill	6
12	Solid State Physics	Employability & Skill	6
13	Electromagnetic Theory	Skill	6
14	Statistical Mechanics	Skill	6

M.Sc. Physics

Sl. No	Course Title	Type(Skill/Employability/Entrepreneurship	Credit
1	Energy storage materials	Employability	4
2	Bio and bimimetic nano materials	Employability	4
3	Photovoltaic technology and nanocatalysts	Employability	4
4	Advanced characterization techniques	Skill	4
5	Smart and electronic materials	Skill	4
6	Corrosion and advanced coating application	Employability	4
7	Synthesis and application of nano composites	Skill & Employability	4
8	Material behavior of nanostructures	Skill	4
9	Emerging materials	Employability	4
10	Synthesis routes of nanomaterials	Skill	4
11	Computational materials science	Skill	4
12	Plasma technology	Employability	4
13	Essentials of nanomaterials	Skill	4
14	Advanced quantum mechanics	Skill	4
15	Physics of solids and semiconductors	Skill	4
16	Laser technology	Skill	4

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Annexure-2

Domain Courses approved by the University 2020-21.

	Group A: Agriculture/ Agri Engineering/Phyto pharma/ Dairy tech/ fisheries/ biological sciences			
	Group B: All other engineering/physical and mathematical science/vocational or skills			
	Group C: Pharmacy and allied Health			
	Group D: Management & media and communication			
Sl. No.	**Name of the Domain**	**Credit**	**Category**	**Year of introduction**
1	Advance Video Processing, Computer Vision and Machine Learning	30	A/B/D	2020
2	Aerial Survey and Remote Sensing Applications	18	A/B	2020
3	Agri Business Management	23	A/B/D	2020
4	Architectural and Structural Design	20	A/B	2020
5	Business Analytics	21	A/B/D	2020
6	Chip Design and Fabrication using VLSI	18	B	2020
7	Commodity and Food Storage	29	A/B/D	2020
8	Communication Systems	18	B	2020
9	Composite Design and Manufacturing	24	A/B	2020
10	Computational Fluid Dynamics	20	A/B	2020
11	Cyber Security	24	B	2020
12	Dairy Processing and Development	28	A/B	2020
13	Fish Processing Technology	29	A/B	2020
14	Food Processing	29	A/B/D	2020
15	Gaming and Immersive Learning (AR & VR)	20	A/B/D	2020
16	Go-To-Market	22	A/B/D	2020
17	Health Care Assistancy	25	A/B	2020
18	Manufacturing Execution System	18	B	2020
19	Nutraceuticals	29	A/C	2020
20	Protected Horticulture	29	A/B	2020
21	Renewable Energy Applications	22	A/B	2020
22	Smart Agriculture	29	A/B	2020
23	Smart Farm Machinery	28	A/B	2020
24	Soil and Water Conservation through Watershed	28	A/B	2020

Annexure-3

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Skill Courses approved by the university in 2020-21.

Sl. No.	Course Title	Credit
1	Introduction to Quantum Computing	4
2	Organic Farming	4
3	Mushroom Farming	4
4	Hydroponics Technology	4
5	Poultry Farming	4
6	Dairy Farming	4
7	Vermicomposting Farming	4
8	Transformer Manufacturing, Repairing and Maintenance	4
9	Electrical Installation	4
10	Repair and Maintenance of Home Appliances	4
11	Refrigeration and air conditioning	4
12	Super critical CO_2 plant operation	4
13	Business Plan Preparation	4
14	Composite fabrication practice	4
15	Powder coating practice	4
16	Farm appliances operation	4
17	Bio fertilizers preparation	4
18	PCB designing & fabrication	4
19	Introduction to Block Chain Technology	4
20	Introduction to Nutraceuticals	4
21	Introduction to NLP	4
22	Introduction to Computational Biology	4
23	Product Life Cycle Management through Gate process	4
24	New material development with Biovia	4
25	Spectral image processing using Python	4
26	Satellite data processing	4
27	Working with Graphene and carbon fibre	4
28	Adobe Tools and Illustrations	4
29	Digital Painting	4
30	Computer Installation and Maintenance	4

Annexure-4

Value Added courses offered by the university in 2020-21.

	Course Title	Credit
1	Natural Resource Management	30 Hours
2	Research Methodology and IPR	30 Hours
3	Urban Gardens using Hydroponics	30 Hours

4	Introduction to Python	30 Hours
5	MATLAB	30 Hours
6	Waste to Wealth	30 Hours
7	Technical Writing	30 Hours
8	Organic Farming	30 Hours
9	Disaster Management	30 Hours
10	Ethical Hacking	30 Hours
11	Web Development	30 Hours
12	Food & Nutrition	30 Hours
13	Clinical Practice	30 Hours
14	Innovation Management	30 Hours
15	Financial Literacy	30 Hours
16	Yoga and Meditation	30 Hours
17	Steps for Career Plan	30 Hours
18	MS Excel Basics	30 Hours
19	Quality Analysis	30 Hours
20	Ethical Writing Practice	30 Hours
21	Ansys	30 Hours
22	Video Making for Youtubers	30 Hours

CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Applied Sciences

Department of Physics

Time: 11.00 a.m. **Date: 11.07.2020**

Venue: Conducted in online mode

Board of Studies Meeting

Attendance Sheet

Sl. No	**Name of the Member**	Designation	Signature

Centurion
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1	Dr. P. K. Jain	Scientist -G, Center Head for Carbon materials division of ARCI, HYD	Attended Online
2	Dr. J K Rath	Director, Mechem Private Ltd, Bhubaneswar	Attended Online
3	Dr. Debadhyana Behera	Dept. of Physics, Revenshaw University	Attended Online
4	Prof. Dipankar Bhattacharyay	Dean – SoAS, Centurion University of Technology and Management	Attended Online
5	Prof. Mohammed Siddique	Associate Dean- SoAS, Centurion University of Technology and Management	Attended Online
6	Dr. Tapan Dash	HoD- Dept of Physics-SoAS,Centurion University of Technology and Management	Attended Online
7	Dr. Subrata Sarangi	Professor, Dept of Physics-SoAS,Centurion University of Technology and Management	Attended Online
8	Sushree Subhadarsi Bhole	MSc Alumnus, Centurion University of Technology and Management	Attended Online
9	Sarita Nayak	MSc Alumnus, Centurion University of Technology and Management	Attended Online
10	Debabrata Mishra	MSc student (Continuing) Centurion University of Technology and Management	Attended Online
11	Nishikanta Mishra	MSc student (Continuing) Centurion University of Technology and Management	Attended Online
12	BapuramVenkateswar Samantaray	MSc student (Continuing) Centurion University of Technology and Management	Attended Online
13	Sulipta Das	MSc Alumnus, Centurion University of Technology and Management	Attended Online
14	Sanjay Kumar Harichandan	MSc Alumnus, Centurion University of Technology and Management	Attended Online
15	Priyabadini Biswal	MSc Alumnus, Centurion University of Technology and Management	Attended Online
16	Alisha Dalai	MSc Alumnus, Centurion University of Technology and Management	Attended Online
17	Monalisa B D Subham	BSc Alumnus, Centurion University of Technology and Management	Attended Online
18	Susmita Rani Pradhan	BSc Student (Continuing) Centurion University of Technology and Management	Attended Online
19	Jyotir Jagadananda Sahoo	BSc student (Continuing) Centurion University of Technology and Management	Attended Online
20	Sadia Masih	BSc Alumnus, Centurion University of Technology and Management	Attended Online
21	Saumya Sarthak Nayak	BSc Alumnus, Centurion University of Technology and Management	Attended Online
22	Ayush Kumar Sahu	BSc student (Continuing) Centurion University of Technology and Management	Attended Online
23	Soumya Sonali kar	BSc student (Continuing)	Attended Online

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		Centurion University of Technology and Management	
24	Amit Kumar Pradhan	BSc student (Continuing) Centurion University of Technology and Management	Attended Online

Dean, Academics

Dean - Academic
Centurion University of Technology & Management
Bhubaneswar, Khurda, Odisha-752050

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CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Applied Sciences
Department of Chemistry

Date: 11.07.2020

MINUTES OF BOARD OF STUDIES MEETING held on 11.07.2020

Venue: Online mode through Zoom Link

Time: 2.30 p.m.

The Board of Studies meeting was conducted in online mode due to ongoing Covid-19 Pandemic on 11th July 2020 at 2.30 pm. The following members were present:

1. Dr. Kishore Sarkar(Subject Expert, External Member)
2. Dr. J. K. Rath(Industry Personel, External Member)
3. Prof. Dipankar Bhattacharyay (Dean,SoAS)CUTM,BBSR Campus
4. Prof. Mohammed Siddique(Associate Dean), CUTM,BBSR Campus
5. Dr.Susanta Kumar Biswal
6. Dr.Atia Arzoo
7. Sonali Sasmal
8. Supriya Rath
9. Tanvi Tanisha Panda
10. Piyali Deb
11. Renukanta Naik
12. Satyajit Pradhan
13. Somia Rani Patel

The Chairperson welcomed all members of the Board and briefly outlined the purpose of the meeting. Thereafter, the Head of the Department of Chemistry presented the achievements and improvements of the department in the areas of academics, research, consultancy and infrastructure.

The following agenda items were taken up subsequently:

Agenda 1: **The minutes of the last meeting of the BoS held on 22.11.2019 were confirmed.**

*Agenda 2:***Total** Revision **in the Curriculum of** B.Sc (Hons.)**,M.Sc program,** domain syllabus for B.Sc and M.Sc .

- At the outset Dean, SoAS addressed the participants and welcomed sharing key academic developments with respect to emerging research areas , online classes and examination reforms.
- The detailed course outline and Syllabus of Department of Chemistry was presented by Associate Dean, Prof. Mohammed Siddique.
- The HoD, Chemistry gave a presentation on the feedback received on curriculum outlining the suggestions made by the various stakeholders. Based on this , the Board accepted and approved a few suggestions for course revision to be implemented from the Academic Year 2019-20.

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- With reference to the suggestions of the members present it was decided that more emphasis should be given to practice classes so that students will have more practical based approach in the proposed practices and research review can also be included in the practice sessions.
- The reference books and textbooks to be added that are more specific and advanced keeping an eye on the course curriculum, which would be suitable for the learners.
- Making students skilled with tomorrows research challenges it was decided to include at least two to three original research papers as reference.
- Flip classes and Seminars should be conducted to encourage students to present original research papers to discuss smart experiments.
- Beyond Academics Students should be encouraged to visit various research centers, industries to have a practical perspective towards the subject.
- The members went through the scheme and syllabus for new M. Sc. courses and commented to be well structured and sound enough to enrich students in acquiring skills required by students to pursue higher research, self employment and setting up of start ups.
- The Board of Study members recommended and approved the syllabus for both B. Sc.(Annexure-I) and M. Sc.(Annexure-II) Programs and domain subjects(Annexure-III) for both programs mentioned here to be taught in upcoming semesters.

*Agenda 3:***Inclusion of courses on life skills and value addition**

It was suggested that students take up the various courses offered by the University in the areas of life skills(Annexure-IV) and value addition (Annexure-V)for their overall improvement and well being.The same was agreed upon and approved by the Board members.

- The meeting ended with a Vote of Thanks by the Dean, SoAS.

Abia Areen 11/07/2020

HoD,Chemistry

H.O.D
Department of Chemistry
School of Applied Sciences
CENTURION UNIVERSITY OF TECHNOLOGY & MANAGEMENT
Bhubaneswar, Odisha

Dean, Academics
Dean - Academic
Centurion University of Technology & Management
Bhubaneswar, Khurda, Odisha-752050

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Annexure-I

Sl. No	Course Title	Type(Skill/Employability/Entrepreneurship	Credit
	B.Sc Program		
1	Atomic Structure and Chemical bonding-I	Employabilityand Skill	6
2	States of matter and ionic equilibrium	Employability and Skill	6
3	Basics and Hydrocarbons	Employability and Skill	6
4	Chemical Thermodynamics and its application	Employability and Skill	6
5	S- and P-block elements	Employability and Skill	6
6	Oxygen Containing Functional Groups	Employability and Skill	6
7	Phase Equilibria& Chemical Kinetics	Employability and Skill	6
8	Coordination Chemistry	Employability and Skill	6
9	Heterocyclic Chemistry	Employability and Skill	6
10	Electrochemistry	Employability and Skill	6
11	Bio-molecules	Employability and Skill	6
12	Quantum Chemistry & Spectroscopy	Employability and Skill	6
13	Organometallic chemistry	Employability and Skill	6
14	Spectroscopy	Employability and Skill	6

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Annexure-II

M.Sc Program			
1	Advanced characterization techniques	Skill	4
2	Synthesis and application of nano composites	Employability and Skill	4
3	Synthesis routes of nanomaterials	Employability and Skill	4
4	Computational materials science	Employability and Skill	4
5	Industrial chemicals	Employability and Skill	4
6	Pharmcognosy and phytochemistry	Employability	4
7	Polymer chemistry	Employability and Skill	4
8	Packaging	Employability and Skill	4
9	Industrial pollution and its waste management	Employability and Skill	4
10	Toxicology	Employability and Skill	4
11	Biopolymer and hydrogel	Employability and Skill	4
12	Nano-pharmaceuticals and biomedical science	Employability and Skill	4
13	Synthetic organic chemistry	Employability and Skill	4
14	Energy storage system	Employability	4
15	Sustainable chemistry	Employability and Skill	4
16	Analytical techniques	Employability and Skill	4

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Annexure-III

Sl.No.	Domain List	Credit	Category	Year of Introduction
1	Advance Video Processing, Computer Vision and Machine Learning	30	A/B/D	2020
2	Aerial Survey and Remote Sensing Applications	18	A/B	2020
3	Agri Business Management	23	A/B/D	2020
4	Architectural and Structural Design	20	A/B	2020
5	Business Analytics	21	A/B/D	2020
6	Chip Design and Fabrication using VLSI	18	B	2020
7	Commodity and Food Storage	29	A/B/D	2020
8	Communication Systems	18	B	2020
9	Composite Design and Manufacturing	24	A/B	2020
10	Computational Fluid Dynamics	20	A/B	2020
11	Cyber Security	24	B	2020
12	Dairy Processing and Development	28	A/B	2020
13	Fish Processing Technology	29	A/B	2020
14	Food Processing	29	A/B/D	2020
15	Gaming and Immersive Learning (AR & VR)	20	A/B/D	2020
16	Genetic Engineering & Genomics	29	A	2020
17	Go-To-Market	22	A/B/D	2020
18	Health Care Assistancy	25	A/B	2020
19	Intensive Aquaculture	29	A	2020
20	Manufacturing Execution System	18	B	2020
21	Nutraceuticals	29	A/C	2020
22	Organic Farming	29	A	2020
23	Protected Horticulture	29	A/B	2020
24	Renewable Energy Applications	22	A/B	2020
25	Seed Production using Manual and Molecular Methods	29	A	2020
26	Smart Agriculture	29	A/B	2020
27	Smart Farm Machinery	28	A/B	2020
28	Soil and Water Conservation through Watershed	28	A/B	2020

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Annexure-IV

List of Skill courses approved by university in the AY 2020-21

Sl.No.	List of Courses	Credit
1	Introduction to Quantum Computing	4
2	Organic Farming	4
3	Mushroom Farming	4
4	Hydroponics Technology	4
5	Poultry Farming	4
6	Dairy Farming	4
7	Vermicomposting Farming	4
8	Transformer Manufacturing, Repairing and Maintenance	4
9	Electrical Installation	4
10	Repair and Maintenance of Home Appliances	4
11	Refrigeration and air conditioning	4
12	Super critical CO2 plant operation	4
13	Business Plan Preparation	4
14	Composite fabrication practice	4
15	Powder coating practice	4
16	Farm appliances operation	4
17	Bio fertilizers preparation	4
18	PCB designing & fabrication	4
19	Introduction to Block Chain Technology	4
20	Introduction to Nutraceuticals	4
21	Introduction to NLP	4
22	Introduction to Computational Biology	4
23	Product Life Cycle Management through Gate process	4
24	New material development with Biovia	4
25	Spectral image processing using Python	4
26	Satellite data processing	4
27	Working with Graphene and carbon fibre	4
28	Adobe Tools and Illustrations	4
29	Digital Painting	4
30	Computer Installation and Maintenance	4

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Annexure-V

List of value added courses approved by university in the AY 2020-21

Sl. No.	List of Courses	Duration of course
1	Natural Resource Management	30 Hours
2	Research Methodology and IPR	30 Hours
3	Urban Gardens using Hydroponics	30 Hours
4	Introduction to Python	30 Hours
5	MATLAB	30 Hours
6	Waste to Wealth	30 Hours
7	Technical Writing	30 Hours
8	Organic Farming	30 Hours
9	Disaster Management	30 Hours
10	Ethical Hacking	30 Hours
11	Web Development	30 Hours
12	Food & Nutrition	30 Hours
13	Clinical Practice	30 Hours
14	Innovation Management	30 Hours
15	Financial Literacy	30 Hours
16	Yoga and Meditation	30 Hours
17	Steps for Career Plan	30 Hours
18	MS Excel Basics	30 Hours
19	Quality Analysis	30 Hours
20	Ethical Writing Practice	30 Hours
21	Ansys	30 Hours
22	Video Making for Youtubers	30 Hours

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CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Applied Sciences

Department of Chemistry

Time: 2.30 pm **Date:** 11.07.2020

Venue: Online mode Through ZOOM link

Board of Studies Meeting

Attendance Sheet

Sl. No.	Name	Designation with Organization	Signature
1.	Dr. Kishore Sarkar	Head of the Department, Gene Therapy and Tissue Engineering Lab, Department of Polymer Science and Technology, Kolkata-700009	Attended Online
2.	Dr. J. K. Rath	Director, Mechem Private Limited	Attended Online
3.	Prof. Dipankar Bhattacharyay	Dean – SoAS, Centurion University of Technology and Management	Attended Online
4.	Prof. Mohammed Siddique	Associate Dean- SoAS, Centurion University of Technology and Management	Attended Online
5.	Prof. Susanta Kumar Biswal	Professor in Chemistry, SoAS, Centurion University of Technology and Management	Attended Online
6.	Dr. Atia Arzoo	HoD- Dept of Chemistry- SoAS, Centurion University of Technology and Management	Attended Online
7.	Sonali Sasmal	M. Sc. Alumni student Centurion University of Technology and Management	Attended Online
8.	Supriya Rath	M. Sc. Alumni student Centurion University of Technology and Management	Attended Online
9.	Tanvi Tanisha Panda	B. Sc. Alumni student Centurion University of Technology and Management	Attended Online
10.	Piyali Deb	B. Sc. Existing student Centurion University of Technology and Management	Attended Online
11.	Renukanta Naik	B. Sc. Existing student Centurion University of Technology and Management	Attended Online
12.	Satyajit Pradhan	M. Sc. Existing student Centurion University of Technology and Management	Attended Online
13.	Somia Rani Patel	M. Sc. Existing student Centurion University of Technology and Management	Attended Online

Dean, Academics

Dean - Academic

Centurion
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CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Applied Sciences

Department of Mathematics

Date: 11.07. 2020

MINUTES OF BOARD OF STUDIES MEETING held on 11.07.2020

Venue: Online Mode

Time: 2.30 p.m.

The Board of Studies (BoS) meeting of Department of Mathematics was held on 11.07.2020 at 2.30 p.m. in the Board Room, CUTM Bhubaneswar. The following members were present:

1. Prof. Mritunjay Kumar Singh,Professor, Department of Mathematics and Computing & Dean, IIT(ISM) Dhanbad,Jharkhanda.
2. Prof. Dipankar Bhattacharyay,Dean,, SoAS, CUTM
3. Prof. Mohammed Siddique , Associate Dean , SoAS,CUTM
4. Dr Ashok Misra, Professor & Head, Centre for Fluid Dynamics, CUTM
5. Dr Tumbanath Samantara, HoD, Department of Mathematics.Bhubaneswar Campus, CUTM

The Chairperson welcomed all members and briefly outlined the purpose of the meeting. Thereafter, the Head of the Department of Mathematics presented the achievements and improvements of the department in the areas of academics, research, consultancy and infrastructure.

The following agenda items were taken up subsequently:

***Agenda 1*:Discussion and approval of the Curriculum of B.Sc. and M.Sc Mathematics.**

- The HoD, Mathematics , gave a presentation on the feedback received on curriculum outlining the suggestions made by the various stakeholders. Based on this , the Board accepted and approved a few suggestions for course revision to be implemented from the Academic Year 2020-21.
- The syllabus of 1st to 6th semester of B. Sc, & 1st to 4th semester M.Sc Mathematics was considered and approved by the Board.
- The Board approved the updation of the courses important from higher studies point of view and replacement of contents of open basket with new courses with greater practice component. *(Annexure-1)*
- Courses that can be executed in Practice mode were placed for approval to be reconfigured to Theory + Practice,Theory+ Project and Project + Practice.
- The Board reviewed the syllabus of Mathematics for foundation course of B.Tech and approved the changes.

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The HoD, Department of Mathematics. extended sincere thanks to all members of the Board.

The meeting ended with a voteof thanks to the Chair.

HoD, Mathematics

HOD
Department of Mathematics
School of Applied Sciences
Centurion University of Technology
& Management
Bhubaneswar, Odisha

Dean, Academics

Dean - Academic
Centurion University of Technology & Management
Bhubaneswar, Khurda, Odisha-752050

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Annexure:1

B.Sc (Mathematics)

Sl. No	Course Title	Type(Skill/Employability/Entrepreneurship/higher studies/Industry)	Credit
1	Calculus	Skill	6
2	Linear Algebra	Skill	6
3	Analysis-I	Higher Study	6
4	Ordinary Differential Equations	Higher Study	6
5	Analysis-II	Higher Study	6
6	Modern Algebra	Higher Study	6
7	Partial Differential Equations and System of Ordinary Differential Equation	Skill	6
8	Numerical Analysis	Skill	6
9	Advanced Analysis	Higher Study	6
10	Complex Analysis	Higher Study	6
11	Integral Transformations	Higher Study	6
12	Discrete Mathematical Structure	Skill	6
13	Linear Programming	Skill	6
14	Probability and Statistics	Skill	6

M.Sc (Mathematics)

Sl. No	Course Title	Type(Skill/Employability/Entrepreneurship/higher studies/Industry)	Credit
1	Heat and Mass Transfer	Skill	4
2	Numerical Methods for CFD	Skill	4
3	Fluid Dynamics	Skill	4
4	Geometry and Grid Generation	Employbility	4
5	Applications of CFD using Computational Tool-Simulia	Employbility	4
6	Advanced differential equations	Skill	4
7	Graph Theory	Skill	4
8	Optimization techniques	Skill	4
9	Advanced Statistical Methods	Skill	4
10	Applied Number Theory	Skill	4
11	Advanced complex analysis	Higher Study	4
12	Topology	Higher Study	4
13	Differential Geometry	Higher Study	4
14	Advanced Algebra	Higher Study	4
15	Data Analysis and Visualizations using Python	Employbility	4
16	Machine Learning using Python	Employbility	4

Centurion University

CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Applied Sciences

Department of Mathematics

Time: 2.30 p.m. Date: 11.07.2020

Venue: On-line Mode, CUTM, Bhubaneswar

Board of Studies Meeting

Attendance Sheet

List of Members present

Sl. No.	Name	Organisation	Signature
1.	Prof. Mritunjay Kumar Singh Professor, Department of Mathematics and Computing & Dean (Students Welfare)	IIT(ISM) Dhanbad Dhanbad-826004, Jharkhand, India	Online mode
2.	Prof. Dipankar Bhattacharyay	Dean - SoAS, Centurion University of Technology and Management	Online mode
3.	Prof. Mohammed Siddique	Associate Dean- SoAS, Centurion University of Technology and Management	Online mode
4.	Dr Ashok Mishra	Professor & Head, Centre for Fluid Dynamics Centurion University of Technology and Management	Online mode
5.	Abhilas Tripathy,	Lecturer Alumni of M.Sc (Mathematics) Program	Online mode
6.	Harapriya Patri Systems Engineer Alumni of M.Sc (Mathematics) Program	Infosys ltd Alumni of M.Sc (Mathematics) Program	Online mode
7.	Priyanka Karan	Student of M.Sc (Mathematics) Program	Online mode
8.	Snigdhamayee Naik	Student of M.Sc (Mathematics) Program	Online mode
9.	Ayushi Sing	Alumni of B.Sc (Mathematics) Program	Online mode
10.	Ashwini Kumar Mahanta	Alumni of B.Sc (Mathematics) Program	Online mode

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11.	Sonali Meher	Student of B.Sc (Mathematics) Program	Online mode
12.	Smitapragyan Sahoo	Student of B.Sc (Mathematics) Program	Online mode
13.	Chinmayee Hota	B.Tech Student	Online mode
14.	Swarnava Bhattacharya	B.Tech Student	Online mode
15.	Debasnan Singh	B.Tech Student(Alumni)	Online mode
16.	Dr Tumbanath Samantara,	Associate Professor & HoD Dept.of Mathematics, Bhubaneswar Campus, CUTM ,Odisha	Online mode

Dean, Academics

Dean - Academic
Centurion University of Technology & Management
Bhubaneswar, Khurda, Odisha-752050

CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Applied Sciences

Department of Botany

Date: 11.07.2020

MINUTES OF BOARD OF STUDIES MEETING held on 11.07.2020

Time: 2.30 p.m.

Virtual Mode

The Board of Studies (BoS) meeting of Department of Botany was held on 11.07.2020 at 2.30 p.m. in virtual mode due to lock down for ongoing COVID 19. The following members were present:

1. Dr Sangram Lenka (External expert)
2. Dr Sabuj Sahoo (External expert)
3. Dean, SoAS, CUTM, Bhubaneswar (Member)
4. Prof. Mohammed Siddique, Assoc. Dean, SoAS, CUTM, Bhubaneswar (Member)
5. Dr. Rukmini Mishra, Head, Dept. of Botany, SoAS, CUTM (Member)

The Chairperson welcomed all members of the Board and briefly outlined the purpose of the meeting. Thereafter, the Head of the Department of Botany presented the achievements and improvements of the department in the areas of academics, research and infrastructure.

The following agenda items were taken up subsequently:

Agenda 1: **The minutes of the last meeting of the BoS held on 30th July, 2019 were confirmed.**

Agenda 2: **Discussion and introduction of Curriculum of B.Sc. and M.Sc. (Botany) with new codes to be approved (Annexure I).**

- The HoD, Botany gave a presentation on the feedback received on curriculum outlining the suggestions made by the various stakeholders. Based on this, the Board accepted and approved the courses with new codes for B.Sc. programme and inclusion of new courses in M.Sc. Botany to be implemented from the Academic Year 2020-21. **(Annexure I)**

Agenda 3: **Inclusion of Domain courses**

- New 22 domain course are finalized by the University based on the industry and academic requirements and approved by Board. These courses to be implemented from the academic year 2020-2021. Group A/C category is for Botany students. **(Annexure II)**

Agenda 4: **Inclusion of Skill and Value added courses**

- New 30 skill courses and 22 value added course are finalized by the University and approved by Board. These courses to be implemented from the academic year 2020-2021 for both B.Sc. and M.Sc. students. **(Annexure III)**

The HoD, Department of Botany extended sincere thanks to all members of the Board.

The meeting ended with a vote of thanks to the Chair.

11/7/2020

HoD, Botany

H O.D
Department of Botany
School of Applied Sciences
CENTURION UNIVERSITY OF TECHNOLOGY & MANAGEMENT
Bhubaneswar, Odisha

Dean, Academics

Dean - Academic
Centurion University of Technology & Management
Bhubaneswar, Khurda, Odisha-752050

Annexure I

B.Sc. Core Courses (CC)

Sl. No.	Code	Subject Name	Type of course	T-P-Pr (Credit)	Credits
1.	CUTM1455	Phycology and Microbiology	Theory + Practice	4-2-0	6
2.	CUTM1456	Biomolecules & Cell biology	Theory + Practice	4-2-0	6
3.	CUTM1457	Mycology & Phytopathology	Theory + Practice	4-2-0	6
4.	CUTM1458	Archegoniate	Theory + Practice	4-2-0	6
5.	CUTM1459	Anatomy of Angiosperms	Theory + Practice	4-2-0	6
6.	CUTM1460	Economic Botany	Theory + Practice	4-2-0	6
7.	CUTM1461	Basics of Genetics	Theory + Practice	4-2-0	6
8.	CUTM1462	Molecular Biology	Theory + Practice	4-2-0	6
9.	CUTM1463	Plant Ecology and Phytogeography	Theory + Practice	4-2-0	6
10.	CUTM1464	Plant Systematics	Theory + Practice	4-2-0	6
11.	CUTM1465	Reproductive Biology of Angiosperm	Theory + Practice	4-2-0	6
12.	CUTM1466	Plant Physiology	Theory + Practice	4-2-0	6
13.	CUTM1467	Plant Metabolism	Theory + Practice	4-2-0	6
14.	CUTM1468	Plant Biotechnology	Theory + Practice	4-2-0	6
	Total				**84**

M.Sc. Core Courses (CC)

Sl. No.	Code	Subject Name	T-P-P	Credits
1.	CUTM1416	Pharmcognosy and phytochemistry	3-1-0	04
2.	CUTM1427	Herbal Cosmetic Technology	3-0-1	04
3.	CUTM 1428	Plant Physiology and Metabolism	3-1-0	04
4.	CUTM 1429	Good Manufacturing Practices-Herbal Industry	3-1-0	04
5.	CUTM 1430	Developmental Biology and Phytotomy	3-1-0	04
6.	CUTM 1431	Systematics and Diversity of Plants	3-1-0	04
7.	CUTM 1432	Advanced Separation Technologies and Downstream Processing	2-2-0	04
8.	CUTM 1433	Biochemistry and Enzyme Technology	3-1-0	04
9.	CUTM 1434	Advances In Plant Ecology	3-1-0	04
10.	CUTM 1435	Computational Biology	3-1-0	04
11.	CUTM 1436	Microbiology	3-1-0	04
12.	CUTM 1437	Cell and Molecular Biology	3-1-0	04
13.	CUTM 1438	Bioanalytical Techniques	3-1-0	04
14.	CUTM 1439	Plant Biotechnology	3-1-0	04
15.	CUTM 1440	Plant Breeding and Genetics	3-1-0	04
16.	CUTM 1441	Plant Genomics	3-1-0	**64**
Basket II (DomainCourses)				**32**
Total				**96**

Annexure II

Domain Courses offered by the University in 2020-21

	Group A: Agriculture/ Agri Engineering/Phyto pharma/ Dairy tech/ fisheries/ biological sciences			
	Group B: All other engineering/physical and mathematical science/vocational or skills			
	Group C: Pharmacy and allied Health			
	Group D: Management & media and communication			
Sl. No.	**Name of the Domain**	**Credit**	**Category**	**Year of introduction**
1	Advance Video Processing, Computer Vision and Machine Learning	30	A B/D	2020
2	Aerial Survey and Remote Sensing Applications	18	A/B	2020
3	Agri Business Management	23	A/B/D	2020
4	Architectural and Structural Design	20	A/B	2020
5	Business Analytics	21	A/B/D	2020
6	Composite Design and Manufacturing	24	A/B	2020
7	Computational Fluid Dynamics	20	A/B	2020
8	Commodity and Food Storage	29	A/B/D	2020
9	Gaming and Immersive Learning (AR & VR)	20	A/B/D	2020
10	Genetic Engineering & Genomics	29	A	2020
11	Go-To-Market	22	A/B/D	2020
12	Health Care Assistancy	25	A/B	2020
13	Intensive Aquaculture	29	A	2020
15	Nutraceuticals	29	A/C	2020
16	Organic Farming	29	A	2020
17	Protected Horticulture	22	A/B	2020
18	Renewable Energy Applications	29	A/B	2020
19	Seed Production using Manual and Molecular Methods	29	A	2020
20	Smart Agriculture	28	A/B	2020
21	Smart Farm Machinery	28	A/B	2020
22	Soil and Water Conservation through Watershed	29	A/C	2020

Annexure III

Skill Courses offered by the University in 2020-21

Sl. No.	Course Title	Credit
1	Introduction to Quantum Computing	4
2	Organic Farming	4
3	Mushroom Farming	4
4	Hydroponics Technology	4
5	Poultry Farming	4
6	Dairy Farming	4
7	Vermicomposting Farming	4
8	Transformer Manufacturing, Repairing and Maintenance	4
9	Electrical Installation	4
10	Repair and Maintenance of Home Appliances	4
11	Refrigeration and air conditioning	4
12	Super critical Co2 plant operation	4
13	Business Plan Preparation	4
14	Composite fabrication practice	4
15	Powder coating practice	
16	Farm appliances operation	4
17	Bio fertilisers preparation	4
18	PCB designing & fabrication	4
19	Introduction to Block Chain Technology	4
20	Introduction to Nutraceuticals	4
21	Introduction to NLP	4
22	Introduction to Computational Biology	4
23	Product Life Cycle Management through Gate process	4
24	New material development with Biovia	4
25	Spectral image processing using Python	4
26	Satellite data processing	4
27	Working with Graphene and carbon fibre	4
28	Adobe Tools and Illustrations	4
29	Digital Painting	4
30	Computer Installation and Maintenance	4

Value added Courses offered by the University in 2020-21

Sl. No.	List of Courses	Duration of course
1	Natural Resource Management	30 Hours
2	Research Methodology and IPR	30 Hours
3	Urban Gardens using Hydroponics	30 Hours
4	Introduction to Python	30 Hours
5	MATLAB	30 Hours
6	Waste to Wealth	30 Hours
7	Technical Writing	30 Hours
8	Organic Farming	30 Hours
9	Disaster Management	30 Hours
10	Ethical Hacking	30 Hours
11	Web Development	30 Hours
12	Food & Nutrition	30 Hours
13	Clinical Practice	30 Hours
14	Innovation Management	30 Hours
15	Financial Literacy	30 Hours
16	Yoga and Meditation	30 Hours
17	Steps for Career Plan	30 Hours
18	MS Excel Basics	30 Hours
19	Quality Analysis	30 Hours
20	Ethical Writing Practice	30 Hours
21	Ansys	30 Hours
22	Video Making for Youtubers	30 Hours

CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Applied Sciences

Department of Botany

Time: 2.30 p.m. **Date: 11.07.2020**

Virtual Mode

Board of Studies Meeting

Attendance Sheet

Sl. No.	Name of the BoS Member(Internal Faculty and External Resource)	Designation	Signature
1.	Dr Sangram Lenka (External expert)	TERI-Deakin Nano-biotechnology Centre, Haryana	Attended Online
2.	Dr Sabuj Sahoo (External expert)	Associate Professor and Deputy Registrar, Department of Biotechnology, Utkal University, BBSR	Attended Online
3.	Prof. Dipankar Bhattacharyay (Member)	Dean, SoAS, Centurion University of Technology and Management	Attended Online
4.	Prof. Mohammed Siddique (Member)	Associate Dean- SoAS, Centurion University of Technology and Management	Attended Online
5.	Dr. Rukmini Mishra (Member)	Head , Department of Botany, CUTM,BBSR.	Attended Online

Dean, Academics

Dean - Academic
Centurion University of Technology & Management
Bhubaneswar, Khurda, Odisha-752050

CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Applied Sciences

Department of Zoology

Date: 11. 07.2020

MINUTES OF BOARD OF STUDIES MEETING held on 11.07.2020

Virtual Mode

Time: 2:30 pm.

The Board of Studies (BoS) meeting of Department of Zoology was held on **11th July 2020** at 2:30 p.m. in online mode due to ongoing Covid-19 Pandemic. The following members were present:

1. Dr. Siba Prasad Parida, HoD, Dept. of Zoology, SoAS, CUTM, Bhubaneswar
2. Dr. Sabuj Sahoo, Dept. of Biotechnology, Utkal University, Bhubaneswar
3. Dr. Mohammad Siddique, Associate Dean, Centurion University of Technology and Management

The Chairperson welcomed all members of the Board and briefly outlined the purpose of the meeting. Thereafter, the Head of the Department of Zoology presented the achievements and improvements of the department in the areas of academics, research and infrastructure.

The following agenda items were taken up subsequently:

Agenda 1: **The minutes of the last meeting of the BoS held on 30th July 2019 were confirmed.**

Agenda 2: **Inclusion of new courses in the curriculum of B.Sc. and M.Sc. Zoology (Hons.) syllabus**

- The HoD, of dept. of Zoology gave a presentation on the feedback received on curriculum outlining the suggestions made by the various stakeholders. Based on this, the Board accepted and approved a few suggestions for the courses and programme to be implemented from the Academic Year 2019-20.
- The syllabus of B. Sc. Zoology (Hons) (CBCS) pattern was revised with new codes and prepared as per UGC guidelines. New courses were introduced in M. Sc. Zoology syllabus and approved by the board. Emphasis was given on course related to fish culture and management in the syllabus of M.Sc. Zoology programme for their overall improvement and well-being were approved by the Board members. **(Annexure I)**

Agenda 3: **Discussion and incorporation of new Domain courses by the University**

- Inclusion of new Domain courses by the University for both B.Sc. Zoology (Hons.) and M.Sc. Zoology programme for their overall improvement and well-being were approved by the Board members. **(Annexure-II)**

Agenda 4: **Discussion and incorporation of new Skills courses by the University**

- Inclusion of new skill courses offered by the University for both B.Sc. Zoology (Hons.) and M.Sc. Zoology programme and approved by the Board members. **(Annexure-III)**

The HoD, Department of extended sincere thanks to all members of the Board.

The meeting ended with a vote of thanks to the Chair.

HoD, Zoology

H O.D
Department of Zoology
School of Applied Sciences
CENTURION UNIVERSITY OF TECHNOLOGY & MANAGEMENT
Bhubaneswar Odisha

Dean, SoAS

DEAN
School of Applied Sciences
CENTURION UNIVERSITY OF TECHNOLOGY & MANAGEMENT
Bhubaneswar,Odisha

Dean, Academics

Dean - Academic
Centurion University of Technology & Management
Bhubaneswar, Khurda, Odisha-752050

Annexure I

B.Sc. Core Courses (CC)

Sl. No.	Code	Subject Name	Type of course	T-P-Pr (Credit)	Credits
1.	CUTM1497	Non-Chordates I	Theory + Practice	3-1-2	6
2.	CUTM1499	Principles of Ecology	Theory + Practice	3-1-2	6
3.	CUTM1498	Non-Chordates II	Theory + Practice	3-1-2	6
4.	CUTM1500	Cell Biology	Theory + Practice	3-1-2	6
5.	CUTM1501	Diversity of Chordates	Theory + Practice	3-1-2	6
6.	CUTM1502	Physiology: Controlling and Coordinating Systems	Theory + Practice	3-1-2	6
7.	CUTM1503	Fundamentals of Biochemistry	Theory + Practice	3-1-2	6
8.	CUTM1504	Comparative Anatomy of Vertebrates	Theory + Practice	3-1-2	6
9.	CUTM1505	Physiology: Life Sustaining Systems	Theory + Practice	3-1-2	6
10.	CUTM1506	Biochemistry of Metabolic Processes	Theory + Practice	3-1-2	6
11.	CUTM1507	Molecular Biology	Theory + Practice	3-1-2	6
12.	CUTM1510	Evolutionary Biology	Theory + Practice	3-1-2	6
13.	CUTM1509	Developmental Biology	Theory + Practice	3-1-2	6
14.	CUTM1508	Principle of Genetics	Theory + Practice	3-1-2	6
	Total				**84**

M. Sc. Zoology Syllabus (1st to 4th semester)
Course Structure-2020

Sl. No.	Code	Subject Name	T-T-P	Credit
1.	CUTM1437	Cell and Molecular Biology	3-1-0	4
2.	CUTM1443	Water and Soil Quality Management in Aquaculture	3-1-0	4
3.	CUTM1437	Genetics and Epigenetics	3-1-0	4
4.	CUTM1446	Anatomy and Biology of Fish and shellfish	3-1-0	4
5.	CUTM1451	Bioanalytical Techniques	3-1-0	4
6.	CUTM1451	Immunology and Cancer Biology	3-1-0	4
7.	CUTM1436	Microbiology	3-1-0	4
8.	CUTM1448	Fish Processing and Value Addition	3-1-0	4
9.	CUTM1452	Animal Biotechnology	3-1-0	4
10.	CUTM1452	Animal Breeding	3-1-0	4
11.	CUTM1450	Animal Physiology and Biochemistry	3-1-0	4
12.	CUTM1444	Fish and Shell fish Nutrition	3-1-0	4
13.	CUTM1442	Advanced Aquaculture	3-1-0	4
14.	CUTM1447	Coastal Aquaculture	3-1-0	4
15.	CUTM1445	Fish and Shellfish Health Management	3-1-0	4
16.	CUTM1449	Ornamental Aquaculture	3-1-0	4
Basket II (Domain Courses)				**32**
Total				**96**

Annexure II

Domain Courses offered by the University in 2020-21

	Group A: Agriculture/ Agri Engineering/Phyto pharma/ Dairy tech/ fisheries/ biological sciences
	Group B: All other engineering/physical and mathematical science/yocational or skills
	Group C: Pharmacy and allied Health
	Group D: Management & media and communication

Sl. No.	Name of the Domain	Credit	Category	Year of introduction
1	Advance Video Processing, Computer Vision and Machine Learning	30	A/B/D	2020
2	Aerial Survey and Remote Sensing Applications	18	A/B	2020
3	Agri Business Management	23	A/B/D	2020
4	Architectural and Structural Design	20	A/B	2020
5	Business Analytics	21	A/B/D	2020
6	Composite Design and Manufacturing	24	A/B	2020
7	Computational Fluid Dynamics	20	A/B	2020
8	Commodity and Food Storage	29	A/B/D	2020
9	Gaming and Immersive Learning (AR & VR)	20	A/B/D	2020
10	Genetic Engineering & Genomics	29	A	2020
11	Go-To-Market	22	A/B/D	2020
12	Health Care Assistancy	25	A/B	2020
13	Intensive Aquaculture	29	A	2020
15	Nutraceuticals	29	A/C	2020
16	Organic Farming	29	A	2020
17	Protected Horticulture	22	A/B	2020
18	Renewable Energy Applications	29	A/B	2020
19	Seed Production using Manual and Molecular Methods	29	A	2020
20	Smart Agriculture	28	A/B	2020
21	Smart Farm Machinery	28	A/B	2020
22	Soil and Water Conservation through Watershed	29	A/C	2020

Annexure III

Skill Courses offered by the University in 2020-21

Sl. No.	Course Title	Credit
1	Introduction to Quantum Computing	4
2	Organic Farming	4
3	Mushroom Farming	4
4	Hydroponics Technology	4
5	Poultry Farming	4
6	Dairy Farming	4
7	Vermicomposting Farming	4
8	Transformer Manufacturing, Repairing and Maintenance	4
9	Electrical Installation	4
10	Repair and Maintenance of Home Appliances	4
11	Refrigeration and air conditioning	4
12	Super critical Co2 plant operation	4
13	Business Plan Preparation	4
14	Composite fabrication practice	4
15	Powder coating practice	
16	Farm appliances operation	4
17	Bio fertilisers preparation	4
18	PCB designing & fabrication	4
19	Introduction to Block Chain Technology	4
20	Introduction to Nutraceuticals	4
21	Introduction to NLP	4
22	Introduction to Computational Biology	4
23	Product Life Cycle Management through Gate process	4
24	New material development with Biovia	4
25	Spectral image processing using Python	4
26	Satellite data processing	4
27	Working with Graphene and carbon fibre	4
28	Adobe Tools and Illustrations	4
29	Digital Painting	4
30	Computer Installation and Maintenance	4

Value added Courses offered by the University in 2020-21

Sl. No.	List of Courses	Duration of course
1	Natural Resource Management	30 Hours
2	Research Methodology and IPR	30 Hours
3	Urban Gardens using Hydroponics	30 Hours
4	Introduction to Python	30 Hours
5	MATLAB	30 Hours
6	Waste to Wealth	30 Hours
7	Technical Writing	30 Hours
8	Organic Farming	30 Hours
9	Disaster Management	30 Hours
10	Ethical Hacking	30 Hours
11	Web Development	30 Hours
12	Food & Nutrition	30 Hours
13	Clinical Practice	30 Hours
14	Innovation Management	30 Hours
15	Financial Literacy	30 Hours
16	Yoga and Meditation	30 Hours
17	Steps for Career Plan	30 Hours
18	MS Excel Basics	30 Hours
19	Quality Analysis	30 Hours
20	Ethical Writing Practice	30 Hours
21	Ansys	30 Hours
22	Video Making for Youtubers	30 Hours

CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Applied Sciences

Department of Zoology

Time: 11.00 a.m. **Date: 11.07.2020**

Virtual Mode

Board of Studies Meeting

Attendance Sheet

Sl. No.	Name	Organization	Signature
1.	Dr. Sabuj Sahoo	Utkal University	Attended Online
2.	Dr. Sangram Kumar Lenka	TERI – Deakin Nanobiotechnology Centre	Attended Online
3.	Dr. E.M. Chhanda Prajnadarsini	ICAR – CMFRI, Chennai	Attended Online
4.	Prof. Dipankar Bhattacharyay	Dean – SoAS, Centurion University of Technology and Management	Attended Online
5.	Prof. Mohammed Siddique	Associate Dean- SoAS, Centurion University of Technology and Management	Attended Online
6.	Prof. Yashaswi Nayak	HoD- Dept of Zoology- SoAS, Centurion University of Technology and Management	Attended Online

Dean, Academics

Dean - Academic
Centurion University of Technology & Management
Bhubaneswar, Khurda, Odisha-752050

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CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Applied Sciences

Department of BCA

Date: 12/07/2020

MINUTES OF BOARD OF STUDIES MEETING held on 12/07/2020

Virtual Mode

Time: 10.00 a.m.

The Board of Studies (BoS) meeting of Department of BCA was held on 11/07/2020 at 11 a.m. in the Board Room, CUTM Bhubaneswar. The following are the members:

1	Dr. Dipankar Bhattacharya	Dean, SoAS
2	Dr. A.M Mohanty	PRO VC,CUTM
3	Dr. P.K. Mohanty	Dean Academic
4	Dr. Sujata Chakraborty	HoD, Computer Science
5	Dr.J.K.Meher	HoD, BCA
6	Ms. Asharani Dalai	Asst. Professor, BCA
7	Mr. Sanjib Naik	Asst. Professor, BCA
8	Mrs. Prativa Satpathy	Asst. Professor, BCA
9	Mr. Gopinath Sahu	Final year student

The Chairperson welcomed all members of the Board and briefly outlined the purpose of the meeting. Thereafter, the Head of the Department of BCA presented the achievements and improvements of the department in the areas of academics, research, consultancy and infrastructure.

The following agenda items were taken up subsequently:

Agenda 1: **The minutes of the last meeting of the BoS held on 22/06/2019 were confirmed.**

Agenda 2: **Credits distributions, courses and baskets layouts, and new inclusions of Smart Basket (Basket-III) Interdisciplinary domains.**

The HoD, BCA gave a presentation on the feedback received on curriculum outlining the suggestions made by the various stakeholders. Based on this , the Board accepted and approved a few suggestions for course revision to be implemented from the Academic Year 2020-21.

- The strategy of keeping at least twenty percent online delivery of courses in the curriculum was appreciated by everyone.
- It was suggested to have more MOUs with academia and industry for effective rollout.
- Everyone appreciated having the "Job Readiness" course of Basket-II as compulsory across branches and also the delivery plan of the course.
- List of new courses added in *(Annexure A.)*

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- The briefing comprised of credits distributions, courses and baskets layouts, and new inclusions such as the Smart Basket (Basket-III) Interdisciplinary domains etc.
- The domain course should be taught in practice and project mode.

Agenda 4: **Inclusion of courses on life skills and value addition**

It was suggested that students take up the various courses offered by the University in the areas of life skills and value addition for their overall improvement and well being.The same was agreed upon and approved by the Board members.*(Annexure B)*

The HoD, Department of BCA. extended sincere thanks to all members of the Board.

The meeting ended with a vote of thanks to the Chair.

Dean, SoAS

Dean, Academics

Dean - Academic
Centurion University of Technology & Management
Bhubaneswar, Khurda, Odisha-752050

HoD, BCA

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Annexure-A

List of new courses added

Sl. No	Course Title	Type(Skill/Employability/ Entrepreneurship/Core)	Credit
1	Computer Aided Drafting	Skill and Employability	3
2	Product Design and Development	Skill and Employability	2
3	Reverse Engineering and Rapid Prototype	Skill and Employability	4
4	Product Life Cycle Management	Skill and Employability	2
5	Manufacturing Process-process planning and Heat Treatment	Skill and Employability	3
6	Material in product design and development	Skill and Employability	2
7	Computer Aided Engineering	Skill and Employability	3
8	Quality Assurance	Skill and Employability	2
9	Applied Ergonomics	Skill and Employability	2
10	Computer Aided Manufacturing	Skill and Employability	2
11	CNC Programming & CNC Machining	Skill and Employability	2
12	Design of Tools, Jigs and Fixtures	Skill and Employability	3
13	Advance Metrology	Skill and Employability	2
14	Thermodynamics	Skill and Employability	3
15	Fluid Mechanics with Finite Volume Method	Skill and Employability	3
16	Hydraulic Machinery	Skill and Employability	2
17	Theory of Machines	Skill and Employability	3
18	Heat Transfer with FDM/FVM	Skill and Employability	3
19	Theories of Failure Using Finite Element Analysis	Skill and Employability	4
20	Optimization Techniques	Skill and Employability	2
21	Programming in Java (Same as Java Technologies)	Skill and Employability	3
22	Database Management Systems	Skill and Employability	3
23	Programming in Python	Core	6
24	OOPs with C ++ Programming	Core	6
25	Database Management Systems	Core	6
26	Data Structures using C++	Core	6
27	Java Technologies	Core	6

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Annexure-B

List of Skill courses

Sl. No	Course Title	Credit	(T+P+P)
1	Introduction to Quantum Computing	4	0+3+1
2	Organic Farming	4	0+3+1
3	Mushroom Farming	4	0+3+1
4	Hydroponics Technology	4	0+3+1
5	Poultry Farming	4	0+3+1
6	Dairy Farming	4	0+3+1
7	Vermi composting Farming	4	0+3+1
8	Transformer Manufacturing, Repairing and Maintenance	4	0+3+1
9	Electrical Installation	4	0+3+1
10	Repair and Maintenance of Home Appliances	4	0+3+1
11	Refrigeration and air conditioning	4	0+3+1
12	Super critical Co2 plant operation	4	0+3+1
13	Business Plan Preparation	4	0+3+1
14	Composite fabrication practice	4	0+3+1
15	Powder coating practice	4	0+3+1
16	Farm appliances operation	4	0+3+1
17	Bio fertilizers preparation	4	0+3+1
18	PCB designing & fabrication	4	0+3+1
19	Introduction to Block Chain Technology	4	0+3+1
20	Introduction to Nutraceuticals	4	0+3+1
21	Introduction to NLP	4	0+3+1
22	Introduction to Computational Biology	4	0+3+1
23	Product Life Cycle Management through Gate process	4	0+3+1
24	New material development with Biovia	4	0+3+1
25	Spectral image processing using Python	4	0+3+1
26	Satellite data processing	4	0+3+1
27	Working with Graphene and carbon fibre	4	0+3+1
28	Adobe Tools and Illustrations	4	0+3+1
29	Digital Painting	4	0+3+1
30	Computer Installation and Maintenance	4	0+3+1

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List of value added courses

Sl. No	Course Title	Hrs. of input
1	Natural Resource Management	30
2	Research Methodology and IPR	30
3	Urban Gardens using Hydroponics	30
4	Introduction to Python	30
5	MATLAB	30
6	Waste to Wealth	30
7	Technical Writing	30
8	Organic Farming	30
9	Disaster Management	30
10	Ethical Hacking	30
11	Web Development	30
12	Food & Nutrition	30
13	Clinical Practice	30
14	Innovation Management	30
15	Financial Literacy	30
16	Yoga and Meditation	30
17	Steps for Career Plan	30
18	MS Excel Basics	30
19	Quality Analysis	30
20	Ethical Writing Practice	30
21	Ansys	30
22	Video Making for Youtubers	30

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CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Applied Sciences

Department of BCA

Time: 10.00 a.m. **Date: 12/07/2020**

Venue: Board Room, CUTM, Bhubaneswar

Board of Studies Meeting
Attendance Sheet

Sl. No.	Name of the BOS Member(Internal Faculty and External Resource)	Designation	Signature
10	Dr. Sujata Chakraborty	HoD, Computer Science	Attended Online
11	Dr. A.M Mohanty	PRO VC,CUTM	Attended Online
12	Dr. P.K. Mohanty	Dean Academic	Attended Online
13	Dr. Dipankar Bhattacharya	Dean, SoAS	Attended Online
14	Dr.J.K.Meher	HoD, BCA	Attended Online
15	Ms. Asharani Dalai	Asst. Professor, BCA	Attended Online
16	Mr. Sanjib Naik	Asst. Professor, BCA	Attended Online
17	Mrs. Prativa Satpathy	Asst. Professor, BCA	Attended Online
18	Mr. Gopinath Sahu	Final year student	Attended Online

Dean, SoAS

Dean, Academics

Dean - Academic
Centurion University of Technology & Management
Bhubaneswar, Khurda, Odisha-752050

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CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Applied Sciences

Department of Physics

Date: 11.07.2020

MINUTES OF BOARD OF STUDIES MEETING held on 11.07.2020

Venue: Conducted in online mode

Time: 11.00 a.m.

The Board of Studies (BoS) meeting of Department of Physics was conducted in online mode on **11.07.2020** at 11 a.m. The following are the board members:

1. Dr. P. K. Jain, Scientist -G, Center Head for Carbon materials division of ARCI, HYD, External expert
2. Dr. J K Rath, Director, Mechem Private Ltd, Bhubaneswar, External expert
3. Dr. Debadhyana Behera, Dept. of Physics, Ravenshaw University, External expert.
4. Prof. Dipankar Bhattacharyay, Dean SoAS.
5. Prof. Mohammed Siddique, Associate Dean- SoAS
6. Dr. Tapan Dash, HoD, Department of Physics, CUTM BBSR
7. Dr. Subrata Sarangi, Professor, Dept of Physics, UCTM, BBSR
8. Ms. Sushree Subhadarsi Bhole, MSc Alumni
9. Few M.Sc and B.Sc students of CUTM.

At the outset, Dean SoAS welcomed the invited (external) experts from industry and academia and addressed all the participants. HE outlined the broad contours of academic developments with respect to emerging research and skill integration areas and pointed out how the University has aligned its curricula keeping in view these developments. He also outlined how the University examination system is being reformed aligning it with the current trends and evolving methods of pedagogy and academic delivery. The steps being taken to execute all academic programs of the University in Covid-19 conditions were also pointed out by him.

The following agenda items were taken up subsequently:

Agenda 1: **The minutes of the last meeting of the BoS held on 30.06.2019 were confirmed.**

Agenda 2: **Revision of Curriculum for the programme B.Sc. Physics and M.Sc. Physics.**

- Based on the feedback received on curriculum outlining the suggestions made by the various stakeholders, it was suggested that the revised curriculum for B.Sc. and M.Sc. programmes is to be implemented from the academic year 2020-21.

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- The detailed course outline and Syllabus of Department of Physics was presented by Prof. Mohammed Siddique, Associate Dean, SoAS.
- The external experts (industrial and academic) appreciated the general approach of the University dividing the curriculum into Core, Domain and Skill Courses and noted with satisfaction, the syllabi being upto-date and with due stress on practice and skill.
- They also noted with satisfaction that the syllabi of all BSc core courses was aligned to the UGC prescribed curriculum. It was also suggested that a BSc level, the foundation (or core) courses with basic concepts should be taught well including appropriate proportions of theory, practice, projects. Advanced topics like Graphene, Nano-materials, etc may be included as electives and at introductory level only.
- The experts also appreciated the advanced and focused nature of the MSc Core courses. Inclusion of advanced Materials Science topics such as Graphene, Composite Materials etc. was highly appreciated. Inclusion of Internship components into the MSc curriculum was also strongly suggested.
- The Board of study members recommended and approved the syllabus for both B.Sc. and M.Sc. programs *(Annexure-1)* to be taught in the upcoming semesters.

Agenda 3: : **Regarding domain courses**

- It was decided that students will take the domain courses offered by the University. Out of the different category of Domain courses Group B category is for Physics students. *(Annexure-2)*

Agenda 4: : **Regarding skills and value added courses**

It was suggested that students will take the skill and value added courses offered by the University. The same was approved by the Board members. *(Annexure-3 &4)*

The HoD, Department of Physics. extended his sincere thanks to all members of the Board.

The meeting was adjourned with Vote of Thanks by the Registrar Prof. Anita Patra. She thanked all the external members present in the meeting for sparing their valuable time from their busy schedule and make it successful.

Dean, Academics

Dean - Academic
Centurion University of Technology & Management
Bhubaneswar, Khurda, Odisha-752050

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Annexure-1

List of new courses approved

B.Sc. Physics

Sl. No	Course Title	Type(Skill/Employability /Entrepreneurship	Credit
1	Mathematical Physics-I	Skill	6
2	Mechanics	Skill	6
3	Thermal Physics	Employability & Skill	6
4	Waves and Optics	Employability & Skill	6
5	Mathematical Physics-II	Skill	6
6	Electricity and Magnetism	Employability & Skill	6
7	Analog System and Application	Employability & Skill	6
8	Mathematical Physics-III	Skill	6
9	Elements of Modern Physics	Employability & Skill	6
10	Digital Systems and Applications	Employability & Skill	6
11	Quantum Mechanics and Applications	Employability & Skill	6
12	Solid State Physics	Employability & Skill	6
13	Electromagnetic Theory	Skill	6
14	Statistical Mechanics	Skill	6

M.Sc. Physics

Sl. No	Course Title	Type(Skill/Employability/Entrepreneurship	Credit
1	Energy storage materials	Employability	4
2	Bio and bimimetic nano materials	Employability	4
3	Photovoltaic technology and nanocatalysts	Employability	4
4	Advanced characterization techniques	Skill	4
5	Smart and electronic materials	Skill	4
6	Corrosion and advanced coating application	Employability	4
7	Synthesis and application of nano composites	Skill & Employability	4
8	Material behavior of nanostructures	Skill	4
9	Emerging materials	Employability	4
10	Synthesis routes of nanomaterials	Skill	4
11	Computational materials science	Skill	4
12	Plasma technology	Employability	4
13	Essentials of nanomaterials	Skill	4
14	Advanced quantum mechanics	Skill	4
15	Physics of solids and semiconductors	Skill	4
16	Laser technology	Skill	4

Centurion University

Annexure-2

Domain Courses approved by the University 2020-21.

	Group A: Agriculture/ Agri Engineering/Phyto pharma/ Dairy tech/ fisheries/ biological sciences			
	Group B: All other engineering/physical and mathematical science/vocational or skills			
	Group C: Pharmacy and allied Health			
	Group D: Management & media and communication			
Sl. No.	**Name of the Domain**	**Credit**	**Category**	**Year of introduction**
1	Advance Video Processing, Computer Vision and Machine Learning	30	A/B/D	2020
2	Aerial Survey and Remote Sensing Applications	18	A/B	2020
3	Agri Business Management	23	A/B/D	2020
4	Architectural and Structural Design	20	A/B	2020
5	Business Analytics	21	A/B/D	2020
6	Chip Design and Fabrication using VLSI	18	B	2020
7	Commodity and Food Storage	29	A/B/D	2020
8	Communication Systems	18	B	2020
9	Composite Design and Manufacturing	24	A/B	2020
10	Computational Fluid Dynamics	20	A/B	2020
11	Cyber Security	24	B	2020
12	Dairy Processing and Development	28	A/B	2020
13	Fish Processing Technology	29	A/B	2020
14	Food Processing	29	A/B/D	2020
15	Gaming and Immersive Learning (AR & VR)	20	A/B/D	2020
16	Go-To-Market	22	A/B/D	2020
17	Health Care Assistancy	25	A/B	2020
18	Manufacturing Execution System	18	B	2020
19	Nutraceuticals	29	A/C	2020
20	Protected Horticulture	29	A/B	2020
21	Renewable Energy Applications	22	A/B	2020
22	Smart Agriculture	29	A/B	2020
23	Smart Farm Machinery	28	A/B	2020
24	Soil and Water Conservation through Watershed	28	A/B	2020

Annexure-3

Centurion University

Skill Courses approved by the university in 2020-21.

Sl. No.	Course Title	Credit
1	Introduction to Quantum Computing	4
2	Organic Farming	4
3	Mushroom Farming	4
4	Hydroponics Technology	4
5	Poultry Farming	4
6	Dairy Farming	4
7	Vermicomposting Farming	4
8	Transformer Manufacturing, Repairing and Maintenance	4
9	Electrical Installation	4
10	Repair and Maintenance of Home Appliances	4
11	Refrigeration and air conditioning	4
12	Super critical CO_2 plant operation	4
13	Business Plan Preparation	4
14	Composite fabrication practice	4
15	Powder coating practice	4
16	Farm appliances operation	4
17	Bio fertilizers preparation	4
18	PCB designing & fabrication	4
19	Introduction to Block Chain Technology	4
20	Introduction to Nutraceuticals	4
21	Introduction to NLP	4
22	Introduction to Computational Biology	4
23	Product Life Cycle Management through Gate process	4
24	New material development with Biovia	4
25	Spectral image processing using Python	4
26	Satellite data processing	4
27	Working with Graphene and carbon fibre	4
28	Adobe Tools and Illustrations	4
29	Digital Painting	4
30	Computer Installation and Maintenance	4

Annexure-4

Value Added courses offered by the university in 2020-21.

	Course Title	Credit
1	Natural Resource Management	30 Hours
2	Research Methodology and IPR	30 Hours
3	Urban Gardens using Hydroponics	30 Hours

4	Introduction to Python	30 Hours
5	MATLAB	30 Hours
6	Waste to Wealth	30 Hours
7	Technical Writing	30 Hours
8	Organic Farming	30 Hours
9	Disaster Management	30 Hours
10	Ethical Hacking	30 Hours
11	Web Development	30 Hours
12	Food & Nutrition	30 Hours
13	Clinical Practice	30 Hours
14	Innovation Management	30 Hours
15	Financial Literacy	30 Hours
16	Yoga and Meditation	30 Hours
17	Steps for Career Plan	30 Hours
18	MS Excel Basics	30 Hours
19	Quality Analysis	30 Hours
20	Ethical Writing Practice	30 Hours
21	Ansys	30 Hours
22	Video Making for Youtubers	30 Hours

CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Applied Sciences

Department of Physics

Time: 11.00 a.m. **Date: 11.07.2020**

Venue: Conducted in online mode

Board of Studies Meeting

Attendance Sheet

Sl. No	**Name of the Member**	Designation	Signature

Centurion
University

1	Dr. P. K. Jain	Scientist -G, Center Head for Carbon materials division of ARCI, HYD	Attended Online
2	Dr. J K Rath	Director, Mechem Private Ltd, Bhubaneswar	Attended Online
3	Dr. Debadhyana Behera	Dept. of Physics, Revenshaw University	Attended Online
4	Prof. Dipankar Bhattacharyay	Dean – SoAS, Centurion University of Technology and Management	Attended Online
5	Prof. Mohammed Siddique	Associate Dean- SoAS, Centurion University of Technology and Management	Attended Online
6	Dr. Tapan Dash	HoD- Dept of Physics-SoAS,Centurion University of Technology and Management	Attended Online
7	Dr. Subrata Sarangi	Professor, Dept of Physics-SoAS,Centurion University of Technology and Management	Attended Online
8	Sushree Subhadarsi Bhole	MSc Alumnus, Centurion University of Technology and Management	Attended Online
9	Sarita Nayak	MSc Alumnus, Centurion University of Technology and Management	Attended Online
10	Debabrata Mishra	MSc student (Continuing) Centurion University of Technology and Management	Attended Online
11	Nishikanta Mishra	MSc student (Continuing) Centurion University of Technology and Management	Attended Online
12	BapuramVenkateswar Samantaray	MSc student (Continuing) Centurion University of Technology and Management	Attended Online
13	Sulipta Das	MSc Alumnus, Centurion University of Technology and Management	Attended Online
14	Sanjay Kumar Harichandan	MSc Alumnus, Centurion University of Technology and Management	Attended Online
15	Priyabadini Biswal	MSc Alumnus, Centurion University of Technology and Management	Attended Online
16	Alisha Dalai	MSc Alumnus, Centurion University of Technology and Management	Attended Online
17	Monalisa B D Subham	BSc Alumnus, Centurion University of Technology and Management	Attended Online
18	Susmita Rani Pradhan	BSc Student (Continuing) Centurion University of Technology and Management	Attended Online
19	Jyotir Jagadananda Sahoo	BSc student (Continuing) Centurion University of Technology and Management	Attended Online
20	Sadia Masih	BSc Alumnus, Centurion University of Technology and Management	Attended Online
21	Saumya Sarthak Nayak	BSc Alumnus, Centurion University of Technology and Management	Attended Online
22	Ayush Kumar Sahu	BSc student (Continuing) Centurion University of Technology and Management	Attended Online
23	Soumya Sonali kar	BSc student (Continuing)	Attended Online

Centurion
University

		Centurion University of Technology and Management	
24	Amit Kumar Pradhan	BSc student (Continuing) Centurion University of Technology and Management	Attended Online

Dean, Academics

Dean - Academic
Centurion University of Technology & Management
Bhubaneswar, Khurda, Odisha-752050

Centurion
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CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Applied Sciences
Department of Chemistry

Date: 11.07.2020

MINUTES OF BOARD OF STUDIES MEETING held on 11.07.2020

Venue: Online mode through Zoom Link

Time: 2.30 p.m.

The Board of Studies meeting was conducted in online mode due to ongoing Covid-19 Pandemic on 11th July 2020 at 2.30 pm. The following members were present:

1. Dr. Kishore Sarkar(Subject Expert, External Member)
2. Dr. J. K. Rath(Industry Personel, External Member)
3. Prof. Dipankar Bhattacharyay (Dean,SoAS)CUTM,BBSR Campus
4. Prof. Mohammed Siddique(Associate Dean), CUTM,BBSR Campus
5. Dr.Susanta Kumar Biswal
6. Dr.Atia Arzoo
7. Sonali Sasmal
8. Supriya Rath
9. Tanvi Tanisha Panda
10. Piyali Deb
11. Renukanta Naik
12. Satyajit Pradhan
13. Somia Rani Patel

The Chairperson welcomed all members of the Board and briefly outlined the purpose of the meeting. Thereafter, the Head of the Department of Chemistry presented the achievements and improvements of the department in the areas of academics, research, consultancy and infrastructure.

The following agenda items were taken up subsequently:

Agenda 1: **The minutes of the last meeting of the BoS held on 22.11.2019 were confirmed.**

Agenda 2: **Total** Revision **in the Curriculum of** B.Sc (Hons.),**M.Sc program,** domain syllabus for B.Sc and M.Sc .

- At the outset Dean, SoAS addressed the participants and welcomed sharing key academic developments with respect to emerging research areas , online classes and examination reforms.
- The detailed course outline and Syllabus of Department of Chemistry was presented by Associate Dean, Prof. Mohammed Siddique.
- The HoD, Chemistry gave a presentation on the feedback received on curriculum outlining the suggestions made by the various stakeholders. Based on this , the Board accepted and approved a few suggestions for course revision to be implemented from the Academic Year 2019-20.

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- With reference to the suggestions of the members present it was decided that more emphasis should be given to practice classes so that students will have more practical based approach in the proposed practices and research review can also be included in the practice sessions.
- The reference books and textbooks to be added that are more specific and advanced keeping an eye on the course curriculum, which would be suitable for the learners.
- Making students skilled with tomorrows research challenges it was decided to include at least two to three original research papers as reference.
- Flip classes and Seminars should be conducted to encourage students to present original research papers to discuss smart experiments.
- Beyond Academics Students should be encouraged to visit various research centers, industries to have a practical perspective towards the subject.
- The members went through the scheme and syllabus for new M. Sc. courses and commented to be well structured and sound enough to enrich students in acquiring skills required by students to pursue higher research, self employment and setting up of start ups.
- The Board of Study members recommended and approved the syllabus for both B. Sc.(Annexure-I) and M. Sc.(Annexure-II) Programs and domain subjects(Annexure-III) for both programs mentioned here to be taught in upcoming semesters.

*Agenda 3:***Inclusion of courses on life skills and value addition**

It was suggested that students take up the various courses offered by the University in the areas of life skills(Annexure-IV) and value addition (Annexure-V)for their overall improvement and well being.The same was agreed upon and approved by the Board members.

- The meeting ended with a Vote of Thanks by the Dean, SoAS.

Abia Areen 11/07/2020

HoD,Chemistry

H.O.D
Department of Chemistry
School of Applied Sciences
CENTURION UNIVERSITY OF TECHNOLOGY & MANAGEMENT
Bhubaneswar, Odisha

Dean, Academics
Dean - Academic
Centurion University of Technology & Management
Bhubaneswar, Khurda, Odisha-752050

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Annexure-I

Sl. No	Course Title	Type(Skill/Employability/Entrepreneurship	Credit
	B.Sc Program		
1	Atomic Structure and Chemical bonding-I	Employabilityand Skill	6
2	States of matter and ionic equilibrium	Employability and Skill	6
3	Basics and Hydrocarbons	Employability and Skill	6
4	Chemical Thermodynamics and its application	Employability and Skill	6
5	S- and P-block elements	Employability and Skill	6
6	Oxygen Containing Functional Groups	Employability and Skill	6
7	Phase Equilibria& Chemical Kinetics	Employability and Skill	6
8	Coordination Chemistry	Employability and Skill	6
9	Heterocyclic Chemistry	Employability and Skill	6
10	Electrochemistry	Employability and Skill	6
11	Bio-molecules	Employability and Skill	6
12	Quantum Chemistry & Spectroscopy	Employability and Skill	6
13	Organometallic chemistry	Employability and Skill	6
14	Spectroscopy	Employability and Skill	6

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Annexure-II

M.Sc Program			
1	Advanced characterization techniques	Skill	4
2	Synthesis and application of nano composites	Employability and Skill	4
3	Synthesis routes of nanomaterials	Employability and Skill	4
4	Computational materials science	Employability and Skill	4
5	Industrial chemicals	Employability and Skill	4
6	Pharmcognosy and phytochemistry	Employability	4
7	Polymer chemistry	Employability and Skill	4
8	Packaging	Employability and Skill	4
9	Industrial pollution and its waste management	Employability and Skill	4
10	Toxicology	Employability and Skill	4
11	Biopolymer and hydrogel	Employability and Skill	4
12	Nano-pharmaceuticals and biomedical science	Employability and Skill	4
13	Synthetic organic chemistry	Employability and Skill	4
14	Energy storage system	Employability	4
15	Sustainable chemistry	Employability and Skill	4
16	Analytical techniques	Employability and Skill	4

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Annexure-III

Sl.No.	Domain List	Credit	Category	Year of Introduction
1	Advance Video Processing, Computer Vision and Machine Learning	30	A/B/D	2020
2	Aerial Survey and Remote Sensing Applications	18	A/B	2020
3	Agri Business Management	23	A/B/D	2020
4	Architectural and Structural Design	20	A/B	2020
5	Business Analytics	21	A/B/D	2020
6	Chip Design and Fabrication using VLSI	18	B	2020
7	Commodity and Food Storage	29	A/B/D	2020
8	Communication Systems	18	B	2020
9	Composite Design and Manufacturing	24	A/B	2020
10	Computational Fluid Dynamics	20	A/B	2020
11	Cyber Security	24	B	2020
12	Dairy Processing and Development	28	A/B	2020
13	Fish Processing Technology	29	A/B	2020
14	Food Processing	29	A/B/D	2020
15	Gaming and Immersive Learning (AR & VR)	20	A/B/D	2020
16	Genetic Engineering & Genomics	29	A	2020
17	Go-To-Market	22	A/B/D	2020
18	Health Care Assistancy	25	A/B	2020
19	Intensive Aquaculture	29	A	2020
20	Manufacturing Execution System	18	B	2020
21	Nutraceuticals	29	A/C	2020
22	Organic Farming	29	A	2020
23	Protected Horticulture	29	A/B	2020
24	Renewable Energy Applications	22	A/B	2020
25	Seed Production using Manual and Molecular Methods	29	A	2020
26	Smart Agriculture	29	A/B	2020
27	Smart Farm Machinery	28	A/B	2020
28	Soil and Water Conservation through Watershed	28	A/B	2020

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Annexure-IV

List of Skill courses approved by university in the AY 2020-21

Sl.No.	List of Courses	Credit
1	Introduction to Quantum Computing	4
2	Organic Farming	4
3	Mushroom Farming	4
4	Hydroponics Technology	4
5	Poultry Farming	4
6	Dairy Farming	4
7	Vermicomposting Farming	4
8	Transformer Manufacturing, Repairing and Maintenance	4
9	Electrical Installation	4
10	Repair and Maintenance of Home Appliances	4
11	Refrigeration and air conditioning	4
12	Super critical CO2 plant operation	4
13	Business Plan Preparation	4
14	Composite fabrication practice	4
15	Powder coating practice	4
16	Farm appliances operation	4
17	Bio fertilizers preparation	4
18	PCB designing & fabrication	4
19	Introduction to Block Chain Technology	4
20	Introduction to Nutraceuticals	4
21	Introduction to NLP	4
22	Introduction to Computational Biology	4
23	Product Life Cycle Management through Gate process	4
24	New material development with Biovia	4
25	Spectral image processing using Python	4
26	Satellite data processing	4
27	Working with Graphene and carbon fibre	4
28	Adobe Tools and Illustrations	4
29	Digital Painting	4
30	Computer Installation and Maintenance	4

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Annexure-V

List of value added courses approved by university in the AY 2020-21

Sl. No.	List of Courses	Duration of course
1	Natural Resource Management	30 Hours
2	Research Methodology and IPR	30 Hours
3	Urban Gardens using Hydroponics	30 Hours
4	Introduction to Python	30 Hours
5	MATLAB	30 Hours
6	Waste to Wealth	30 Hours
7	Technical Writing	30 Hours
8	Organic Farming	30 Hours
9	Disaster Management	30 Hours
10	Ethical Hacking	30 Hours
11	Web Development	30 Hours
12	Food & Nutrition	30 Hours
13	Clinical Practice	30 Hours
14	Innovation Management	30 Hours
15	Financial Literacy	30 Hours
16	Yoga and Meditation	30 Hours
17	Steps for Career Plan	30 Hours
18	MS Excel Basics	30 Hours
19	Quality Analysis	30 Hours
20	Ethical Writing Practice	30 Hours
21	Ansys	30 Hours
22	Video Making for Youtubers	30 Hours

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CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Applied Sciences

Department of Chemistry

Time: 2.30 pm **Date:** 11.07.2020

Venue: Online mode Through ZOOM link

Board of Studies Meeting

Attendance Sheet

Sl. No.	Name	Designation with Organization	Signature
1.	Dr. Kishore Sarkar	Head of the Department, Gene Therapy and Tissue Engineering Lab, Department of Polymer Science and Technology, Kolkata-700009	Attended Online
2.	Dr. J. K. Rath	Director, Mechem Private Limited	Attended Online
3.	Prof. Dipankar Bhattacharyay	Dean – SoAS, Centurion University of Technology and Management	Attended Online
4.	Prof. Mohammed Siddique	Associate Dean- SoAS, Centurion University of Technology and Management	Attended Online
5.	Prof. Susanta Kumar Biswal	Professor in Chemistry, SoAS, Centurion University of Technology and Management	Attended Online
6.	Dr. Atia Arzoo	HoD- Dept of Chemistry- SoAS, Centurion University of Technology and Management	Attended Online
7.	Sonali Sasmal	M. Sc. Alumni student Centurion University of Technology and Management	Attended Online
8.	Supriya Rath	M. Sc. Alumni student Centurion University of Technology and Management	Attended Online
9.	Tanvi Tanisha Panda	B. Sc. Alumni student Centurion University of Technology and Management	Attended Online
10.	Piyali Deb	B. Sc. Existing student Centurion University of Technology and Management	Attended Online
11.	Renukanta Naik	B. Sc. Existing student Centurion University of Technology and Management	Attended Online
12.	Satyajit Pradhan	M. Sc. Existing student Centurion University of Technology and Management	Attended Online
13.	Somia Rani Patel	M. Sc. Existing student Centurion University of Technology and Management	Attended Online

Dean, Academics

Dean - Academic

Centurion
University

CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Applied Sciences

Department of Mathematics

Date: 11.07. 2020

MINUTES OF BOARD OF STUDIES MEETING held on 11.07.2020

Venue: Online Mode

Time: 2.30 p.m.

The Board of Studies (BoS) meeting of Department of Mathematics was held on 11.07.2020 at 2.30 p.m. in the Board Room, CUTM Bhubaneswar. The following members were present:

1. Prof. Mritunjay Kumar Singh,Professor, Department of Mathematics and Computing & Dean, IIT(ISM) Dhanbad,Jharkhanda.
2. Prof. Dipankar Bhattacharyay,Dean,, SoAS, CUTM
3. Prof. Mohammed Siddique , Associate Dean , SoAS,CUTM
4. Dr Ashok Misra, Professor & Head, Centre for Fluid Dynamics, CUTM
5. Dr Tumbanath Samantara, HoD, Department of Mathematics.Bhubaneswar Campus, CUTM

The Chairperson welcomed all members and briefly outlined the purpose of the meeting. Thereafter, the Head of the Department of Mathematics presented the achievements and improvements of the department in the areas of academics, research, consultancy and infrastructure.

The following agenda items were taken up subsequently:

***Agenda 1*:Discussion and approval of the Curriculum of B.Sc. and M.Sc Mathematics.**

- The HoD, Mathematics , gave a presentation on the feedback received on curriculum outlining the suggestions made by the various stakeholders. Based on this , the Board accepted and approved a few suggestions for course revision to be implemented from the Academic Year 2020-21.
- The syllabus of 1st to 6th semester of B. Sc, & 1st to 4th semester M.Sc Mathematics was considered and approved by the Board.
- The Board approved the updation of the courses important from higher studies point of view and replacement of contents of open basket with new courses with greater practice component. *(Annexure-1)*
- Courses that can be executed in Practice mode were placed for approval to be reconfigured to Theory + Practice,Theory+ Project and Project + Practice.
- The Board reviewed the syllabus of Mathematics for foundation course of B.Tech and approved the changes.

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The HoD, Department of Mathematics. extended sincere thanks to all members of the Board.

The meeting ended with a voteof thanks to the Chair.

HoD, Mathematics

HOD
Department of Mathematics
School of Applied Sciences
Centurion University of Technology
& Management
Bhubaneswar, Odisha

Dean, Academics

Dean - Academic
Centurion University of Technology & Management
Bhubaneswar, Khurda, Odisha-752050

Centurion University

Annexure:1

B.Sc (Mathematics)

Sl. No	Course Title	Type(Skill/Employability/Entrepreneurship/higher studies/Industry)	Credit
1	Calculus	Skill	6
2	Linear Algebra	Skill	6
3	Analysis-I	Higher Study	6
4	Ordinary Differential Equations	Higher Study	6
5	Analysis-II	Higher Study	6
6	Modern Algebra	Higher Study	6
7	Partial Differential Equations and System of Ordinary Differential Equation	Skill	6
8	Numerical Analysis	Skill	6
9	Advanced Analysis	Higher Study	6
10	Complex Analysis	Higher Study	6
11	Integral Transformations	Higher Study	6
12	Discrete Mathematical Structure	Skill	6
13	Linear Programming	Skill	6
14	Probability and Statistics	Skill	6

M.Sc (Mathematics)

Sl. No	Course Title	Type(Skill/Employability/Entrepreneurship/higher studies/Industry)	Credit
1	Heat and Mass Transfer	Skill	4
2	Numerical Methods for CFD	Skill	4
3	Fluid Dynamics	Skill	4
4	Geometry and Grid Generation	Employbility	4
5	Applications of CFD using Computational Tool-Simulia	Employbility	4
6	Advanced differential equations	Skill	4
7	Graph Theory	Skill	4
8	Optimization techniques	Skill	4
9	Advanced Statistical Methods	Skill	4
10	Applied Number Theory	Skill	4
11	Advanced complex analysis	Higher Study	4
12	Topology	Higher Study	4
13	Differential Geometry	Higher Study	4
14	Advanced Algebra	Higher Study	4
15	Data Analysis and Visualizations using Python	Employbility	4
16	Machine Learning using Python	Employbility	4

Centurion University

CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Applied Sciences

Department of Mathematics

Time: 2.30 p.m. Date: 11.07.2020

Venue: On-line Mode, CUTM, Bhubaneswar

Board of Studies Meeting

Attendance Sheet

List of Members present

Sl. No.	Name	Organisation	Signature
1.	Prof. Mritunjay Kumar Singh Professor, Department of Mathematics and Computing & Dean (Students Welfare)	IIT(ISM) Dhanbad Dhanbad-826004, Jharkhand, India	Online mode
2.	Prof. Dipankar Bhattacharyay	Dean - SoAS, Centurion University of Technology and Management	Online mode
3.	Prof. Mohammed Siddique	Associate Dean- SoAS, Centurion University of Technology and Management	Online mode
4.	Dr Ashok Mishra	Professor & Head, Centre for Fluid Dynamics Centurion University of Technology and Management	Online mode
5.	Abhilas Tripathy,	Lecturer Alumni of M.Sc (Mathematics) Program	Online mode
6.	Harapriya Patri Systems Engineer Alumni of M.Sc (Mathematics) Program	Infosys ltd Alumni of M.Sc (Mathematics) Program	Online mode
7.	Priyanka Karan	Student of M.Sc (Mathematics) Program	Online mode
8.	Snigdhamayee Naik	Student of M.Sc (Mathematics) Program	Online mode
9.	Ayushi Sing	Alumni of B.Sc (Mathematics) Program	Online mode
10.	Ashwini Kumar Mahanta	Alumni of B.Sc (Mathematics) Program	Online mode

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11.	Sonali Meher	Student of B.Sc (Mathematics) Program	Online mode
12.	Smitapragyan Sahoo	Student of B.Sc (Mathematics) Program	Online mode
13.	Chinmayee Hota	B.Tech Student	Online mode
14.	Swarnava Bhattacharya	B.Tech Student	Online mode
15.	Debasnan Singh	B.Tech Student(Alumni)	Online mode
16.	Dr Tumbanath Samantara,	Associate Professor & HoD Dept.of Mathematics, Bhubaneswar Campus, CUTM ,Odisha	Online mode

Dean, Academics

Dean - Academic
Centurion University of Technology & Management
Bhubaneswar, Khurda, Odisha-752050

CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Applied Sciences

Department of Botany

Date: 11.07.2020

MINUTES OF BOARD OF STUDIES MEETING held on 11.07.2020

Time: 2.30 p.m.

Virtual Mode

The Board of Studies (BoS) meeting of Department of Botany was held on 11.07.2020 at 2.30 p.m. in virtual mode due to lock down for ongoing COVID 19. The following members were present:

1. Dr Sangram Lenka (External expert)
2. Dr Sabuj Sahoo (External expert)
3. Dean, SoAS, CUTM, Bhubaneswar (Member)
4. Prof. Mohammed Siddique, Assoc. Dean, SoAS, CUTM, Bhubaneswar (Member)
5. Dr. Rukmini Mishra, Head, Dept. of Botany, SoAS, CUTM (Member)

The Chairperson welcomed all members of the Board and briefly outlined the purpose of the meeting. Thereafter, the Head of the Department of Botany presented the achievements and improvements of the department in the areas of academics, research and infrastructure.

The following agenda items were taken up subsequently:

Agenda 1: **The minutes of the last meeting of the BoS held on 30th July, 2019 were confirmed.**

Agenda 2: **Discussion and introduction of Curriculum of B.Sc. and M.Sc. (Botany) with new codes to be approved (Annexure I).**

- The HoD, Botany gave a presentation on the feedback received on curriculum outlining the suggestions made by the various stakeholders. Based on this, the Board accepted and approved the courses with new codes for B.Sc. programme and inclusion of new courses in M.Sc. Botany to be implemented from the Academic Year 2020-21. **(Annexure I)**

Agenda 3: **Inclusion of Domain courses**

- New 22 domain course are finalized by the University based on the industry and academic requirements and approved by Board. These courses to be implemented from the academic year 2020-2021. Group A/C category is for Botany students. **(Annexure II)**

Agenda 4: **Inclusion of Skill and Value added courses**

- New 30 skill courses and 22 value added course are finalized by the University and approved by Board. These courses to be implemented from the academic year 2020-2021 for both B.Sc. and M.Sc. students. **(Annexure III)**

The HoD, Department of Botany extended sincere thanks to all members of the Board.

The meeting ended with a vote of thanks to the Chair.

11/7/2020

HoD, Botany

H O.D
Department of Botany
School of Applied Sciences
CENTURION UNIVERSITY OF TECHNOLOGY & MANAGEMENT
Bhubaneswar, Odisha

Dean, Academics

Dean - Academic
Centurion University of Technology & Management
Bhubaneswar, Khurda, Odisha-752050

Annexure I

B.Sc. Core Courses (CC)

Sl. No.	Code	Subject Name	Type of course	T-P-Pr (Credit)	Credits
1.	CUTM1455	Phycology and Microbiology	Theory + Practice	4-2-0	6
2.	CUTM1456	Biomolecules & Cell biology	Theory + Practice	4-2-0	6
3.	CUTM1457	Mycology & Phytopathology	Theory + Practice	4-2-0	6
4.	CUTM1458	Archegoniate	Theory + Practice	4-2-0	6
5.	CUTM1459	Anatomy of Angiosperms	Theory + Practice	4-2-0	6
6.	CUTM1460	Economic Botany	Theory + Practice	4-2-0	6
7.	CUTM1461	Basics of Genetics	Theory + Practice	4-2-0	6
8.	CUTM1462	Molecular Biology	Theory + Practice	4-2-0	6
9.	CUTM1463	Plant Ecology and Phytogeography	Theory + Practice	4-2-0	6
10.	CUTM1464	Plant Systematics	Theory + Practice	4-2-0	6
11.	CUTM1465	Reproductive Biology of Angiosperm	Theory + Practice	4-2-0	6
12.	CUTM1466	Plant Physiology	Theory + Practice	4-2-0	6
13.	CUTM1467	Plant Metabolism	Theory + Practice	4-2-0	6
14.	CUTM1468	Plant Biotechnology	Theory + Practice	4-2-0	6
	Total				**84**

M.Sc. Core Courses (CC)

Sl. No.	Code	Subject Name	T-P-P	Credits
1.	CUTM1416	Pharmcognosy and phytochemistry	3-1-0	04
2.	CUTM1427	Herbal Cosmetic Technology	3-0-1	04
3.	CUTM 1428	Plant Physiology and Metabolism	3-1-0	04
4.	CUTM 1429	Good Manufacturing Practices-Herbal Industry	3-1-0	04
5.	CUTM 1430	Developmental Biology and Phytotomy	3-1-0	04
6.	CUTM 1431	Systematics and Diversity of Plants	3-1-0	04
7.	CUTM 1432	Advanced Separation Technologies and Downstream Processing	2-2-0	04
8.	CUTM 1433	Biochemistry and Enzyme Technology	3-1-0	04
9.	CUTM 1434	Advances In Plant Ecology	3-1-0	04
10.	CUTM 1435	Computational Biology	3-1-0	04
11.	CUTM 1436	Microbiology	3-1-0	04
12.	CUTM 1437	Cell and Molecular Biology	3-1-0	04
13.	CUTM 1438	Bioanalytical Techniques	3-1-0	04
14.	CUTM 1439	Plant Biotechnology	3-1-0	04
15.	CUTM 1440	Plant Breeding and Genetics	3-1-0	04
16.	CUTM 1441	Plant Genomics	3-1-0	**64**
Basket II (DomainCourses)				**32**
Total				**96**

Annexure II

Domain Courses offered by the University in 2020-21

	Group A: Agriculture/ Agri Engineering/Phyto pharma/ Dairy tech/ fisheries/ biological sciences			
	Group B: All other engineering/physical and mathematical science/vocational or skills			
	Group C: Pharmacy and allied Health			
	Group D: Management & media and communication			
Sl. No.	**Name of the Domain**	**Credit**	**Category**	**Year of introduction**
1	Advance Video Processing, Computer Vision and Machine Learning	30	A B/D	2020
2	Aerial Survey and Remote Sensing Applications	18	A/B	2020
3	Agri Business Management	23	A/B/D	2020
4	Architectural and Structural Design	20	A/B	2020
5	Business Analytics	21	A/B/D	2020
6	Composite Design and Manufacturing	24	A/B	2020
7	Computational Fluid Dynamics	20	A/B	2020
8	Commodity and Food Storage	29	A/B/D	2020
9	Gaming and Immersive Learning (AR & VR)	20	A/B/D	2020
10	Genetic Engineering & Genomics	29	A	2020
11	Go-To-Market	22	A/B/D	2020
12	Health Care Assistancy	25	A/B	2020
13	Intensive Aquaculture	29	A	2020
15	Nutraceuticals	29	A/C	2020
16	Organic Farming	29	A	2020
17	Protected Horticulture	22	A/B	2020
18	Renewable Energy Applications	29	A/B	2020
19	Seed Production using Manual and Molecular Methods	29	A	2020
20	Smart Agriculture	28	A/B	2020
21	Smart Farm Machinery	28	A/B	2020
22	Soil and Water Conservation through Watershed	29	A/C	2020

Annexure III

Skill Courses offered by the University in 2020-21

Sl. No.	Course Title	Credit
1	Introduction to Quantum Computing	4
2	Organic Farming	4
3	Mushroom Farming	4
4	Hydroponics Technology	4
5	Poultry Farming	4
6	Dairy Farming	4
7	Vermicomposting Farming	4
8	Transformer Manufacturing, Repairing and Maintenance	4
9	Electrical Installation	4
10	Repair and Maintenance of Home Appliances	4
11	Refrigeration and air conditioning	4
12	Super critical Co2 plant operation	4
13	Business Plan Preparation	4
14	Composite fabrication practice	4
15	Powder coating practice	
16	Farm appliances operation	4
17	Bio fertilisers preparation	4
18	PCB designing & fabrication	4
19	Introduction to Block Chain Technology	4
20	Introduction to Nutraceuticals	4
21	Introduction to NLP	4
22	Introduction to Computational Biology	4
23	Product Life Cycle Management through Gate process	4
24	New material development with Biovia	4
25	Spectral image processing using Python	4
26	Satellite data processing	4
27	Working with Graphene and carbon fibre	4
28	Adobe Tools and Illustrations	4
29	Digital Painting	4
30	Computer Installation and Maintenance	4

Value added Courses offered by the University in 2020-21

Sl. No.	List of Courses	Duration of course
1	Natural Resource Management	30 Hours
2	Research Methodology and IPR	30 Hours
3	Urban Gardens using Hydroponics	30 Hours
4	Introduction to Python	30 Hours
5	MATLAB	30 Hours
6	Waste to Wealth	30 Hours
7	Technical Writing	30 Hours
8	Organic Farming	30 Hours
9	Disaster Management	30 Hours
10	Ethical Hacking	30 Hours
11	Web Development	30 Hours
12	Food & Nutrition	30 Hours
13	Clinical Practice	30 Hours
14	Innovation Management	30 Hours
15	Financial Literacy	30 Hours
16	Yoga and Meditation	30 Hours
17	Steps for Career Plan	30 Hours
18	MS Excel Basics	30 Hours
19	Quality Analysis	30 Hours
20	Ethical Writing Practice	30 Hours
21	Ansys	30 Hours
22	Video Making for Youtubers	30 Hours

CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Applied Sciences

Department of Botany

Time: 2.30 p.m. **Date: 11.07.2020**

Virtual Mode

Board of Studies Meeting

Attendance Sheet

Sl. No.	Name of the BoS Member(Internal Faculty and External Resource)	Designation	Signature
1.	Dr Sangram Lenka (External expert)	TERI-Deakin Nano-biotechnology Centre, Haryana	Attended Online
2.	Dr Sabuj Sahoo (External expert)	Associate Professor and Deputy Registrar, Department of Biotechnology, Utkal University, BBSR	Attended Online
3.	Prof. Dipankar Bhattacharyay (Member)	Dean, SoAS, Centurion University of Technology and Management	Attended Online
4.	Prof. Mohammed Siddique (Member)	Associate Dean- SoAS, Centurion University of Technology and Management	Attended Online
5.	Dr. Rukmini Mishra (Member)	Head , Department of Botany, CUTM,BBSR.	Attended Online

Dean, Academics

Dean - Academic
Centurion University of Technology & Management
Bhubaneswar, Khurda, Odisha-752050

CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Applied Sciences

Department of Zoology

Date: 11. 07.2020

MINUTES OF BOARD OF STUDIES MEETING held on 11.07.2020

Virtual Mode

Time: 2:30 pm.

The Board of Studies (BoS) meeting of Department of Zoology was held on **11th July 2020** at 2:30 p.m. in online mode due to ongoing Covid-19 Pandemic. The following members were present:

1. Dr. Siba Prasad Parida, HoD, Dept. of Zoology, SoAS, CUTM, Bhubaneswar
2. Dr. Sabuj Sahoo, Dept. of Biotechnology, Utkal University, Bhubaneswar
3. Dr. Mohammad Siddique, Associate Dean, Centurion University of Technology and Management

The Chairperson welcomed all members of the Board and briefly outlined the purpose of the meeting. Thereafter, the Head of the Department of Zoology presented the achievements and improvements of the department in the areas of academics, research and infrastructure.

The following agenda items were taken up subsequently:

Agenda 1: **The minutes of the last meeting of the BoS held on 30th July 2019 were confirmed.**

Agenda 2: **Inclusion of new courses in the curriculum of B.Sc. and M.Sc. Zoology (Hons.) syllabus**

- The HoD, of dept. of Zoology gave a presentation on the feedback received on curriculum outlining the suggestions made by the various stakeholders. Based on this, the Board accepted and approved a few suggestions for the courses and programme to be implemented from the Academic Year 2019-20.
- The syllabus of B. Sc. Zoology (Hons) (CBCS) pattern was revised with new codes and prepared as per UGC guidelines. New courses were introduced in M. Sc. Zoology syllabus and approved by the board. Emphasis was given on course related to fish culture and management in the syllabus of M.Sc. Zoology programme for their overall improvement and well-being were approved by the Board members. **(Annexure I)**

Agenda 3: **Discussion and incorporation of new Domain courses by the University**

- Inclusion of new Domain courses by the University for both B.Sc. Zoology (Hons.) and M.Sc. Zoology programme for their overall improvement and well-being were approved by the Board members. **(Annexure-II)**

Agenda 4: **Discussion and incorporation of new Skills courses by the University**

- Inclusion of new skill courses offered by the University for both B.Sc. Zoology (Hons.) and M.Sc. Zoology programme and approved by the Board members. **(Annexure-III)**

The HoD, Department of extended sincere thanks to all members of the Board.

The meeting ended with a vote of thanks to the Chair.

HoD, Zoology

H O.D
Department of Zoology
School of Applied Sciences
CENTURION UNIVERSITY OF TECHNOLOGY & MANAGEMENT
Bhubaneswar Odisha

Dean, SoAS

DEAN
School of Applied Sciences
CENTURION UNIVERSITY OF TECHNOLOGY & MANAGEMENT
Bhubaneswar,Odisha

Dean, Academics

Dean - Academic
Centurion University of Technology & Management
Bhubaneswar, Khurda, Odisha-752050

Annexure I

B.Sc. Core Courses (CC)

Sl. No.	Code	Subject Name	Type of course	T-P-Pr (Credit)	Credits
1.	CUTM1497	Non-Chordates I	Theory + Practice	3-1-2	6
2.	CUTM1499	Principles of Ecology	Theory + Practice	3-1-2	6
3.	CUTM1498	Non-Chordates II	Theory + Practice	3-1-2	6
4.	CUTM1500	Cell Biology	Theory + Practice	3-1-2	6
5.	CUTM1501	Diversity of Chordates	Theory + Practice	3-1-2	6
6.	CUTM1502	Physiology: Controlling and Coordinating Systems	Theory + Practice	3-1-2	6
7.	CUTM1503	Fundamentals of Biochemistry	Theory + Practice	3-1-2	6
8.	CUTM1504	Comparative Anatomy of Vertebrates	Theory + Practice	3-1-2	6
9.	CUTM1505	Physiology: Life Sustaining Systems	Theory + Practice	3-1-2	6
10.	CUTM1506	Biochemistry of Metabolic Processes	Theory + Practice	3-1-2	6
11.	CUTM1507	Molecular Biology	Theory + Practice	3-1-2	6
12.	CUTM1510	Evolutionary Biology	Theory + Practice	3-1-2	6
13.	CUTM1509	Developmental Biology	Theory + Practice	3-1-2	6
14.	CUTM1508	Principle of Genetics	Theory + Practice	3-1-2	6
	Total				**84**

M. Sc. Zoology Syllabus (1st to 4th semester)

Course Structure-2020

Sl. No.	Code	Subject Name	T-T-P	Credit
1.	CUTM1437	Cell and Molecular Biology	3-1-0	4
2.	CUTM1443	Water and Soil Quality Management in Aquaculture	3-1-0	4
3.	CUTM1437	Genetics and Epigenetics	3-1-0	4
4.	CUTM1446	Anatomy and Biology of Fish and shellfish	3-1-0	4
5.	CUTM1451	Bioanalytical Techniques	3-1-0	4
6.	CUTM1451	Immunology and Cancer Biology	3-1-0	4
7.	CUTM1436	Microbiology	3-1-0	4
8.	CUTM1448	Fish Processing and Value Addition	3-1-0	4
9.	CUTM1452	Animal Biotechnology	3-1-0	4
10.	CUTM1452	Animal Breeding	3-1-0	4
11.	CUTM1450	Animal Physiology and Biochemistry	3-1-0	4
12.	CUTM1444	Fish and Shell fish Nutrition	3-1-0	4
13.	CUTM1442	Advanced Aquaculture	3-1-0	4
14.	CUTM1447	Coastal Aquaculture	3-1-0	4
15.	CUTM1445	Fish and Shellfish Health Management	3-1-0	4
16.	CUTM1449	Ornamental Aquaculture	3-1-0	4
Basket II (Domain Courses)				**32**
Total				**96**

Annexure II

Domain Courses offered by the University in 2020-21

	Group A: Agriculture/ Agri Engineering/Phyto pharma/ Dairy tech/ fisheries/ biological sciences
	Group B: All other engineering/physical and mathematical science/yocational or skills
	Group C: Pharmacy and allied Health
	Group D: Management & media and communication

Sl. No.	Name of the Domain	Credit	Category	Year of introduction
1	Advance Video Processing, Computer Vision and Machine Learning	30	A/B/D	2020
2	Aerial Survey and Remote Sensing Applications	18	A/B	2020
3	Agri Business Management	23	A/B/D	2020
4	Architectural and Structural Design	20	A/B	2020
5	Business Analytics	21	A/B/D	2020
6	Composite Design and Manufacturing	24	A/B	2020
7	Computational Fluid Dynamics	20	A/B	2020
8	Commodity and Food Storage	29	A/B/D	2020
9	Gaming and Immersive Learning (AR & VR)	20	A/B/D	2020
10	Genetic Engineering & Genomics	29	A	2020
11	Go-To-Market	22	A/B/D	2020
12	Health Care Assistancy	25	A/B	2020
13	Intensive Aquaculture	29	A	2020
15	Nutraceuticals	29	A/C	2020
16	Organic Farming	29	A	2020
17	Protected Horticulture	22	A/B	2020
18	Renewable Energy Applications	29	A/B	2020
19	Seed Production using Manual and Molecular Methods	29	A	2020
20	Smart Agriculture	28	A/B	2020
21	Smart Farm Machinery	28	A/B	2020
22	Soil and Water Conservation through Watershed	29	A/C	2020

Annexure III

Skill Courses offered by the University in 2020-21

Sl. No.	Course Title	Credit
1	Introduction to Quantum Computing	4
2	Organic Farming	4
3	Mushroom Farming	4
4	Hydroponics Technology	4
5	Poultry Farming	4
6	Dairy Farming	4
7	Vermicomposting Farming	4
8	Transformer Manufacturing, Repairing and Maintenance	4
9	Electrical Installation	4
10	Repair and Maintenance of Home Appliances	4
11	Refrigeration and air conditioning	4
12	Super critical Co2 plant operation	4
13	Business Plan Preparation	4
14	Composite fabrication practice	4
15	Powder coating practice	
16	Farm appliances operation	4
17	Bio fertilisers preparation	4
18	PCB designing & fabrication	4
19	Introduction to Block Chain Technology	4
20	Introduction to Nutraceuticals	4
21	Introduction to NLP	4
22	Introduction to Computational Biology	4
23	Product Life Cycle Management through Gate process	4
24	New material development with Biovia	4
25	Spectral image processing using Python	4
26	Satellite data processing	4
27	Working with Graphene and carbon fibre	4
28	Adobe Tools and Illustrations	4
29	Digital Painting	4
30	Computer Installation and Maintenance	4

Value added Courses offered by the University in 2020-21

Sl. No.	List of Courses	Duration of course
1	Natural Resource Management	30 Hours
2	Research Methodology and IPR	30 Hours
3	Urban Gardens using Hydroponics	30 Hours
4	Introduction to Python	30 Hours
5	MATLAB	30 Hours
6	Waste to Wealth	30 Hours
7	Technical Writing	30 Hours
8	Organic Farming	30 Hours
9	Disaster Management	30 Hours
10	Ethical Hacking	30 Hours
11	Web Development	30 Hours
12	Food & Nutrition	30 Hours
13	Clinical Practice	30 Hours
14	Innovation Management	30 Hours
15	Financial Literacy	30 Hours
16	Yoga and Meditation	30 Hours
17	Steps for Career Plan	30 Hours
18	MS Excel Basics	30 Hours
19	Quality Analysis	30 Hours
20	Ethical Writing Practice	30 Hours
21	Ansys	30 Hours
22	Video Making for Youtubers	30 Hours

CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Applied Sciences

Department of Zoology

Time: 11.00 a.m. **Date: 11.07.2020**

Virtual Mode

Board of Studies Meeting

Attendance Sheet

Sl. No.	Name	Organization	Signature
1.	Dr. Sabuj Sahoo	Utkal University	Attended Online
2.	Dr. Sangram Kumar Lenka	TERI – Deakin Nanobiotechnology Centre	Attended Online
3.	Dr. E.M. Chhanda Prajnadarsini	ICAR – CMFRI, Chennai	Attended Online
4.	Prof. Dipankar Bhattacharyay	Dean – SoAS, Centurion University of Technology and Management	Attended Online
5.	Prof. Mohammed Siddique	Associate Dean- SoAS, Centurion University of Technology and Management	Attended Online
6.	Prof. Yashaswi Nayak	HoD- Dept of Zoology- SoAS, Centurion University of Technology and Management	Attended Online

Dean, Academics

Dean - Academic
Centurion University of Technology & Management
Bhubaneswar, Khurda, Odisha-752050

CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Media and Communication

Date: 16.07.2020

MINUTES OF BOARD OF STUDIES MEETING held on 11.07.2020

Venue: Online Zoom Platform

Time: 3.00 p.m.

The Board of Studies (BoS) meeting of School of Media and Communication was held on 11.07.2020 at 3.00 p.m. on the online zoom platform. The following members were participated:

1. Dr. Anita Patra, Registrar, CUTM
2. Dr. Jayant Kumar Swain, Assistant Professor and Co-ordinator, PG Department of Journalism & Mass Communication, Ravenshaw University
3. Mr. Anuj Kumar Das, Journalist, Nandighosha TV
4. Dr. Chinu Bohidar, HoD, SoMC
5. Dr. Umakanta Nayak, Dean, School of Management, CUTM

The Chairperson welcomed all members of the Board and briefly outlined the purpose of the meeting. Thereafter, the Head of the Department of Civil Engineering presented the achievements and improvements of the department in the areas of academics, research, consultancy and infrastructure.

The following agenda items were taken up subsequently:

Agenda 1: **The minutes of the last meeting of the BoS held on 22.06.2019 were confirmed.**

Agenda 2: **Discussion and approval on revision required in the Curriculum of MAMC**

- The HoD, SoMC gave a presentation based on the feedback received on curriculum outlining the suggestions made by the various stakeholders. Based on that, the Board accepted and approved the existing syllabus for the academic year 2020-21.

Agenda 3: **Discussion and approval on revision required in the Curriculum of BAMC**

- BAMC syllabus was presented based on the suggestions made by the various stakeholders. The Board accepted and approved the incorporation of new courses in the syllabus for the academic year Year 2020-21 *(Annexure-I)*.
    - Basket structure was introduced to allow students to choose course.
    - New course were introduced

Agenda 4: **Inclusion of courses on life skills, value addition and Domain Courses**

It was suggested that students take up the various courses offered by the University in the areas of life skills and value addition for their overall improvement and well being. The domain courses for SoMC was finalized. The same was agreed upon and approved by the Board members. *(Annexure-II)*

The Director, SoMC extended sincere thanks to all members of the Board.

The meeting ended with a Vote of Thanks to the Chair.

Dean-in-charge, SoMC

Dean
School of Media and Communication
Centurion University ,Odisha

Dean, Academics

Dean - Academic
Centurion University of Technology & Management
Bhubaneswar, Khurda, Odisha-752050

Annexure-I

New Courses Added to BAMC Syllabus

Sl. No	Course Title	Type (Skill/Employability/ Entrepreneurship)	Credit
1	Communication, Media and Society	Employability	6
2	Introduction to Journalism	Employability	6
3	Communication Research	Employability	6
4	Exploring Hindi Cinema	Employability	6
5	Graphic Designing & Visual Images	Skill	6
6	Television Journalism	Employability	6
7	Global Politics and Media	Employability	6
8	Documentary	Employability & Skill	6
9	Communication and the Plastic Arts	Employability	6
10	Integrated Marketing Communication	Employability & Entrepreneurship	6
11	Data Analysis through Microsoft Excel	Skill	2
12	Job Readiness	Employability	6
13	Environmental Science	Employability	4

Annexure-II

Skill Courses approved by university

Sl. No.	Course Title	Credit
1	Introduction to Quantum Computing	4
2	Organic Farming	4
3	Mushroom Farming	4
4	Hydroponics Technology	4
5	Poultry Farming	4
6	Dairy Farming	4
7	Vermicomposting Farming	4
8	Transformer Manufacturing, Repairing and Maintenance	4
9	Electrical Installation	4
10	Repair and Maintenance of Home Appliances	4
11	Refrigeration and air conditioning	4
12	Super critical Co2 plant operation	4
13	Business Plan Preparation	4
14	Composite fabrication practice	4
15	Powder coating practice	4
16	Farm appliances operation	4
17	Bio fertilisers preparation	4
18	PCB designing & fabrication	4
19	Introduction to Block Chain Technology	4
20	Introduction to Nutraceuticals	4
21	Introduction to NLP	4
22	Introduction to Computational Biology	4
23	Product Life Cycle Management through Gate process	4
24	New material development with Biovia	4
25	Spectral image processing using Python	4
26	Satellite data processing	4
27	Working with Graphene and carbon fibre	4
28	Adobe Tools and Illustrations	4
29	Digital Painting	4
30	Computer Installation and Maintenance	4

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Value Added courses approved by university

	Course Title	Credit
1	Natural Resource Management	30 Hours
2	Research Methodology and IPR	30 Hours
3	Urban Gardens using Hydroponics	30 Hours
4	Introduction to Python	30 Hours
5	MATLAB	30 Hours
6	Waste to Wealth	30 Hours
7	Technical Writing	30 Hours
8	Organic Farming	30 Hours
9	Disaster Management	30 Hours
10	Ethical Hacking	30 Hours
11	Web Development	30 Hours
12	Food & Nutrition	30 Hours
13	Clinical Practice	30 Hours
14	Innovation Management	30 Hours
15	Financial Literacy	30 Hours
16	Yoga and Meditation	30 Hours
17	Steps for Career Plan	30 Hours
18	MS Excel Basics	30 Hours
19	Quality Analysis	30 Hours
20	Ethical Writing Practice	30 Hours
21	Ansys	30 Hours
22	Video Making for Youtubers	30 Hours
23	Natural Resource Management	30 Hours

University-wide Domains for SoMC

1	DACU2200	Data Analytics- Visualisation	20
2	BACU2210	Business Analytics	18
3	MLCU2000	Data Science and Machine Learning	26
4	ARCU2060	Gaming and Immersive Learning (AR & VR)	20
5	GMCU2140	GO-TO-MARKET(3D Experience)	22
6	FPCU2310	Food Processing	29
7	ABCU2320	Agri Business Management	23
8	FSCU2330	Commodity and Food Storage	29

CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Media and Communication

Time: 3.00 p.m. Date: 11.07.2020

Venue: Online Zoom Platform

Board of Studies Meeting

Attendance Sheet

Sl.No.	Name of the Member	Designation	Signature
1	Dr. Supriya Pattanayak	Vice Chancellor, CUTM	Attended Online
2	Dr. Anita Patra	Registrar, CUTM	Attended Online
3	Dr. Jayant Kumar Swain	Assistant Professor and Co-ordinator, PG Department of Journalism & Mass Communication, Ravenshaw University	Attended Online
4	Mr. Anuj Kumar Das	Journalist, Nandighosha TV	Attended Online
5	Dr. Chinu Bohidar	HoD, SoMC, CUTM	Attended Online
6	Dr. Umakanta Nayak	Dean, School of Management, CUTM	Attended Online

CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Media and Communication

Time: 3.00 p.m. Date: 11.07.2020

Venue: Online Zoom Platform

Board of Studies Meeting

Centurion University

Attendance Sheet

Sl.No.	Name of the Member	Designation	Signature
1	Dr. Anita Patra	Registrar, CUTM	Attended Online
2	Dr. Jayant Kumar Swain	Assistant Professor and Co-ordinator, PG Department of Journalism & Mass Communication, Ravenshaw University	Attended Online
3	Mr. Anuj Kumar Das	Journalist, Nandighosha TV	Attended Online
4	Dr. Chinu Bohidar	HoD, SoMC, CUTM	Attended Online
5	Dr. Umakanta Nayak	Dean, School of Management, CUTM	Attended Online

Dean, Academics

Dean - Academic
Centurion University of Technology & Management
Bhubaneswar, Khurda, Odisha-752050

Centurion
University

CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Paramedics and Allied Health Sciences

Date: 11/07/2020

MINUTES OF BOARD OF STUDIES MEETING held on 11/07/2020

Venue: Hybrid mode (Board Room, CUTM, Bhubaneswar and online)

Time: 11.00 AM

The Board of Studies (BoS) meeting of School of Paramedics and Allied Health Sciences was held on **11/07/2020** at 11 AM in hybrid mode.

The following members were present:

Dr. Bhargavram (MD, Professor of Opthalmology)

Dr. Ajay Kumar Singh (MD, Professor of Ophthalmology)

Dr. Santosh Kumar Behera (Senior Scientist)

Dr. Debasish Sahoo (MD, Professor in Microbiology)

Dr. Debi Prasad Rath (MD, Professor in Pathology)

Dr. Ardhendu Praharaj (Ph. D. in Microbiology)

Dr. Harihar Praharaj (MD, Professor of Medicine)

Dr.Chandra Mouli (MD, Professor of Radiology)

Dr.Teja, Anesthesian

Prof. Sourav Karmakar (Asst. Prof. SoPAHS)

Ms. SNS Neelima (Asst. Prof. SoPAHS)

Mr. M.Vinay Dinakaran (Asst. Prof. SoPAHS)

Ms. N.Anuhya (Asst. Prof. SoPAHS)

Dr.M.L.N.Acharyulu (Associate Dean, SoPAHS)

Dr.CH.Nooka Raju (Associate Prof., SoPAHS)

Mr. Rajesh Sukkala (Asst. Prof. SoPAHS)

Dr. Ashish Kumar Sen (Adjunct Faculty, SoPAHS)

Dr. Monali P. Mishra (Assistant Prof., SoPAHS)

Ms. Sonali Dash (Assistant Prof., SoPAHS)

Ms. Susmita Chakrabarty (Lecturer, SoPAHS)

Centurion
UNIVERSITY

Prof. Sunil Kumar Jha (Dean, SoPAHS)

Dr. Soumya Jal (HoD, SoPAHS)

Dr. P.K. Mohanty, Dean (Acad) CUTM

All the members were welcomed to the online session by the Chairperson and were briefed regarding the purpose of the meeting. Thereafter, the Dean of SoPAHS presented on the achievements, improvements of the department in terms of academics and infrastructure.

Following are the programs offered by SoPAHS:

MSc Medical Laboratory Technology (MSc MLT)
MSc Applied and Clinical Microbiology (MSc CMB)
BSc Medical Laboratory Technology (BSc MLT)
BSc Clinical Microbiology (BSc CMB)
BSc Medical Radiation Technology (BSc MRT)
BSc Optometry (BSc Optom)

Agenda of the meeting:

Agenda 1: **The minutes of the last meeting of the BoS held on 22.06.2019 were confirmed.**

Agenda 2: **Discussion and approval on the content of syllabus for various courses of SoPAHS. Implementation of CBCS pattern.**

At first, the Dean of the school presented the feedback received from several stakeholders, on the curriculum of its various departments. With respect to the feedback received from the stakeholders, the committee discussed and approved for incorporation/ modifications in the curriculum for the Academic session 2020-21.

- The committee approved to introduce the following programmes in SoPAHS:
  BSc Anaesthesia Technology;
  BSc Operation Theatre Technology;
  BSc Emergency Medicine Technology
- The curriculum was framed adopting the CBCS pattern.
- Based on the feedback from stakeholders, the curriculum was framed in a manner to incorporate Project/ Practical based learning. The Project and Practical components of relevant subjects were embedded along with their theory component. Much of practical exposure/ hands on training/ research and project exposure is emphasized.
- The curriculum developed is available on http://courseware.cutm.ac.in/ (links/ notes/ videos for relevant notes are also available). It was adapted in a way to ease flip class technique and enhance Virtual learning along with real time learning, which was highly appreciated by the board members.
- New courses added into the curriculum are provided in *Annexure A*.

Agenda 3: **Inclusion of courses on life skills and value addition**

For their overall development and wellbeing of the students, it was advised that students enroll in the various life skills and value-adding courses that are offered by the university. The Board members agreed and gave their approval to the same.

Details of the life skill and value added courses introduced are mentioned in *Annexure B*.

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The Dean, SoPAHS extended sincere thanks to all the members of the Board.

The meeting ended with a vote of thanks to the Chair.

Dean, SoPAHS

Prof. Sunil Kumar Jha
DEAN
School of Paramedics & Allied Health Sciences
Centurion University of Technology & Management
Bhubaneswar, Odisha-752050

Dean, Academics

Dean - Academic
Centurion University of Technology & Management
Bhubaneswar, Khurda, Odisha-752050

11/7/20

HOD, SoPAHS

Dr. Soumya Jal
Associate Professor & HOD
School of Paramedics & Allied Health Sciences
Centurion University of Technology & Management
Ramachandrapur, Bhubaneswar - 752050

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Annexure A

List of new courses added

Sl. No	Course Title	Type (Skill/ Employability/ Entrepreneurship)	Credit
	MSc MLT		
1.	Human Anatomy and Physiology	Employability	3
2.	Analytical Techniques	Entrepreneurship	4
3.	Biological Chemistry	Employability	3
4.	Clinical Hematology	Entrepreneurship	4
5.	Clinical Pathology	Entrepreneurship	4
6.	Cell and Molecular Biology	Employability	3
7.	Clinical Biochemistry	Employability	3
8.	Histology	Employability	4
9.	Medical Laboratory Technology	Entrepreneurship	5
10.	Blood Banking	Entrepreneurship	4
11.	Health Programme in India	Entrepreneurship	3
12.	Medical Microbiology	Employability	4
13.	Immunology & Parasitology	Employability	5
14.	Advanced Hematology	Entrepreneurship	4
15.	Research Methodology	Employability	3
16.	Mini Project	Employability	2
17.	Internship	Employability	12
18.	Project	Employability	12
19.	Environmental Studies	Employability	2
20.	Job Readiness	Employability	3
21.	Proficiency in English	Employability	2
	MSc CMB		
1.	Human Anatomy and Physiology	Employability	3
2.	Analytical Techniques	Entrepreneurship	4
3.	Biological Chemistry	Employability	3
4.	Clinical Hematology	Entrepreneurship	4
5.	Clinical Pathology	Entrepreneurship	4
6.	Cell and Molecular Biology	Employability	3
7.	Clinical Biochemistry	Employability	3
8.	Histology	Employability	4
9.	General Microbiology	Employability	4
10.	Systematic Bacteriology	Employability	4
11.	Applied microbiology	Employability	3
12.	Medical Parasitology and Mycology	Employability	5
13.	Immunology & Virology	Employability	5
14.	Clinical Bacteriology	Employability	4
15.	Research Methodology	Employability	3

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16.	Mini Project	Employability	2
17.	Internship	Employability	12
18.	Project	Employability	12
19.	Environmental Studies	Employability	2
20.	Job Readiness	Employability	3
21.	Proficiency in English	Employability	2
	BSc MLT		
1.	Human Anatomy and Physiology	Employability	3
2.	Cell Biology	Employability	4
3.	Medical Instrumentation and Technique	Entrepreneurship	4
4.	Biochemistry	Employability	4
5.	Clinical Pathology	Entrepreneurship	4
6.	Immunology	Employability	5
7.	Molecular Biology	Entrepreneurship	4
8.	Haematology	Entrepreneurship	5
9.	Microbiology	Employability	5
10.	Medical Law and Ethics	Employability	3
11.	Histology	Employability	4
12.	Advanced Hematology	Entrepreneurship	4
13.	Research Methodology	Employability	3
14.	Analytical Biochemistry	Employability	5
15.	Applied Haematology	Entrepreneurship	5
16.	Immunopathology	Employability	4
17.	Parasitology	Employability	5
18.	Basic Computer and Information Science	Employability	2
19.	Blood Banking	Entrepreneurship	4
20.	Medical Laboratory Management	Entrepreneurship	5
21.	Introduction to Quality and Patient Safety	Employability	5
22.	Mycology & Virology	Employability	5
23.	Mini Project	Employability	2
24.	Internship	Employability	12
25.	Project	Employability	12
26.	Environmental Studies	Employability	2
27.	Job Readiness	Employability	3
28.	Proficiency in English	Employability	2
	BSc CMB		
1.	Human Anatomy and Physiology	Employability	3
2.	Cell Biology	Employability	4
3.	Medical Instrumentation and Technique	Entrepreneurship	4
4.	Biochemistry	Employability	4
5.	Clinical Pathology	Entrepreneurship	4
6.	Immunology	Employability	5
7.	Molecular Biology	Entrepreneurship	4

8.	Haematology	Entrepreneurship	5
9.	Microbiology	Employability	5
10.	Medical Law and Ethics	Employability	3
11.	Systemic Bacteriology	Employability	4
12.	Systemic Virology & Mycology	Employability	5
13.	Research Methodology	Employability	3
14.	Analytical Biochemistry	Employability	5
15.	Public Heath Microbiology	Employability	4
16.	Pharmaceutical Microbiology	Employability	4
17.	Industrial Microbiology	Employability	4
18.	Basic Computer and Information Science	Employability	2
19.	Epidemiology	Employability	3
20.	Diagnostic Bacteriology	Entrepreneurship	5
21.	Diagnostic Mycology	Entrepreneurship	4
22.	Diagnostic Virology	Entrepreneurship	4
23.	Diagnostic Parasitology	Entrepreneurship	4
24.	Mini Project	Employability	2
25.	Internship	Employability	12
26.	Project	Employability	12
27.	Environmental Studies	Employability	2
28.	Job Readiness	Employability	3
29.	Proficiency in English	Employability	2
	BSc MRT		
1.	General Anatomy	Employability	5
2.	General Physiology	Employability	5
3.	Basic Biochemistry	Employability	5
4.	Biology	Employability	5
5.	Cell Biology	Employability	5
6.	Mathematics	Employability	5
7.	Basic Radiation Physics	Employability	4
8.	Fundamental Medical Imaging	Entrepreneurship	6
9.	Principles of Radiation Therapy	Employability	4
10.	Basic Medical Instrumentation & Technique	Entrepreneurship	4
11.	Applied Radiation Physics & Radiation Protection	Employability	4
12.	Radiographic Technique - 1	Employability	5
13.	Basic Equipment in Radiotherapy	Employability	4
14.	Mammography and Ultrasound	Entrepreneurship	4
15.	Applied Equipment of Radio Diagnosis	Employability	4
16.	Radiotherapy and Brachy Therapy in Malignant & Non-malignant Disease	Employability	4
17.	Radiographic Technique - 2	Employability	5
18.	Physics of CT & MRI	Employability	4
19.	Interventional Radiology and	Employability	5

	Drug Diagnostic Radiology		
20.	Computerized Tomography (CT Scanning) Method & Procedure	Employability	4
21.	Basic of Magnetic Resonance Imaging	Employability	4
22.	Image Interpretation of X-Ray Mammography, CT & MRI	Entrepreneurship	5
23.	Medical Law and Ethics	Employability	3
24.	Orientation in Clinical Sciences Course contents	Employability	4
25.	Basic Computer and Information Science	Employability	2
26.	Project	Employability	18
27.	Internship	Employability	18
28.	Environmental Studies	Employability	2
29.	Job Readiness	Employability	3
30.	Proficiency in English	Employability	2
	BSc Optometry		
1.	Biology	Employability	4
2.	Maths	Employability	4
3.	Cell Biology	Employability	4
4.	General Anatomy	Employability	5
5.	General Physiology	Employability	5
6.	Basic Biochemistry	Employability	5
7.	GEOMETRIC OPTICS	Employability	5
8.	BASIC COMPUTER AND INFORMATION SCIENCE	Employability	2
9.	OCULAR ANATOMY	Employability	4
10.	OCULAR PHYSIOLOGY	Employability	4
11.	INTRODUCTION TO OPTOMETRY	Employability	2
12.	PHYSICAL OPTICS	Entrepreneurship	4
13.	VISUAL OPTICS –I	Entrepreneurship	5
14.	OPTOMETRIC OPTICS –I	Entrepreneurship	5
15.	OCULAR DISEASES –I	Entrepreneurship	4
16.	OCULAR MICROBIOLOGY & PATHOLOGY	Employability	4
17.	CLINICAL EXAMINATION OF VISUAL SYSTEM LAB	Entrepreneurship	2
18.	VISUAL OPTICS –II	Entrepreneurship	5
19.	OPTOMETRIC OPTICS –II & DISPENCING OPTICS	Employability	5
20.	OCULAR DISEASES –II	Employability	4
21.	CONTACT LENSES-I	Entrepreneurship	5
22.	CONTACT LENSES-II	Entrepreneurship	5
23.	BINOCULAR VISION –I	Entrepreneurship	5
24.	LOW VISION & REHABILITATION	Entrepreneurship	4
25.	BASIC & OCULAR PHARMACOLOGY	Employability	4
26.	BINOCULAR VISION –II	Entrepreneurship	5
27.	PEDIATRIC & GERIATRIC	Employability	4

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	OPTOMETRY		
28.	SYSTEMIC DISEASES & EYE	Employability	4
29.	OCCUPATIONAL OPTOMETRY	Entrepreneurship	3
30.	LAW & OPTOMETRY	Employability	3
31.	PUBLIC HEALTH& COMMUNITY OPTOMETRY	Employability	3
32.	OPTOMETRIC INSTRUMENTS	Entrepreneurship	4
33.	PROJECT	Employability	18
34.	INTERNSHIP	Employability	20
35.	Environmental Studies	Employability	2
36.	Job Readiness	Employability	3
37.	Proficiency in English	Employability	2

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Annexure B

List of Skill courses (Basket) approved

Sl. No	Course Title	Credit	(T+P+P)
1.	Refraction Technology (CUTM3057)	4	0+3+1
2.	Emergency Medical Technology (CUTM3058)	4	0+3+1
3.	Medical Lab Technology (CUTM3059)	4	0+3+1
4.	Operation Theatre Technology (CUTM3060)	4	0+3+1
5.	Radiology Technology (CUTM3061)	4	0+3+1
6.	Phlebotomy Technology (CUTM3062)	4	0+3+1
7.	First Aid Service (CUTM3063)	4	0+3+1
8.	General Duty Assistance Service (CUTM3064)	4	0+3+1
9.	X- ray Technology (CUTM3065)	4	0+3+1

List of value-added courses approved

Sl. No	Course Title	Hrs. of input
1.	Gender, Human Rights and Ethics (CUVA4040)	30 hrs

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CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Paramedics and Allied Health Sciences

Time: 11.00 AM

Date: 11.07.2020

Venue: Hybrid mode (Board Room, CUTM, Bhubaneswar and online)

Board of Studies Meeting

Attendance Sheet

Sl. No.	Name of the BOS Member (Internal Faculty and External Resource)	Designation	Signature
1	Dr. Santosh Kumar Behera	Regional Medical Research Center	Attended online
2	Dr. Debasish Sahoo	SOA University	Attended online
3	Dr. Debi Prasad Rath	CARE Hospital	Attended online
4	Dr. Ardhendu Praharaj	District Microbiology Lab, Nabarangpur	Attended online
5	Dr. Harihar Praharaj	Directorate of Medical Education and Training, Odisha	Attended online
6	Dr. Bhargavram	MD, Professor of Opthalmology, Sandhya Eye Hospital, Andhra Pradesh	Attended online
7	Dr. Ajay Kumar Singh	MD, Professor of Ophthalmology, DHC Khordha	Attended online
8	Dr.Chandra Mouli	Radiology Dept., GVP Institute of Health Care and Medical Technology,Marika valasa, Visakhapatnam,A.P	Attended online
9	Dr.M.Bhargava Ram	Opthamologist, Sandhya Eye Hospital, Maddilapale, Visakhapatnam	Attended online
10	Dr.Teja	Anesthesian	Attended online
11	Dr. Monali P. Mishra	Assistant Prof., SoPAHS (CUTM)	Attended online
12	Ms. Sonali Dash	Assistant Prof., SoPAHS (CUTM)	Attended online
13	Ms. Susmita Chakrabarty	Lecturer, SoPAHS (CUTM)	Attended online
14	Prof. Sourav Karmakar	Asst. Prof. & HoD, SoPAHS (CUTM)	Attended online
15	Ms. SNS Neelima	Asst. Prof. SoPAHS (CUTM)	Attended online
16	Dr.CH.Nooka Raju	Associate Prof., SoPAHS (CUTM)	Attended online
17	Mr. M.Vinay Dinakaran	Asst. Prof. SoPAHS (CUTM)	Attended online

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18	Ms. N.Anuhya	Asst. Prof. SoPAHS (CUTM)	Attended online
19	Dr.M.L.N.Acharyulu	Associate Dean, SoPAHS (CUTM)	Attended online

Dean, SoPAHS
Prof. Sunil Kumar Jha
DEAN
School of Paramedics & Allied Health Sciences
Centurion University of Technology & Management
Bhubaneswar, Odisha-752050

Dean, Academics
Dean - Academic
Centurion University of Technology & Management
Bhubaneswar, Khurda, Odisha-752050

Dr. Soumya Jal
HOD, SoPAHS
Associate Professor & HOD
School of Paramedics & Allied Health Sciences
Centurion University of Technology & Management
Ramachandrapur, Bhubaneswar - 752050

Centurion University

2019-20

CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Engineering & Technology

Department of Civil Engineering

Date: 22/06/2019

MINUTES OF BOARD OF STUDIES MEETING held on 22/06/2019

Venue: Board Room, CUTM, Bhubaneswar

Time: 11.00 a.m.

The Board of Studies (BoS) meeting of Department of Civil Engineering was held on 22/06/2019 at 11 a.m. in the Board Room, CUTM Bhubaneswar. The following are the members:

1. Dr. Vazeer Mahmood, Professor, Dept of Civil Engg., Andhra University

2 Dr Siba Prasad Mishra, , Internal Expert

3 Prof. Prafulla Kumar Panda, Internal Expert

4 Prof. Sagarika Panda, Internal Expert

5 Prof. Kamal Kumar Barik, Internal Expert

6 Prof Rakesh Kumar Jena, Internal Expert

7 Prof Prashant Nayak, Internal Expert

The Chairperson welcomed all members of the Board and briefly outlined the purpose of the meeting. Thereafter, the Head of the Department of Civil Engineering presented the achievements and improvements of the department in the areas of academics, research, consultancy and infrastructure.

The following agenda items were taken up subsequently:

Agenda 1: **The minutes of the last meeting of the BoS held on 30/06/2018 were confirmed.**

Agenda 2: **Discussion and approval on any revision required in the Curriculum of B.Tech, Civil Engg. , M.Tech Structural Engineering and M.Tech Transportation Engg.**

The HoD, Civil Engg. gave a presentation on the feedback received on curriculum outlining the suggestions made by the various stakeholders. Based on this , the Board accepted and approved a few suggestions for course revision to be implemented from the Academic Year 2020-21.

- The syllabus was highly appreciated because the university follows Choice-based Credit system and courses relevant to the advancement in Mechanical Engineering are put in the syllabus.
- The members noted that the courses are mostly industry-oriented and also provide scope for competitive examination like UPSC, GATE etc. The members remarked that the syllabus is designed to enhance skill level of the students.
- The syllabus offers scope for gaining knowledge in other branches of engineering. Also offers scope to enhance on knowledge in AI, Machine learning, Nano Technology, Data science, SAP etc.
- The syllabus is best suited for each semester, but certain courses need to be modified.
- The syllabus is good but as compared to the content of syllabus, the credits are very less.

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- The syllabus is quiet useful. There should be more practice subjects to increase student efficiency and skill.
- The Board approved the updation of the courses important from higher studies point of view and replacement of contents of open basket with new courses with greater practice component.*(Annexure A.)*
- Discussion on modification of syllabus of Basket-5.
- The domain course should be taught in practice and project mode.
- The Board approved the changes suggested in the Hydraulics and Hydraulic machine, Disaster Management, Transportation Engg. And Water supply and sanitary engineering as per the latest Software and technology being used by the industry. List of existing courses where syllabus was revised in (*Annexure B & C)*

Agenda 3: **Inclusion of courses on life skills and value addition**

It was suggested that students take up the various courses offered by the University in the areas of life skills and value addition for their overall improvement and well being.The same was agreed upon and approved by the Board members.*(Annexure D)*

The HoD, Department of Civil Engg. extended sincere thanks to all members of the Board.

The meeting ended with a voteof thanks to the Chair.

22.06.19

HOD
Dept. of Civil Engineering
Centurion University of
Technology & Management,BBSR

Dean, SoET

Dean, SOET
Centurion University of Technology & Management
Odisha

Dean, Academics

Dean - Academic
Centurion University of Technology & Management
Bhubaneswar, Khurda, Odisha-752050

HoD, Civil Engineering

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Annexure-A

List of new courses added

Sl. No	Course Title	Type(Skill/Employability/Entrepreneurship)	Credit
1	Disaster Preparedness & Planning management	Skill And Employability	2
2	Functional Planning & DPR	Skill And Employability	3
3	Site Supervision & Measurement Methods.	Skill And Employability	4
4	Tendering Process, Bidding Contract, Agreements & Arbitration.	Skill And Employability	3
5	Green Building Design	Skill And Employability	3
6	Barrier Free Design	Skill And Employability	2
7	Intelligent Building Design	Skill And Employability	2
8	3D Modelling and VR experience of Building	Skill And Employability	4
9	Geospatial Technology and its Application	Skill And Employability	5
10	Photogrammetry and its Application	Skill And Employability	4
11	Concrete Technology	Skill And Employability	2

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Annexure-B

List of existing courses where syllabus was revised

Basket/ Semester	Name of Course	No. of Modules/ Topics revised	Revised Modules/Topics (details)
IV	Pre-Fabricated Structures	1	One module has been added depending on the industry requirement
IV	Soil Mechanics	2	One module has been added depending on the industry requirement
IV	Transportation Engineering	2	One module has been added and another module is merged with slight change as per industry requirement
IV	Water supply & Waste water Management	1	One module has been added depending on the industry requirement
IV	Hydrology & Water Resources Engineering	1	One module has been added depending on the industry requirement
IV	Quality Control and Risk Management in Construction	1	One module has been added depending on the industry requirement
IV	Geotechnical Investigations	1	One module has been added depending on the industry requirement
IV	Repairs, Renovation and Rehabilitation of Structures	1	One module has been added depending on the industry requirement
IV	Software Based Project Scheduling and Management	1	One module has been added depending on the industry requirement
IV	Earthquake Resistant Design	1	One module has been added depending on the industry requirement
IV	Architectural Design	1	One module has been added depending on the industry requirement
IV	Remote Sensing & Digital Image Processing	1	One module has been added depending on the industry requirement
IV	Lidar Remote Sensing and its Applications	1	One module has been added depending on the industry requirement
IV	Smart City Planning	1	One module has been added depending on the industry requirement

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Annexure-C

List of existing M.Tech courses where syllabus was revised

M Tech Structural Engineering			
Sl no	**Name of Course**	**No. of Modules/Topics revised**	**Revised Modules/Topics (details)**
1	Advanced Structural Analysis	1	One module has been added depending on the industry requirement
2	Structural Dynamics	1	One module has been added depending on the industry requirement
3	Theory of Elasticity & Plasticity	1	One module has been added depending on the industry requirement
4	Bridge Engineering	1	One module has been added depending on the industry requirement
5	Computer Graphics	1	One module has been added depending on the industry requirement
6	Finite Element Method	1	One module has been added depending on the industry requirement
7	Concrete Technology	1	One module has been added depending on the industry requirement
8	Structural Engineering Lab	1	One module has been added depending on the industry requirement
9	Renovation and retrofitting of green structures	1	One module has been added depending on the industry requirement
10	Soil Dynamics and Geotechnical Earthquake Engineering	1	One module has been added depending on the industry requirement
M Tech Transportation Engineering			
1	Pavement Analysis and Design	1	One module has been added depending on the industry requirement
2	Highway Project formulation and Economics	1	One module has been added depending on the industry requirement
3	Traffic Safety	1	One module has been added depending on the industry requirement
4	Remote Sensing and GIS for Transportation Engineering	1	One module has been added depending on the industry requirement
5	Pavement Evaluation, Rehabilitation and Maintenance	1	One module has been added depending on the industry requirement
6	Highway Project formulation and Economics	1	One module has been added depending on the industry requirement

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Annexure-D

List of Skill courses (Basket) approved

Sl. No	Course Title	Credit	(T+P+P)
1	Refraction Technology	3	0÷2÷1
2	Emergency Medical Technology	3	0÷2÷1
3	Medical Lab Technology	3	0÷2÷1
4	Operating Theatre Technology	3	0÷2÷1
5	Radiology Technology	3	0÷2÷1
6	Phlebotomy Technology	3	0÷2÷1
7	First Aid Service	3	0÷2÷1
8	General Duty Assistance Service	3	0÷2÷1
9	X- ray Technology	3	0÷2÷1
10	Retail Sales	3	0÷2÷1
11	Basketball	3	0÷2÷1
12	Gym Fitness	3	0÷2÷1
13	Swimming	3	0÷2÷1
14	Yoga & Meditation	3	0÷2÷1
15	Solar PV Installation	3	0÷2÷1
16	Solar Lighting Technology	3	0÷2÷1
17	Solar PV Microgrid System	3	0÷2÷1
18	Solar PV Driven Equipment O/M & Assembly	3	0÷2÷1
19	Solar Thermal Engineering	3	0÷2÷1

List of Domain courses approved

Sl. No	Domain Course Title	Credit	(T+P+P)
1	Automobile Engineering	24	8÷12÷10
2	Operation and Maintenance of Electrical Grid System & Transformers	24	8÷12÷10

List of value-added courses approved

Sl. No	Course Title	Hrs. of input
1	LSD-2	30
2	Conduct in daily Life-Insights from The Panchatantra	30
3	Human Rights	30
4	Renewable Energy	30
5	Data science & ML	30
6	Introduction to Nutraceuticals	30
7	Introduction to Tableau	30
8	Basics of Photography	30
9	Innovation Management	30

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10	Effective Writing	30
11	Indian Culture and History	30
12	Critical Thinking	30
13	Disability, Diversity and Development	30
14	Intellectual Property Rights	30
15	Emotional Intelligence	30
16	Home remedies for healthy living	30
17	Self-Management: Insights from Srimad Bhagavad Gita	30

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Proceedings of board of studies in Civil Engg Dept held on 22nd June 2019 at Jatni Campus

Considered the syllabus basket - IV & V and following recommendations were made.

Basket - IV.

CECC-0103 - Hydraulics and Hydraulic Machine.

module - 1. Integral momentum Equation (only Introduction)
Add - Introduction to NC Fetun
module - Inclusion of Air foil - module - 4 - Sudden Transition should mention mode - 5, GVF - surface profiles, direct step method.

Disaster management.

module - 3, Title - should change to manmade disaster

Estimation: Addition of few theory lectures

Foundation CT - Module 1 XRF should to be maid optional

module - 7 - Addition of liquification,
overall concept should be involve subsurface design in all practices

Transportation

module - 1 - Types of road should included

module - 6 - To be shifted to module - 2 with subsequent changes.

Water supply

module - Design of water supply system instead of prepared one.

Irrigation

module - 7 - Addition of Reservoir types, capacity etc.
Practice Part (B) addition of Estimation of a design discharge for a given project.

Ref. Book.

Irrigation Eng B.C. Punmia.

Domain - 5

-) Geo Technical investigation.
Module-6: Necessity of Water Table Study in Geo Technical Engg.
-) Title of the course project management/ project Survey management shall be chgd.

1. Dr. (Prof). Vazeer Mahammood 22.06.2019
2. Prof. Prafulla Kumar Panda Panda 22.06.19
3. Prof. Sagarika Panda 22/6/2019
4. Prof. Kamal Ku. Barik 22-06-19
5. Prof. Rakesh Kumar Jena 22.06.19
6. Prof. Prashant Nayak Prasant 22-06-19

Proceedings of the Board of studies in M.Sc in Geoinformatics held on 22.06.2019.

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Members Presents:-

1. Prof. K.M. Setty
2. Rudra Narayan Tripathy
3. Anjan Kumar Mallick.
4. Kamal Kumar Barik - Convenor.
5. Sagarika Panda - HOD, Civil

Business.

1. Resolved that the nomenculture M.Sc. in Geomatics should be changes to M.Sc in "Geoinformatics".
2. Minor change in Syllabus has been made.
3. In III semster one min project has been added as compulsory subject of "4" credits with a report and presentation.
4. In IV Semster "4" credit "web GIS" has been included. The project will be '20' credits.

22/6/19.

22.6.19

22/06/19

22-06-19

22/6/2019

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CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Engineering & Technology

Department of Computer Science and Engineering

Date: 22.06.2019

MINUTES OF BOARD OF STUDIES MEETING held on 22.06.2019

Venue: Board Room, CUTM, Bhubaneswar

Time: 11.00 a.m.

The Board of Studies (BoS) meeting of Department of Computer Science and Engineering was held on 22.06.2019 at 11 a.m. in the Board Room, CUTM Bhubaneswar. The following are the Board members:

1. Sanjeeb Kumar, Industry Expert, Mindtree
2. Prof. Subbarao, APSSDC Director
3. Chandan Giri, Asst. Prof, CSE
4. K. Santosh Chandra Rao, Asst. Prof., CSE
5. Suvendu Kumar Nayak, Asst. Prof., CSE
6. Dr. Prasant Kumar Mohanty, Dean, SoET

The Chairperson welcomed all members of the Board and briefly outlined the purpose of the meeting. Thereafter, the Head of the Department of Computer Science Engineering presented the achievements and improvements of the department in the areas of academics, research, consultancy and infrastructure.

The following agenda items were taken up subsequently:

Agenda 1: **The minutes of the last meeting of the BoS held on 30.06.2018 were confirmed.**

Agenda 2: **Discussion and approval on any revision required in the Curriculum of B.Tech, Computer Science Engg.**

- The HoD, Computer Science and Engg. gave a presentation on the feedback received on curriculum outlining the suggestions made by the various stakeholders. Based on this , the Board accepted and approved a few suggestions for course revision to be implemented from the Academic Year 2019-20.
- The Board approved the changes suggested in the existing syllabus and some new domains were added as per the latest technology being used by the industry. *(Annex 1)*
- In this regard Cyber Security domain is approved to run in collaboration with IBM, and Cloud domain to be offered in collaboration with AWS.

Agenda 3: Inclusion of courses on life skills and value addition

The members suggested to provide various life skills and value-added courses offered by the university for the overall improvement of student. The same was agreed upon and approved by the Board members. *(Annex 2 and Annex 3)*

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The HoD, Department of Computer Science and Engg. extended sincere thanks to all members of the Board.

The meeting ended with a vote of thanks to the Chair.

Dean, SoET
Dean, SOET
Centurion University of Technology & Management
Odisha

Dean, Academics
Dean Academics
Centurion University of Technology & Management
Odisha

HoD, Computer Science & Engineering
HOD CSE
Centurion Institute of Technology

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Annexure I

List of courses partly modified

Sl. No	Name of Course	Credit	Details of modification
1	Data Base Management System	3	30% new content was added
2	Operating System	3	20% new content was added
3	Problem Solving using Python	3	35% new content was added
4	Mobile App Development	4	65% new content was added
5	Computer Networks	4	65% new content was added
6	Computer Organization and Architecture	3	50% new content was added
7	Formal Language and Automata Theory	3	30% new content was added
8	Design Analysis and Algorithms	4	25% new content was added

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Annexure 2

List of Skill Courses offered in the Year 2019-20

S No	Course Name	Course Code	Credit
1	Refraction Technology	CUTM3057	4
2	Emergency Medical Technology	CUTM3058	4
3	Medical Lab Technology	CUTM3059	4
4	Operating Theatre Technology	CUTM3060	4
5	Radiology Technology	CUTM3061	4
6	Phlebotomy Technology	CUTM3062	4
7	First Aid Service	CUTM3063	4
8	General Duty Assistance Service	CUTM3064	4
9	X- ray Technology	CUTM3065	4
10	Retail Sales	CUTM3067	4
11	Basketball	CUTM3068	4
12	Gym Fitness	CUTM3069	4
13	Swimming	CUTM3070	4
14	Yoga & Meditation	CUTM3072	4

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Annexure 3

List of Value added Courses offered in the Year 2019-20

S No	Name of the value added courses (with 30 or more contact hours)offered	Course Code (if any)	Duration of course
1	The Mind-Its mysteries and conquest	CUVA0040	30 Hours
2	Understanding Personality-The Bhagavad Gita Perspective	CUVA0041	30 Hours
3	Understanding Leadership - The Valmiki Ramayana Perspective	CUVA0042	30 Hours
4	Organic Farming	CUVA0043	30 Hours
5	Urban Kitchen gardens using Hydroponics	CUVA0044	30 Hours
6	Introduction to PowerBI	CUVA0045	30 Hours
7	Introduction to Python	CUVA0046	30 Hours
8	Food & Nutrition	CUVA0047	30 Hours
9	Behavioural Economics	CUVA0052	30 Hours
10	Nutrition for Healthy Living	CUVA0053	30 Hours
11	Conflict Resolution	CUVA0054	30 Hours
12	Gender issues in Contemporary times	CUVA0055	30 Hours
13	Natural Resource Management	CUVA0067	30 Hours
14	Rural Livelihood and Promotion	CUVA0068	30 Hours
15	Leadership in Organizations	CUVA0069	30 Hours
16	Introduction to Qualitative Research Methodology	CUVA0071	30 Hours

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17	Knowledge Management	CUVA0072	30 Hours
18	Professional Etiquette	CUVA0073	30 Hours

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18 Proceedings of BOS Meeting held on 22-06-19

Minutes of the Meeting

Agenda - 1. Revision of Btech CSE Syllabus, Basket 3, 4 & 5
2. B Tech. CTLS

The BOS meeting was held in CUTM, BBSR on dated 22-06-19 for the session 2019-20. The course structure and syllabus for above mentioned programmes were presented to the members of BOS for their final approval. The following suggestioned were made,

- The course structure and syllabus was accepted without any changes. Following suggestions were discussed to strengthen the quality of delivery.

1) Few Industry lecture should be included in course pedagogy wherever applicable.
2) Fundamental and basic concept must be covered before projects and practical works are under taken.
3) It is suggested to keep advance java topics in the curriculum.
4) More Industry collaboration has to be done in order to expose students and faculty members to the real world problems and industry environment.

The meeting was concluded with vote of thanks to the member present.

Sl no.	Name	place/organization	Sig.
1.	Sanjib Kumar	Mindtree	
2.	Chandan Kumar Giri	CSE, CUTM, PKD	
3.	K. Santosh Ch. Rao	CSE, CUTM, PKD (HOD)	
4.	Surendra Nayak	CSE, CUTM, BBSR	

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CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Engineering & Technology

Department of Mechanical Engineering

Date: 22/06/2019

MINUTES OF BOARD OF STUDIES MEETING held on 22/06/2019

Venue: Board Room, CUTM, Bhubaneswar

Time: 11.00 a.m.

The Board of Studies (BoS) meeting of Department of Mechanical Engineering was held on 22/06/2019 at 11 a.m. in the Board Room, CUTM Bhubaneswar. The following are the members:

1. Prof. S. S. Mohapatra Professor, NIT Rourkela

2 Mr. Rabindra Saha, External Expert, Tata Technologies

3 Prof. Tapan Rath, Internal Expert

4 Prof. P. S. Rao, Internal Expert

5 Prof. Ramana Rao, Internal Expert

6 Prof. Ipsita Mishra, Internal Faculty

7 Prof. R. C. Mohanty, Internal Faculty

8 Prof. Sukant Nayak, Internal Faculty

9 Prof. Sudeep Kumar Singh, Internal Faculty

The Chairperson welcomed all members of the Board and briefly outlined the purpose of the meeting. Thereafter, the Head of the Department of Mechanical Engineering presented the achievements and improvements of the department in the areas of academics, research, consultancy and infrastructure.

The following agenda items were taken up subsequently:

Agenda 1: **The minutes of the last meeting of the BoS held on 30/06/2018 were confirmed.**

Agenda 2: **Discussion and approval on any revision required in the Curriculum of B.Tech, Mechanical Engg.**

The HoD, Mechanical Engg. gave a presentation on the feedback received on curriculum outlining the suggestions made by the various stakeholders. Based on this , the Board accepted and approved a few suggestions for course revision to be implemented from the Academic Year 2020-21.

- The syllabus was highly appreciated because the university follows Choice-based Credit system and courses relevant to the advancement in Mechanical Engineering are put in the syllabus.
- The members noted that the courses are mostly industry-oriented and also provide scope for competitive examination like UPSC, GATE etc. The members remarked that the syllabus is designed to enhance skill level of the students.

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- The syllabus offers scope for gaining knowledge in other branches of engineering. Also offers scope to enhance on knowledge in AI, Machine learning, Nano Technology, Data science, SAP etc.
- The syllabus is best suited for each semester, but certain courses need to be modified.
- The syllabus is good but as compared to the content of syllabus, the credits are very less.
- The syllabus is quiet useful. There should be more practice subjects to increase student efficiency and skill.
- The Board approved the updation of the courses important from higher studies point of view and replacement of contents of open basket with new courses with greater practice component. *(Annexure A.)*
- Discussion on modification of syllabus of Basket-5.
- The domain course should be taught in practice and project mode.
- The Board approved the changes suggested in the Introduction to Hybrid and Electric Vehicles, Fluid Power Control, Renewable Energy Systems, Fundamentals of Heat Engine as per the latest Software and technology being used by the industry. List of existing courses where syllabus was changed in *(Annexure B)*

Agenda 3: **Inclusion of courses on life skills and value addition**

It was suggested that students take up the various courses offered by the University in the areas of life skills and value addition for their overall improvement and well being.The same was agreed upon and approved by the Board members.*(Annexure C)*

The HoD, Department of Mechanical Engg. extended sincere thanks to all members of the Board.

The meeting ended with a voteof thanks to the Chair.

Dean, SoET

Dean, SOET
Centurion University of Technology & M[illegible]
Odisha

Dean, Academics

Dean - Academic
Centurion University of Technology & Management
Bhubaneswar, Khurda, Odisha-752050

HoD, Mechanical Engineering

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Annexure-A

List of new courses added

Sl. No	Course Title	Type(Skill/Employability/Entrepreneurship)	Credit
1	Quality Control and Reliability Engineering	Skill And Employability	3
2	Fluid Power Control	Skill And Employability	3
3	Introduction to Hybrid and Electric Vehicles	Skill And Employability	3
4	Renewable Energy Systems	Skill And Employability	3
5	Manufacturing Technology 1	Skill And Employability	3
6	Manufacturing Technology 2	Skill And Employability	3
7	Design for Manufacturing	Skill And Employability	3
8	Finite Element Analysis	Skill And Employability	3
9	Digital Manufacturing	Skill And Employability	3
10	Fundamentals of Heat Engine	Skill And Employability	3
11	Design of Thermal Energy Systems	Skill And Employability	3
12	Mechanics of Machines	Skill And Employability	3
13	Strength of Material	Skill And Employability	3
14	Design of Transmission Systems	Skill And Employability	3
15	Fluid Mechanics and Heat Transfer	Skill And Employability	3
16	Introduction to Automobile Engineering	Skill And Employability	3
17	Entrepreneurship Opportunities in Automobile Trade	Skill And Employability	3
18	Maintenance of Automobile	Skill And Employability	3
19	Design of Basic Automobile Components	Skill And Employability	3
20	Subsystems of	Skill And Employability	3

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	Automobile		
21	Design and Maintenance of Electric Vehicles	Skill And Employability	3
22	Project	Skill And Employability	3
23	Internship	Skill And Employability	3
24	Jigs and Fixtures	Skill And Employability	3
25	Process Planning and Cost Estimation	Skill And Employability	3
26	Conventional Machining for Cylindrical Shape Component	Skill And Employability	3
27	Conventional Machining for Prismatic Shape Component	Skill And Employability	3
28	CNC Machining	Skill And Employability	3
29	Non-Traditional Machining and 3D Printing	Skill And Employability	3
30	Wood Engineering	Skill And Employability	3
31	Project	Skill And Employability	3
32	Internship	Skill And Employability	3
33	Joining Processes & Technology	Skill And Employability	3
34	Arc Welding, Gas Welding & Brazing	Skill And Employability	3
35	Metal Transfer & Weld Metallurgy	Skill And Employability	3
36	Design of Welded Joints (CATIA)	Skill And Employability	3
37	Welding of Stainless Steel, Aluminium, Copper, Cast Iron and Hard Surfacing	Skill And Employability	3
38	Testing of Welded Joints (DT, NDT & Microstructure)	Skill And Employability	3
39	Project	Skill And Employability	3
40	Internship	Skill And Employability	3

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Centurion University

Annexure-B

List of existing courses where syllabus was changed

Basket/ Semester	Name of Course	No. of Modules/Topics revised	Revised Modules/Topics (details)
III	Introduction to Hybrid and Electric Vehicles	2	One module has been added and another module is partly modified depending on the industry requirement
IV	Fluid Power Control	1	One module has been added depending on the industry requirement
	Renewable Energy Systems	2	One module has been added and another module is partly modified depending on the industry requirement
	Fundamentals of Heat Engine	1	One module has been added depending on the industry requirement

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Centurion University

Annexure-C

List of Skill courses (Basket) approved

Sl. No	Course Title	Credit	(T+P+P)
1	Solar PV Installation	3	0+2+1
2	Solar Lighting Technology	3	0+2+1
3	Solar PV Microgrid System	3	0+2+1
4	Solar PV Driven Equipment O/M & Assembly	3	0+2+1
5	Solar Thermal Engineering	3	0+2+1

List of Domain courses approved

Sl. No	Domain Course Title	Credit	(T+P+P)
1	Automobile Engineering	24	8+12+10

List of value-added courses approved

Sl. No	Course Title	Hrs. of input
1	Introduction to python	30
2	Gender issue	30

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BOS MEETING (22/06/19)

17.81

Agenda – Approval of Mechanical engineering Basket IV and Basket V Syllabus For 2018 Batch students.

Date – 22/06/19

Venue – Cad lab, CIT Campus Jatani.

Member Present – Signature

1. Prof. S. K Mohapatra (NIT Rourkela) Mahapatra
2. Dr. S. Mohanty (Nilachal Ispat Nigam Ltd) Asst
3. Mr. Rabindra Sah (CUTM, BBSR)
4. Prof. P. K Rao (CUTM, PKD)
5. Dr. A. M Mohanty (Pro. VC)
6. Mr. Tapan Rath (CUTM, BBSR)
7. Dr. R. C Mohanty (CUTM, BBSR)
8. Prof. Amarit Mallick (CUTM, PKD) Amrit mallick.
9. Prajna Paramita Debata (HOD, ME)
10. Mrs Ipsita Mishra
11. Mr M. K Rath.
12. Sudeep Kumar Singh (Asst Prof. Mechanical Engg)

Centurion
UNIVERSITY

CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Engineering & Technology

Department of Civil Engineering

Date: 22/06/2019

MINUTES OF BOARD OF STUDIES MEETING held on 22/06/2019

Venue: Board Room, CUTM, Bhubaneswar

Time: 11.00 a.m.

The Board of Studies (BoS) meeting of Department of Civil Engineering was held on 22/06/2019 at 11 a.m. in the Board Room, CUTM Bhubaneswar. The following are the members:

1. Dr. Vazeer Mahmood, Professor, Dept of Civil Engg., Andhra University

2 Dr Siba Prasad Mishra, , Internal Expert

3 Prof. Prafulla Kumar Panda, Internal Expert

4 Prof. Sagarika Panda, Internal Expert

5 Prof. Kamal Kumar Barik, Internal Expert

6 Prof Rakesh Kumar Jena, Internal Expert

7 Prof Prashant Nayak, Internal Expert

The Chairperson welcomed all members of the Board and briefly outlined the purpose of the meeting. Thereafter, the Head of the Department of Civil Engineering presented the achievements and improvements of the department in the areas of academics, research, consultancy and infrastructure.

The following agenda items were taken up subsequently:

Agenda 1: **The minutes of the last meeting of the BoS held on 30/06/2018 were confirmed.**

Agenda 2: **Discussion and approval on any revision required in the Curriculum of B.Tech, Civil Engg. , M.Tech Structural Engineering and M.Tech Transportation Engg.**

The HoD, Civil Engg. gave a presentation on the feedback received on curriculum outlining the suggestions made by the various stakeholders. Based on this , the Board accepted and approved a few suggestions for course revision to be implemented from the Academic Year 2020-21.

- The syllabus was highly appreciated because the university follows Choice-based Credit system and courses relevant to the advancement in Mechanical Engineering are put in the syllabus.
- The members noted that the courses are mostly industry-oriented and also provide scope for competitive examination like UPSC, GATE etc. The members remarked that the syllabus is designed to enhance skill level of the students.
- The syllabus offers scope for gaining knowledge in other branches of engineering. Also offers scope to enhance on knowledge in AI, Machine learning, Nano Technology, Data science, SAP etc.
- The syllabus is best suited for each semester, but certain courses need to be modified.
- The syllabus is good but as compared to the content of syllabus, the credits are very less.

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- The syllabus is quiet useful. There should be more practice subjects to increase student efficiency and skill.
- The Board approved the updation of the courses important from higher studies point of view and replacement of contents of open basket with new courses with greater practice component.*(Annexure A.)*
- Discussion on modification of syllabus of Basket-5.
- The domain course should be taught in practice and project mode.
- The Board approved the changes suggested in the Hydraulics and Hydraulic machine, Disaster Management, Transportation Engg. And Water supply and sanitary engineering as per the latest Software and technology being used by the industry. List of existing courses where syllabus was revised in (*Annexure B & C)*

Agenda 3: **Inclusion of courses on life skills and value addition**

It was suggested that students take up the various courses offered by the University in the areas of life skills and value addition for their overall improvement and well being.The same was agreed upon and approved by the Board members.*(Annexure D)*

The HoD, Department of Civil Engg. extended sincere thanks to all members of the Board.

The meeting ended with a voteof thanks to the Chair.

22.06.19

HOD
Dept. of Civil Engineering
Centurion University of
Technology & Management,BBSR

Dean, SoET

Dean, SOET
Centurion University of Technology & Management
Odisha

Dean, Academics

Dean - Academic
Centurion University of Technology & Management
Bhubaneswar, Khurda, Odisha-752050

HoD, Civil Engineering

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Annexure-A

List of new courses added

Sl. No	Course Title	Type(Skill/Employability/Entrepreneurship)	Credit
1	Disaster Preparedness & Planning management	Skill And Employability	2
2	Functional Planning & DPR	Skill And Employability	3
3	Site Supervision & Measurement Methods.	Skill And Employability	4
4	Tendering Process, Bidding Contract, Agreements & Arbitration.	Skill And Employability	3
5	Green Building Design	Skill And Employability	3
6	Barrier Free Design	Skill And Employability	2
7	Intelligent Building Design	Skill And Employability	2
8	3D Modelling and VR experience of Building	Skill And Employability	4
9	Geospatial Technology and its Application	Skill And Employability	5
10	Photogrammetry and its Application	Skill And Employability	4
11	Concrete Technology	Skill And Employability	2

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Annexure-B

List of existing courses where syllabus was revised

Basket/ Semester	Name of Course	No. of Modules/ Topics revised	Revised Modules/Topics (details)
IV	Pre-Fabricated Structures	1	One module has been added depending on the industry requirement
IV	Soil Mechanics	2	One module has been added depending on the industry requirement
IV	Transportation Engineering	2	One module has been added and another module is merged with slight change as per industry requirement
IV	Water supply & Waste water Management	1	One module has been added depending on the industry requirement
IV	Hydrology & Water Resources Engineering	1	One module has been added depending on the industry requirement
IV	Quality Control and Risk Management in Construction	1	One module has been added depending on the industry requirement
IV	Geotechnical Investigations	1	One module has been added depending on the industry requirement
IV	Repairs, Renovation and Rehabilitation of Structures	1	One module has been added depending on the industry requirement
IV	Software Based Project Scheduling and Management	1	One module has been added depending on the industry requirement
IV	Earthquake Resistant Design	1	One module has been added depending on the industry requirement
IV	Architectural Design	1	One module has been added depending on the industry requirement
IV	Remote Sensing & Digital Image Processing	1	One module has been added depending on the industry requirement
IV	Lidar Remote Sensing and its Applications	1	One module has been added depending on the industry requirement
IV	Smart City Planning	1	One module has been added depending on the industry requirement

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Annexure-C

List of existing M.Tech courses where syllabus was revised

M Tech Structural Engineering			
Sl no	**Name of Course**	**No. of Modules/Topics revised**	**Revised Modules/Topics (details)**
1	Advanced Structural Analysis	1	One module has been added depending on the industry requirement
2	Structural Dynamics	1	One module has been added depending on the industry requirement
3	Theory of Elasticity & Plasticity	1	One module has been added depending on the industry requirement
4	Bridge Engineering	1	One module has been added depending on the industry requirement
5	Computer Graphics	1	One module has been added depending on the industry requirement
6	Finite Element Method	1	One module has been added depending on the industry requirement
7	Concrete Technology	1	One module has been added depending on the industry requirement
8	Structural Engineering Lab	1	One module has been added depending on the industry requirement
9	Renovation and retrofitting of green structures	1	One module has been added depending on the industry requirement
10	Soil Dynamics and Geotechnical Earthquake Engineering	1	One module has been added depending on the industry requirement
M Tech Transportation Engineering			
1	Pavement Analysis and Design	1	One module has been added depending on the industry requirement
2	Highway Project formulation and Economics	1	One module has been added depending on the industry requirement
3	Traffic Safety	1	One module has been added depending on the industry requirement
4	Remote Sensing and GIS for Transportation Engineering	1	One module has been added depending on the industry requirement
5	Pavement Evaluation, Rehabilitation and Maintenance	1	One module has been added depending on the industry requirement
6	Highway Project formulation and Economics	1	One module has been added depending on the industry requirement

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Annexure-D

List of Skill courses (Basket) approved

Sl. No	Course Title	Credit	(T+P+P)
1	Refraction Technology	3	0÷2÷1
2	Emergency Medical Technology	3	0÷2÷1
3	Medical Lab Technology	3	0÷2÷1
4	Operating Theatre Technology	3	0÷2÷1
5	Radiology Technology	3	0÷2÷1
6	Phlebotomy Technology	3	0÷2÷1
7	First Aid Service	3	0÷2÷1
8	General Duty Assistance Service	3	0÷2÷1
9	X- ray Technology	3	0÷2÷1
10	Retail Sales	3	0÷2÷1
11	Basketball	3	0÷2÷1
12	Gym Fitness	3	0÷2÷1
13	Swimming	3	0÷2÷1
14	Yoga & Meditation	3	0÷2÷1
15	Solar PV Installation	3	0÷2÷1
16	Solar Lighting Technology	3	0÷2÷1
17	Solar PV Microgrid System	3	0÷2÷1
18	Solar PV Driven Equipment O/M & Assembly	3	0÷2÷1
19	Solar Thermal Engineering	3	0÷2÷1

List of Domain courses approved

Sl. No	Domain Course Title	Credit	(T+P+P)
1	Automobile Engineering	24	8÷12÷10
2	Operation and Maintenance of Electrical Grid System & Transformers	24	8÷12÷10

List of value-added courses approved

Sl. No	Course Title	Hrs. of input
1	LSD-2	30
2	Conduct in daily Life-Insights from The Panchatantra	30
3	Human Rights	30
4	Renewable Energy	30
5	Data science & ML	30
6	Introduction to Nutraceuticals	30
7	Introduction to Tableau	30
8	Basics of Photography	30
9	Innovation Management	30

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10	Effective Writing	30
11	Indian Culture and History	30
12	Critical Thinking	30
13	Disability, Diversity and Development	30
14	Intellectual Property Rights	30
15	Emotional Intelligence	30
16	Home remedies for healthy living	30
17	Self-Management: Insights from Srimad Bhagavad Gita	30

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Proceedings of board of studies in Civil Engg Dept held on 22nd June 2019 at Jatni Campus

Considered the syllabus basket - IV & V and following recommendations were made.

Basket - IV.

CECC-0103 - Hydraulics and Hydraulic Machine.

module - 1. Integral momentum Equation (only Introduction)
Add - Introduction to NC Fctn
module - Inclusion of Air foil - module - 4 - Sudden Transition should mention mode - 5, GVF - surface profiles, direct step method.

Disaster management.

module - 3, Title - should change to manmade disaster

Estimation: Addition of few theory lectures

Foundation CT - Module 1 XRF should to be made optional

module - 7 - Addition of liquification,
overall concept should be involve subsurface design in all practices

Transportation

module - 1 - Types of road should included

module - 6 - To be shifted to module - 2 with subsequent changes.

Water supply

module - Design of water supply system instead of prepared one.

Irrigation

module - 7 - Addition of Reservoir types, capacity etc.
Practice Part (B) addition of Estimation of a design discharge for a given project.

Ref. Book.

Irrigation Eng B.C. Punmia.

Domain - 5

-) Geo Technical investigation.
Module-6: Necessity of Water Table Study in Geo Technical Engg.
-) Title of the course project management/ project Survey management shall be chgd.

1. Dr. (Prof). Vazeer Mahammood 22.06.2019
2. Prof. Prafulla Kumar Panda Panda 22.06.19
3. Prof. Sagarika Panda 22/6/2019
4. Prof. Kamal Ku. Barik 22-06-19
5. Prof. Rakesh Kumar Jena 22.06.19
6. Prof. Prashant Nayak Prasant 22-06-19

Proceedings of the Board of studies in M.Sc in Geoinformatics held on 22.06.2019.

1151

Members Presents:-

1. Prof. K.M. Setty
2. Rudra Narayan Tripathy
3. Anjan Kumar Mallick.
4. Kamal Kumar Barik - Convenor.
5. Sagarika Panda - HOD, Civil

Business.

1. Resolved that the nomenculture M.Sc. in Geomatics should be changes to M.Sc in "Geoinformatics".
2. Minor change in Syllabus has been made.
3. In III semster one min project has been added as compulsory subject of "4" credits with a report and presentation.
4. In IV Semster "4" credit "web GIS" has been included. The project will be '20' credits.

22/6/19.

22.6.19

22/06/19

22-06-19

22/6/2019

Centurion
UNIVERSITY

CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Engineering & Technology

Department of Civil Engineering

Date: 22/06/2019

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- The syllabus is best suited for each semester, but certain courses need to be modified.
- The syllabus is good but as compared to the content of syllabus, the credits are very less.

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- The syllabus is quiet useful. There should be more practice subjects to increase student efficiency and skill.
- The Board approved the updation of the courses important from higher studies point of view and replacement of contents of open basket with new courses with greater practice component.*(Annexure A.)*
- Discussion on modification of syllabus of Basket-5.
- The domain course should be taught in practice and project mode.
- The Board approved the changes suggested in the Hydraulics and Hydraulic machine, Disaster Management, Transportation Engg. And Water supply and sanitary engineering as per the latest Software and technology being used by the industry. List of existing courses where syllabus was revised in (*Annexure B & C)*

Agenda 3: **Inclusion of courses on life skills and value addition**

It was suggested that students take up the various courses offered by the University in the areas of life skills and value addition for their overall improvement and well being.The same was agreed upon and approved by the Board members.*(Annexure D)*

The HoD, Department of Civil Engg. extended sincere thanks to all members of the Board.

The meeting ended with a voteof thanks to the Chair.

22.06.19

HOD
Dept. of Civil Engineering
Centurion University of
Technology & Management,BBSR

Dean, SoET

Dean, SOET
Centurion University of Technology & Management
Odisha

Dean, Academics

Dean - Academic
Centurion University of Technology & Management
Bhubaneswar, Khurda, Odisha-752050

HoD, Civil Engineering

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Annexure-A

List of new courses added

Sl. No	Course Title	Type(Skill/Employability/Entrepreneurship)	Credit
1	Disaster Preparedness & Planning management	Skill And Employability	2
2	Functional Planning & DPR	Skill And Employability	3
3	Site Supervision & Measurement Methods.	Skill And Employability	4
4	Tendering Process, Bidding Contract, Agreements & Arbitration.	Skill And Employability	3
5	Green Building Design	Skill And Employability	3
6	Barrier Free Design	Skill And Employability	2
7	Intelligent Building Design	Skill And Employability	2
8	3D Modelling and VR experience of Building	Skill And Employability	4
9	Geospatial Technology and its Application	Skill And Employability	5
10	Photogrammetry and its Application	Skill And Employability	4
11	Concrete Technology	Skill And Employability	2

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Annexure-B

List of existing courses where syllabus was revised

Basket/ Semester	Name of Course	No. of Modules/ Topics revised	Revised Modules/Topics (details)
IV	Pre-Fabricated Structures	1	One module has been added depending on the industry requirement
IV	Soil Mechanics	2	One module has been added depending on the industry requirement
IV	Transportation Engineering	2	One module has been added and another module is merged with slight change as per industry requirement
IV	Water supply & Waste water Management	1	One module has been added depending on the industry requirement
IV	Hydrology & Water Resources Engineering	1	One module has been added depending on the industry requirement
IV	Quality Control and Risk Management in Construction	1	One module has been added depending on the industry requirement
IV	Geotechnical Investigations	1	One module has been added depending on the industry requirement
IV	Repairs, Renovation and Rehabilitation of Structures	1	One module has been added depending on the industry requirement
IV	Software Based Project Scheduling and Management	1	One module has been added depending on the industry requirement
IV	Earthquake Resistant Design	1	One module has been added depending on the industry requirement
IV	Architectural Design	1	One module has been added depending on the industry requirement
IV	Remote Sensing & Digital Image Processing	1	One module has been added depending on the industry requirement
IV	Lidar Remote Sensing and its Applications	1	One module has been added depending on the industry requirement
IV	Smart City Planning	1	One module has been added depending on the industry requirement

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Annexure-C

List of existing M.Tech courses where syllabus was revised

M Tech Structural Engineering			
Sl no	**Name of Course**	**No. of Modules/Topics revised**	**Revised Modules/Topics (details)**
1	Advanced Structural Analysis	1	One module has been added depending on the industry requirement
2	Structural Dynamics	1	One module has been added depending on the industry requirement
3	Theory of Elasticity & Plasticity	1	One module has been added depending on the industry requirement
4	Bridge Engineering	1	One module has been added depending on the industry requirement
5	Computer Graphics	1	One module has been added depending on the industry requirement
6	Finite Element Method	1	One module has been added depending on the industry requirement
7	Concrete Technology	1	One module has been added depending on the industry requirement
8	Structural Engineering Lab	1	One module has been added depending on the industry requirement
9	Renovation and retrofitting of green structures	1	One module has been added depending on the industry requirement
10	Soil Dynamics and Geotechnical Earthquake Engineering	1	One module has been added depending on the industry requirement
M Tech Transportation Engineering			
1	Pavement Analysis and Design	1	One module has been added depending on the industry requirement
2	Highway Project formulation and Economics	1	One module has been added depending on the industry requirement
3	Traffic Safety	1	One module has been added depending on the industry requirement
4	Remote Sensing and GIS for Transportation Engineering	1	One module has been added depending on the industry requirement
5	Pavement Evaluation, Rehabilitation and Maintenance	1	One module has been added depending on the industry requirement
6	Highway Project formulation and Economics	1	One module has been added depending on the industry requirement

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Annexure-D

List of Skill courses (Basket) approved

Sl. No	Course Title	Credit	(T+P+P)
1	Refraction Technology	3	0÷2÷1
2	Emergency Medical Technology	3	0÷2÷1
3	Medical Lab Technology	3	0÷2÷1
4	Operating Theatre Technology	3	0÷2÷1
5	Radiology Technology	3	0÷2÷1
6	Phlebotomy Technology	3	0÷2÷1
7	First Aid Service	3	0÷2÷1
8	General Duty Assistance Service	3	0÷2÷1
9	X- ray Technology	3	0÷2÷1
10	Retail Sales	3	0÷2÷1
11	Basketball	3	0÷2÷1
12	Gym Fitness	3	0÷2÷1
13	Swimming	3	0÷2÷1
14	Yoga & Meditation	3	0÷2÷1
15	Solar PV Installation	3	0÷2÷1
16	Solar Lighting Technology	3	0÷2÷1
17	Solar PV Microgrid System	3	0÷2÷1
18	Solar PV Driven Equipment O/M & Assembly	3	0÷2÷1
19	Solar Thermal Engineering	3	0÷2÷1

List of Domain courses approved

Sl. No	Domain Course Title	Credit	(T+P+P)
1	Automobile Engineering	24	8÷12÷10
2	Operation and Maintenance of Electrical Grid System & Transformers	24	8÷12÷10

List of value-added courses approved

Sl. No	Course Title	Hrs. of input
1	LSD-2	30
2	Conduct in daily Life-Insights from The Panchatantra	30
3	Human Rights	30
4	Renewable Energy	30
5	Data science & ML	30
6	Introduction to Nutraceuticals	30
7	Introduction to Tableau	30
8	Basics of Photography	30
9	Innovation Management	30

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10	Effective Writing	30
11	Indian Culture and History	30
12	Critical Thinking	30
13	Disability, Diversity and Development	30
14	Intellectual Property Rights	30
15	Emotional Intelligence	30
16	Home remedies for healthy living	30
17	Self-Management: Insights from Srimad Bhagavad Gita	30

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Proceedings of board of studies in Civil Engg Dept held on 22nd June 2019 at Jatni Campus

Considered the syllabus basket - IV & V and following recommendations were made.

Basket - IV.

CECC-0103 - Hydraulics and Hydraulic Machine.

module - 1. Integral momentum Equation (only Introduction)
Add - Introduction to NC Fetun
module - Inclusion of Air foil - module - 4 - Sudden Transition should mention mode - 5, GVF - surface profiles, direct step method.

Disaster management.

module - 3, Title - should change to manmade disaster

Estimation: Addition of few theory lectures

Foundation CT - Module 1 XRF should to be maid optional

module - 7 - Addition of liquification,
overall concept should be involve subsurface design in all practices

Transportation

module - 1 - Types of road should included

module - 6 - To be shifted to module - 2 with subsequent changes.

Water supply

module - Design of water supply system instead of prepared one.

Irrigation

module - 7 - Addition of Reservoir types, capacity etc.
Practice Part (B) addition of Estimation of a design discharge for a given project.

Ref. Book.

Irrigation Eng B.C. Punmia.

Domain - 5

-) Geo Technical investigation.
Module-6: Necessity of Water Table Study in Geo Technical Engg.
-) Title of the course project management/ project Survey management shall be chgd.

1. Dr. (Prof). Vazeer Mahammood 22.06.2019
2. Prof. Prafulla Kumar Panda Panda 22.06.19
3. Prof. Sagarika Panda 22/6/2019
4. Prof. Kamal Ku. Barik 22-06-19
5. Prof. Rakesh Kum Jena 22.06.19
6. Prof. Prashant Nayak Prasant 22-06-19

Proceedings of the Board of studies in M.Sc in Geoinformatics held on 22.06.2019.

1151

Members Presents:-

1. Prof. K.M. Setty
2. Rudra Narayan Tripathy
3. Anjan Kumar Mallick.
4. Kamal Kumar Barik - Convenor.
5. Sagarika Panda - HOD, Civil

Business.

1. Resolved that the nomenculture M.Sc. in Geomatics should be changes to M.Sc in "Geoinformatics".
2. Minor change in Syllabus has been made.
3. In III semster one min project has been added as compulsory subject of "4" credits with a report and presentation.
4. In IV Semster "4" credit "web GIS" has been included. The project will be '20' credits.

22/6/19.

22.6.19

22/06/19

22-06-19

22/6/2019

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CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Engineering & Technology

Department of Electrical & Electronics Engineering

Date: 22.06.2019

MINUTES OF BOARD OF STUDIES MEETING held on 22.06.2019

Venue: Room No. – 104 , CUTM, Bhubaneswar

Time: 11.00 a.m.

The Board of Studies (BoS) meeting of Department of EEE was held on 22.06.2019 at 11 a.m. in the Room No.-104 , CUTM Bhubaneswar. The following are the Board members:

1. Prof. P.K. Pradhan, Ex-Director -Commerce, GRIDCO (Industry Expert)
2. Prof. P.K.Hota, VSSUT, Burla (Academician)
3. Prof. Jagannath Padhi, Director, CIT (Internal Expert)
4. Prof. Abhinna Chandra Biswal, Professor, CIT
5. Prof. Amit Kumar Sahoo, HoD, CIT (Faculty)
6. Prof. Manoj Samal, HoD, CIT (Faculty)

The Chairperson welcomed all members of the Board and briefly outlined the purpose of the meeting. Thereafter, the Head of the Department of EEE presented the achievements and improvements of the department in the areas of academics, research, consultancy and infrastructure.

The following agenda items were taken up subsequently:

Agenda 1: **The minutes of the last meeting of the BoS held on 30.06.2018 were confirmed.**

Agenda 2: **Discussion and approval on any revision required in the Curriculum of B.Tech, EEE.**

The HoD, EEE gave a presentation on the feedback received on curriculum outlining the suggestions made by the various stakeholders. Based on this , the Board accepted and approved a few suggestions for course revision to be implemented from the Academic Year 2019-20.

1. Renaming of few subjects were suggested as below
   a) Power System Market and Regulation suggested to be renamed as Power System Market, Acts and Regulation (in Basket 5)
   b) The domain name - Design, fabrication and repair of Transformer up to 33kV should be renamed as Design, Fabrication and Repair of Distribution Transformer (Basket 5)
2. One new course – Soft Computing is to be added in open basket courses. The pre-requisite for this paper will be 'Soft Computing I'. The existing Soft Computing paper is to be renamed as 'Soft Computing I'
3. More FDPs should be organized, particularly in the domain areas.
4. The Board approved the updation of the courses important from higher studies point of view and replacement of contents of open basket with new courses with greater practice component. List of new courses added in *(Annexure A.)*
5. The Board approved the changes suggested in the Distributed Generation & Microgrid, Power System Protection as per the latest Software and technology being used by the industry. Many changes were incorporated in M.Tech. power System & Control Syllabus. List of existing courses where syllabus was changed in *(Annexure B)*

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Discussion and approval on any revision required in the Curriculum of M.Tech. Power System & Control.

- The M.Tech Power System & Control Syllabus was revised completely to make it as per industrial requirements..
- Contents of the following courses got completely changed in M. Tech Power System & Control Syllabus as per industry requirement such as Microcontroller Application with PLC, SCADA Compatible with all PLC, Advanced Electrical in Automation, Sensors and VFD Interface to PLC and SCADA, SCADA Compatible with Fixed Brand of PLC, Distributed Control System, Power System Monitoring by HMI, POWER SYSTEM SECURITY, DIGITAL SIGNAL PROCESSING APPLICATIONS IN POWER SYSTEM PROTECTION.
- It was decided to offer the M.Tech. program in an industry integrated platform focussing on process automation so as to enable working professionals to take the course and enable the regular students to focus on industry related project while doing thesis work.

Agenda 3: **Inclusion of courses on life skills and value addition**

Students were asked to take up the various courses offered by the University in the areas of life skills and value addition for their overall improvement and well being.The same was agreed upon and approved by the Board members.*(Annexure C)*

Agenda 4:

GATE Training was introduced in the timetable for final year students to encourage students to go for higher studies and to compete for PSU jobs.

The HoD. Department of EEE extended sincere thanks to all members of the Board.

The meeting ended with a voteof thanks to the Chair.

Dean, SoET

Dean, SOET
Centurion University of Technology & Manage
Odisha

Dean, Academics

Dean - Academic
Centurion University of Technology & Management
Bhubaneswar, Khurda, Odisha-752050

HoD, EEE Department

H.O.D (EEE)
CENTURION UNIVERSITY
OF
TECHNOLOGY AND MANAGEMENT

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Annexure-A

List of new courses added (B.Tech.)

Sl. No.	Course Title	Type(Skill/Employability/Entrepreneurship)	Credit
1	Electrical Workshop Practice	Skill development	2
2	Basic Electrical Engineering	Skill development	3
3	Electrical Machines	Skill development	3
4	Introduction to automation	Skill development	3
5	Transmission & Distribution	Skill development	3
6	Power System Operation & Control	Skill development	3
7	Distributed Generation & Micro Grid	Skill development	2
8	Soft Computing Techniques - I	Skill development	2
9	Electrical Circuit Drawing (Using Auto CAD)	Skill development	2
10	Network Theory	Skill development	3
11	Electronic Measurement & Instrumentation	Skill development	3
12	Linear Integrated Circuits & Application	Employability	3
13	Power Electronics	Skill development	5
14	Micro Controllers for Industrial Application (PIC)	Skill development	4

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15	Control System	Skill development	5
16	Microprocessor and its Interfacing	Skill development	2
17	Digital Electronic Circuits	Employability	4
18	Digital Signal Processing	Employability	4
19	General PLC	Skill development	2
20	Basic Electrical (Automation based) and Panel Designing	Skill development	2
21	Supervisory Control and Data Acquisition (SCADA)	Skill development	3
22	Micro Range Programmable Logic Controller	Skill development	3
23	Small Range Programmable Logic Controller	Skill development	3
24	Medium Range Programmable Logic Controller	Skill development	3
25	Human Machine Interface (HMI)	Skill development	2
26	Variable Frequency Drive	Skill development	2
27	Project	Skill development	6
28	Internship	Skill development	4
29	Modern Transmission and Distribution System	Skill development	3

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30	Operation and Testing of Power and Distribution Transformer	Skill development	3
31	System Protection and Auxiliaries	Skill development	3
32	Construction of HT and LT lines and Cables	Skill development	3
33	Safety Practice and First Aid	Skill development	2
34	Electrical System Layout and Drawing	Skill development	2
35	Power System Market, Act and Regulations	Employability	4
36	Project	Skill development	6
37	Internship	Employability	4
38	Design of Transformer Core and Winding	Skill development	4
39	Manufacturing of Transformer HT and LT Winding	Skill development	2
40	Manufacturing of Transformer Tank and Accessories	Skill development	2
41	Testing and Commissioning	Skill development	5
42	Safety and Protection	Skill development	2
43	Transformer Repair and Maintenance	Skill development	5
44	Project	Skill development	6
45	Internship	Employability	4
46	Renewable Energy Sources and Technology	Skill development	3

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47	Solar Photovoltaic Technology	Skill development	3
48	Solar Thermal Technology	Skill development	3
49	Solar Systems for Buildings	Skill development	5
50	Solar Power Plant	Skill development	5
51	Decentralized and Smart Power Grids	Skill development	5
52	Solar Photovoltaic Laboratory	Skill development	2
53	Solar Thermal Laboratory	Skill development	2
54	Project	Skill development	6
55	Internship	Skill development	4
56	Power System Generation	Skill development	3
57	Electromagnetic Theory	Employability	3
58	Power Quality and FACTS	Skill development	3
59	Soft Computing Techniques - II	Skill development	3
60	Basic Electrical Maintenance	Skill development	3
61	Automotive Electrician	Skill development	3
62	Advanced Power Electronics	Skill development	5
63	Electrical Drives	Skill development	5
64	Advance Control System	Skill development	5
65	Instrumentation and Measurement	Skill development	3

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Annexure-B

List of existing courses where syllabus was changed (B.Tech.)

Basket/ Semester	Name of Course	No. of Modules/Topics revised	Revised Modules/Topics (details)
IV	Electronic Measurement & Instrumentation	7	**Module I** : Basics of Measurements **Module II**: Temperature measurement **Module III** : Pressure Measurement **Module IV**: Displacement measurement **Module V**: Converters and Flow measurement **Module VI**: Signal Analyzers **Module VII**: Oscilloscopes

List of existing courses where syllabus was changed (M.Tech.)

Basket/ Semester	Name of Course	No. of Modules/Topics revised	Revised Modules/Topics (details)
1st Semester	*Microcontroller Application with PLC*	7	**Module-I:** *Introduction***Module-** **Module-II:** *Architecture ofControllers* Module-III: *Addressing* **Module-IV:** *HardwareLinking* Module-V: *Programming Basics* **Module-6:** *Timers,Counter, Compare* Module-7:*DifferentOperational Blocks*
1st Semester	*SCADA-*	7	**Module-1** *Introduction ofScada*

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	Compatible with all PLC		**Module-2** *Introduction toIntouch* **Module-3** *Toolbars* **Module-4** *Wizards* **Module-5** *In touch SCADAFeatures-1* **Module-6** *In touch SCADAFeatures-2* **Module-7** *In touch SCADA Features-3*
1st Semester	*Advanced Electrical in Automation*	7	**Module-1** **Introduction** **Module-2** **Power Supply** **Module-3** **Basic Industrial Switches & Sensors** **Module-4** **Relay** **Module-5** **Contactor** **Module-6** **Panel Designing** **Module-7** **Starter Wiring**
1st Semester	*Sensors and VFD Interface to PLC and SCADA*	1	**Module-1** Interface of different sensors (Temp, CT, VT, OPTO) and DRIVE (VFD) to PLC& SCADA.
2nd Semester	*SCADA-Compatible with Fixed Brand of PLC*	7	**Module-I** *Introduction ofSCADA* **Module-II** *Introduction toRs-View 32* **Module-III** *Toolbars* **Module-IV** *Wizards* **Module-V** *Rs-View 32SCADA Features* **Module-VI** *Rs-View 32 SCADA Features* **Module-VII** *RS-View 32 SCADA Features*
2nd Semester	*Distributed Control System*	7	**Module-1** *Introduction ofDCS* **Module-2**

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			Introduction toDCS 800F (ABB) Module-3 *Toolbars* Module-4 *EngineeringStation* Module-5 *Process Station* Module-6 *OperatorsStation* Module-7 *Programming and SCADA*
2nd Semester	*Power System Monitoring by HMI*	7	Module-1 *Introduction* Module-2 *Application Development* Module-3 *Working onSoftware* Module-4 *Control Window* Module-5 *Property WindowBasics* Module-6 *Designing ofApplication* Module-7 *DifferentDynamicDisplays*
2nd Semester	*POWER SYSTEM SECURITY*	3	Module-I *Introduction toPower System Operations inPowerSystemSecurity State Estimation Optimal Power Flow* Module-II *Security Assessment* Module-III *Security EnhancementRecent Techniques*
2nd Semester	*DIGITAL SIGNAL PROCESSING APPLICATIONS IN POWER SYSTEM PROTECTION*	3	Module-I *Abnormal States in Power Systemsand Criteria for Their Recognition Hardware andFunctional Development of Protection Devices and Systems Fundamentals ofSystem Analysis and Synthesis Infinite ImpulseResponse (IIR) Filters Finite Impulse Response (FIR)Filters* Module-II *Measurement Algorithms for Digital ProtectionCharacteristic of Measurement ofCriterion Valuesand AdaptiveAlgorithms Decision Makingin ProtectiveRelays Application ofArtificial Neural*

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			Network **Module-III** *Genetic and Evolutionary Algorithms forPower System Protection Expert SystemsArtificial Intelligence: Summary and Hybrid Schemes*

Annexure-C

List of Skill courses (Basket) approved

Sl. No.	Course Title	Credit
1	Refraction Technology	4
2	Emergency Medical Technology	4
3	Medical Lab Technology	4
4	Operating Theatre Technology	4
5	Radiology Technology	4
6	Phlebotomy Technology	4
7	First Aid Service	4
8	General Duty Assistance Service	4
9	X- ray Technology	4
10	Retail Sales	4
11	Basketball	4
12	Gym Fitness	4
13	Swimming	4
14	Yoga & Meditation	4
15	Solar PV Installation	4
16	Solar Lighting Technology	4
17	Solar PV Microgrid System	4
18	Solar PV Driven Equipment O/M & Assembly	4

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19	Solar Thermal Engineering	4

List of Domain courses approved

Sl. No	Domain Course Title	Credit	(T+P+P)
1	Fundamentals of industrial Automation	24	6-14-10
2	Design, Fabrication and Repair of transformer upto 33Kv level	26	2-16-8
3	Operation and Maintenance of Transmission and Distribution Systems	30	12-12-6

List of value added courses approved

Sl. No	Course Title	Hrs. of input
1	The Mind-Its mysteries and conquest	30 Hours
2	Understanding Personality-The Bhagavad Gita Perspective	30 Hours
3	Understanding Leadership - The Valmiki Ramayana Perspective	30 Hours
4	Organic Farming	30 Hours
5	Urban Kitchen gardens using Hydroponics	30 Hours
6	Introduction to PowerBI	30 Hours
7	Introduction to Python	30 Hours
8	Food & Nutrition	30 Hours
9	Behavioural Economics	30 Hours
10	Nutrition for Healthy Living	30 Hours
11	Conflict Resolution	30 Hours
12	Gender issues in Contemporary times	30 Hours
13	Natural Resource Management	30 Hours
14	Rural Livelihood and Promotion	30 Hours
15	Leadership in Organizations	30 Hours
16	Introduction to Qualitative Research Methodology	30 Hours
17	Knowledge Management	30 Hours
18	Professional Etiquette	30 Hours

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12 Date :- 22/06/19

Sl. No	Name	Designation / Place	Signature
1	Dr. P. K. Pradhan	Ex. Director COM, GRIDCO	
2	Dr. A.C. Biswal	Professor, EEE CUTM,	
3	Dr. P. K. Hota	Professor, EE USSUT, Burla	
4	Prof. Jagannath Padhi	Director, CIT	
5	Mr. Amit Ku. Sahoo	HOD, EEE, CIT	
6	Mr. Manoj Samal	HOD, EEE, PKD	

Centurion University

CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Paramedics and Allied Health Sciences

Date: 22/06/2019

MINUTES OF BOARD OF STUDIES MEETING held on 22/06/2019

Venue: Board Room, CUTM, Bhubaneswar

Time: 11.00 AM

The Board of Studies (BoS) meeting of School of Paramedics and Allied Health Sciences was held on **22/06/2019** at 11 AM in the Board Room, CUTM Bhubaneswar.

The following members were present:

1. Dr. Debi Prasad Rath, M.D. Pathology
2. Dr. Debasish Sahoo, M.D. Microbiology
3. Dr. Amalendu Choudhary, Hi-Tech Medical College and Hospital
4. Prof. Sunil Kumar Jha, Dean SoPAHS
5. Dr. Soumya Jal, HoD SoPAHS
6. Ms. Sonali Dash, Faculty SoPAHS

All the members were welcomed to the session by the Chairperson and were briefed regarding the purpose of the meeting. Thereafter, the Dean of SoPAHS presented on the achievements, improvements of the department in terms of academics and infrastructure.

Following are the programs offered by SoPAHS:

MSc Medical Laboratory Technology (MSc MLT)
MSc Applied and Clinical Microbiology (MSc CMB)
BSc Medical Laboratory Technology (BSc MLT)
BSc Clinical Microbiology (BSc CMB)
BSc Medical Radiation Technology (BSc MRT)
BSc Optometry (BSc Optom)

Agenda of the meeting:

Agenda 1: **The minutes of the last meeting of the BoS held on 30.06.2018 were confirmed.**

Agenda 2: **Discussion and approval on the content of syllabus for various courses of SoPAHS.**

At first, the Dean of the school presented the feedback received from several stakeholders, on the curriculum of its various departments. With respect to the feedback received from the stakeholders, the committee discussed and approved for incorporation/ modifications in the curriculum for the Academic session 2019-18.

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- The nomenclature for BSc Radiology and Imaging Technology was changed to BSc Medical Radiation Technology (BSc MRT) based on the requirement of the DMET council, Odisha.
- The structure and content for the courses of BSc Medical Radiation Technology, BSc Optometry were discussed and approved without any further revision.
- The committee approved to introduce the following programmes in SoPAHS:
  Bachelor of Physiotherapy;
  BSc MLT (Work Integrated);
  BSc Anaesthesia Technology;
  BSc OT-AT.
- Based on the feedback received from the stakeholders to incorporate more practical aspects, the committee approved modifications into the curriculum of the MLT; MSc MLT; BSc CMB; MSc CMB.
- Clinical Pathology was incorporated to the syllabus of MLT and CMB departments, based on the industrial need.
- It was also suggested to incorporate molecular diagnostic techniques into the curriculum of MLT and CMB.
- The committee discussed to emphasize on the research-based learning of the students, and therefore, Mini project was incorporated into the curriculum.
- The courses were structured to enhance the skill and industry-based learning and to improve scopes for competitive examinations.
- New courses added into the curriculum are provided in *Annexure A*.
- Modifications in syllabus are provided in *Annexure B*.

Agenda 3: **Inclusion of courses on Domain, life skills and value addition**

For their overall development and wellbeing of the students, it was advised that students enroll in the various life skills and value-adding courses that are offered by the university. The Board members agreed and gave their approval to the same.

Deatials of Domain courses, life skill and value added courses introduced are mentioned in *Annexure C*.

The Dean, SoPAHS extended sincere thanks to all the members of the Board.

The meeting ended with a vote of thanks to the Chair.

Dean, SoPAHS
Prof. Sunil Kumar Jha
DEAN
School of Paramedics & Allied Health Sciences
Centurion University of Technology & Management
Odisha-752050

Dean, Academics
Dean - Academic
Centurion University of Technology & Management
Bhubaneswar, Khurda, Odisha-752050

12/6/17
HOD, SoPAHS
Dr. Sowmya Das
Associate Professor & HOD
School of Paramedics & Allied Health Sciences
Centurion University of Technology & Management
Ramachandrapur, Bhubaneswar - 752050

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Annexure A

List of new courses added

Sl. No	Course Title	Type (Skill/ Employability/ Entrepreneurship)	Credit
	MSc MLT		
1.	Clinical Pathology lab	Entrepreneurship	2
2.	Microbiology lab	Entrepreneurship	2
3.	Immunology lab	Employability	2
4.	Biochemistry lab	Employability	2
5.	Histopathology lab	Employability	2
6.	Mini Project	Employability	2
	MSc CMB		
1.	Clinical Pathology	Entrepreneurship	4
2.	Parasitology and Mycology lab	Employability	2
3.	Immunology lab	Employability	2
4.	Histopathology lab	Employability	2
5.	Biochemistry lab	Employability	2
6.	Mini Project	Employability	2
	BSc MLT		
1.	Clinical Pathology lab	Entrepreneurship	2
2.	Microbiology lab	Entrepreneurship	2
3.	Molecular Biology	Entrepreneurship	4
4.	Immunology lab	Employability	2
5.	Histopathology lab	Employability	2
6.	Biochemistry lab	Employability	2
7.	Parasitology lab	Employability	2
8.	Mycology and Virology lab	Employability	2
9.	Mini Project	Employability	2
	BSc CMB		
1.	Clinical Pathology lab	Entrepreneurship	2
2.	Microbiology lab	Entrepreneurship	2
3.	Virology and Mycology lab	Employability	2
4.	Analytical Biochemistry	Employability	4
5.	Industrial Microbiology lab	Employability	2
6.	Public Health Microbiology lab	Employability	2
7.	Biochemistry lab	Employability	2
8.	Diagnostic Bacteriology lab	Employability	2
9.	Mini Project	Employability	2

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Annexure B

List of existing courses where syllabus was changed

Basket/ Semester	Name of Course	No. of Modules/Topics revised	Revised Modules/Topics (details)
MSc MLT			
	Research Methodology	3	Credits modified from 4 to 3 credits based on experts' suggestion
	Immunology and Parasitology	1	Cells and organs of Immune system
	Project	1	Credits modified to 10 credits based on experts suggestion
	Research Methodology	3	Credits modified from 4 to 3 credits based on experts' suggestion
	Immunology and Parasitology	1	Cells and organs of Immune system
MSc CMB			
	Research Methodology	3	Credits modified from 4 to 3 credits based on experts' suggestion
	Project	1	Credits modified to 10 credits based on experts suggestions
	Internship	1	Credits modified to 10 credits based on experts suggestion
BSc MLT			
	Analytical Biochemistry	2	Electrophoresis and Chromatography was included based on industry requirement
	Basic Computer and Information Science	3	Credits modified from 4 to 2 credits based on experts' suggestion
	Introduction to Quality and Patient Safety	3	Credits modified from 4 to 3 credits based on experts' suggestion
	Medical Law and Ethics	3	Credits modified from 4 to 3 credits based on experts' suggestion
	Research Methodology	3	Credits modified from 4 to 3 credits based on experts' suggestion
	Project	1	Credits modified to 10 credits based on experts suggestion
	Internship	1	Credits modified to 10 credits based on experts suggestion
BSc CMB			

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	Public Health Microbiology	3	Credits modified from 4 to 3 credits based on experts' suggestion
	Industrial Microbiology	3	Credits modified from 4 to 3 credits based on experts' suggestion
	Basic Computer and Information Science	3	Credits modified from 4 to 2 credits based on experts' suggestion
	Epidemiology	2	Credits modified from 4 to 2 credits based on experts' suggestion
	Diagnostic Bacteriology	3	Credits modified from 4 to 3 credits based on experts' suggestion
	Medical Law and Ethics	3	Credits modified from 4 to 3 credits based on experts' suggestion
	Research Methodology	3	Credits modified from 4 to 3 credits based on experts' suggestion
	Project	1	Credits modified to 10 credits based on experts suggestion
	Internship	1	Credits modified to 10 credits based on experts suggestion

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Annexure C

List of Domain courses approved

Sl. No	Domain Course Title	Credit	(T+P+P)
1.	Microbiology	28	(14+8+6)
2.	Medical Lab Technician	28	(12+10+6)
3.	Radiology and Imaging Technology	30	(14+10+6)

List of Skill courses (Basket) approved

Sl. No	Course Title	Credit	(T+P+P)
1.	Ophthalmic Lens and spectacle manufacturing Techniques	4	0+3+1
2.	Medical Diagnostic Techniques	4	0+3+1
3.	Refraction Technology	4	0+3+1
4.	Emergency Medical Technology	4	0+3+1
5.	Medical Lab Technology	4	0+3+1
6.	Operating Theatre Technology	4	0+3+1
7.	Radiology Technology	4	0+3+1
8.	Phlebotomy Technology	4	0+3+1
9.	First Aid Service	4	0+3+1
10.	General Duty Assistance Service	4	0+3+1
11.	X- ray Technology	4	0+3+1

List of value-added courses approved

Sl. No	Course Title	Hrs. of input
1.	Human Rights (FCMG0115)	30 hrs
2.	Gender Issues in Development (FCMG0401)	30 hrs

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SLNO	NAME	PLACE	SIGNATURE
1	Dr. Debi Prasad Ratti	M-81, Kapil Prasad Phase II Bhimtangi, BBSR.	22/6
2.	Dr. Debasish Saha	Af/Po Ghatikia, BBSR-3	22/6
3	Dr. Amalendu Chowdhury	Hitechmedical college	22/6
4	S. K. Jha	Dean SPAHS	22/6/19
5.	Dr. Soumya Jal	HoD, SPAHS	22/6/19
6.	Sonali Dash	Visiting faculty SPAHS	Sonali 22/6/19

Centurion University

CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Paramedics and Allied Health Sciences

Date: 22/06/2019

MINUTES OF BOARD OF STUDIES MEETING held on 22/06/2019

Venue: Board Room, CUTM, Bhubaneswar

Time: 11.00 AM

The Board of Studies (BoS) meeting of School of Paramedics and Allied Health Sciences was held on **22/06/2019** at 11 AM in the Board Room, CUTM Bhubaneswar.

The following members were present:

1. Dr. Debi Prasad Rath, M.D. Pathology
2. Dr. Debasish Sahoo, M.D. Microbiology
3. Dr. Amalendu Choudhary, Hi-Tech Medical College and Hospital
4. Prof. Sunil Kumar Jha, Dean SoPAHS
5. Dr. Soumya Jal, HoD SoPAHS
6. Ms. Sonali Dash, Faculty SoPAHS

All the members were welcomed to the session by the Chairperson and were briefed regarding the purpose of the meeting. Thereafter, the Dean of SoPAHS presented on the achievements, improvements of the department in terms of academics and infrastructure.

Following are the programs offered by SoPAHS:

MSc Medical Laboratory Technology (MSc MLT)
MSc Applied and Clinical Microbiology (MSc CMB)
BSc Medical Laboratory Technology (BSc MLT)
BSc Clinical Microbiology (BSc CMB)
BSc Medical Radiation Technology (BSc MRT)
BSc Optometry (BSc Optom)

Agenda of the meeting:

Agenda 1: **The minutes of the last meeting of the BoS held on 30.06.2018 were confirmed.**

Agenda 2: **Discussion and approval on the content of syllabus for various courses of SoPAHS.**

At first, the Dean of the school presented the feedback received from several stakeholders, on the curriculum of its various departments. With respect to the feedback received from the stakeholders, the committee discussed and approved for incorporation/ modifications in the curriculum for the Academic session 2019-18.

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- The nomenclature for BSc Radiology and Imaging Technology was changed to BSc Medical Radiation Technology (BSc MRT) based on the requirement of the DMET council, Odisha.
- The structure and content for the courses of BSc Medical Radiation Technology, BSc Optometry were discussed and approved without any further revision.
- The committee approved to introduce the following programmes in SoPAHS:
  Bachelor of Physiotherapy;
  BSc MLT (Work Integrated);
  BSc Anaesthesia Technology;
  BSc OT-AT.
- Based on the feedback received from the stakeholders to incorporate more practical aspects, the committee approved modifications into the curriculum of the MLT; MSc MLT; BSc CMB; MSc CMB.
- Clinical Pathology was incorporated to the syllabus of MLT and CMB departments, based on the industrial need.
- It was also suggested to incorporate molecular diagnostic techniques into the curriculum of MLT and CMB.
- The committee discussed to emphasize on the research-based learning of the students, and therefore, Mini project was incorporated into the curriculum.
- The courses were structured to enhance the skill and industry-based learning and to improve scopes for competitive examinations.
- New courses added into the curriculum are provided in *Annexure A*.
- Modifications in syllabus are provided in *Annexure B*.

Agenda 3: **Inclusion of courses on Domain, life skills and value addition**

For their overall development and wellbeing of the students, it was advised that students enroll in the various life skills and value-adding courses that are offered by the university. The Board members agreed and gave their approval to the same.

Deatials of Domain courses, life skill and value added courses introduced are mentioned in *Annexure C*.

The Dean, SoPAHS extended sincere thanks to all the members of the Board.

The meeting ended with a vote of thanks to the Chair.

Dean, SoPAHS
Prof. Sunil Kumar Jha
DEAN
School of Paramedics & Allied Health Sciences
Centurion University of Technology & Management
Odisha-752050

Dean, Academics
Dean - Academic
Centurion University of Technology & Management
Bhubaneswar, Khurda, Odisha-752050

12/6/17
HOD, SoPAHS
Dr. Sowmya Das
Associate Professor & HOD
School of Paramedics & Allied Health Sciences
Centurion University of Technology & Management
Ramachandrapur, Bhubaneswar - 752050

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Annexure A

List of new courses added

Sl. No	Course Title	Type (Skill/ Employability/ Entrepreneurship)	Credit
	MSc MLT		
1.	Clinical Pathology lab	Entrepreneurship	2
2.	Microbiology lab	Entrepreneurship	2
3.	Immunology lab	Employability	2
4.	Biochemistry lab	Employability	2
5.	Histopathology lab	Employability	2
6.	Mini Project	Employability	2
	MSc CMB		
1.	Clinical Pathology	Entrepreneurship	4
2.	Parasitology and Mycology lab	Employability	2
3.	Immunology lab	Employability	2
4.	Histopathology lab	Employability	2
5.	Biochemistry lab	Employability	2
6.	Mini Project	Employability	2
	BSc MLT		
1.	Clinical Pathology lab	Entrepreneurship	2
2.	Microbiology lab	Entrepreneurship	2
3.	Molecular Biology	Entrepreneurship	4
4.	Immunology lab	Employability	2
5.	Histopathology lab	Employability	2
6.	Biochemistry lab	Employability	2
7.	Parasitology lab	Employability	2
8.	Mycology and Virology lab	Employability	2
9.	Mini Project	Employability	2
	BSc CMB		
1.	Clinical Pathology lab	Entrepreneurship	2
2.	Microbiology lab	Entrepreneurship	2
3.	Virology and Mycology lab	Employability	2
4.	Analytical Biochemistry	Employability	4
5.	Industrial Microbiology lab	Employability	2
6.	Public Health Microbiology lab	Employability	2
7.	Biochemistry lab	Employability	2
8.	Diagnostic Bacteriology lab	Employability	2
9.	Mini Project	Employability	2

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Annexure B

List of existing courses where syllabus was changed

Basket/ Semester	Name of Course	No. of Modules/Topics revised	Revised Modules/Topics (details)
MSc MLT			
	Research Methodology	3	Credits modified from 4 to 3 credits based on experts' suggestion
	Immunology and Parasitology	1	Cells and organs of Immune system
	Project	1	Credits modified to 10 credits based on experts suggestion
	Research Methodology	3	Credits modified from 4 to 3 credits based on experts' suggestion
	Immunology and Parasitology	1	Cells and organs of Immune system
MSc CMB			
	Research Methodology	3	Credits modified from 4 to 3 credits based on experts' suggestion
	Project	1	Credits modified to 10 credits based on experts suggestions
	Internship	1	Credits modified to 10 credits based on experts suggestion
BSc MLT			
	Analytical Biochemistry	2	Electrophoresis and Chromatography was included based on industry requirement
	Basic Computer and Information Science	3	Credits modified from 4 to 2 credits based on experts' suggestion
	Introduction to Quality and Patient Safety	3	Credits modified from 4 to 3 credits based on experts' suggestion
	Medical Law and Ethics	3	Credits modified from 4 to 3 credits based on experts' suggestion
	Research Methodology	3	Credits modified from 4 to 3 credits based on experts' suggestion
	Project	1	Credits modified to 10 credits based on experts suggestion
	Internship	1	Credits modified to 10 credits based on experts suggestion
BSc CMB			

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	Public Health Microbiology	3	Credits modified from 4 to 3 credits based on experts' suggestion
	Industrial Microbiology	3	Credits modified from 4 to 3 credits based on experts' suggestion
	Basic Computer and Information Science	3	Credits modified from 4 to 2 credits based on experts' suggestion
	Epidemiology	2	Credits modified from 4 to 2 credits based on experts' suggestion
	Diagnostic Bacteriology	3	Credits modified from 4 to 3 credits based on experts' suggestion
	Medical Law and Ethics	3	Credits modified from 4 to 3 credits based on experts' suggestion
	Research Methodology	3	Credits modified from 4 to 3 credits based on experts' suggestion
	Project	1	Credits modified to 10 credits based on experts suggestion
	Internship	1	Credits modified to 10 credits based on experts suggestion

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Annexure C

List of Domain courses approved

Sl. No	Domain Course Title	Credit	(T+P+P)
1.	Microbiology	28	(14+8+6)
2.	Medical Lab Technician	28	(12+10+6)
3.	Radiology and Imaging Technology	30	(14+10+6)

List of Skill courses (Basket) approved

Sl. No	Course Title	Credit	(T+P+P)
1.	Ophthalmic Lens and spectacle manufacturing Techniques	4	0+3+1
2.	Medical Diagnostic Techniques	4	0+3+1
3.	Refraction Technology	4	0+3+1
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8.	Phlebotomy Technology	4	0+3+1
9.	First Aid Service	4	0+3+1
10.	General Duty Assistance Service	4	0+3+1
11.	X- ray Technology	4	0+3+1

List of value-added courses approved

Sl. No	Course Title	Hrs. of input
1.	Human Rights (FCMG0115)	30 hrs
2.	Gender Issues in Development (FCMG0401)	30 hrs

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Centurion University

CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Paramedics and Allied Health Sciences

Date: 22/06/2019

MINUTES OF BOARD OF STUDIES MEETING held on 22/06/2019

Venue: Board Room, CUTM, Bhubaneswar

Time: 11.00 AM

The Board of Studies (BoS) meeting of School of Paramedics and Allied Health Sciences was held on **22/06/2019** at 11 AM in the Board Room, CUTM Bhubaneswar.

The following members were present:

1. Dr. Debi Prasad Rath, M.D. Pathology
2. Dr. Debasish Sahoo, M.D. Microbiology
3. Dr. Amalendu Choudhary, Hi-Tech Medical College and Hospital
4. Prof. Sunil Kumar Jha, Dean SoPAHS
5. Dr. Soumya Jal, HoD SoPAHS
6. Ms. Sonali Dash, Faculty SoPAHS

All the members were welcomed to the session by the Chairperson and were briefed regarding the purpose of the meeting. Thereafter, the Dean of SoPAHS presented on the achievements, improvements of the department in terms of academics and infrastructure.

Following are the programs offered by SoPAHS:

MSc Medical Laboratory Technology (MSc MLT)
MSc Applied and Clinical Microbiology (MSc CMB)
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BSc Clinical Microbiology (BSc CMB)
BSc Medical Radiation Technology (BSc MRT)
BSc Optometry (BSc Optom)

Agenda of the meeting:

Agenda 1: **The minutes of the last meeting of the BoS held on 30.06.2018 were confirmed.**

Agenda 2: **Discussion and approval on the content of syllabus for various courses of SoPAHS.**

At first, the Dean of the school presented the feedback received from several stakeholders, on the curriculum of its various departments. With respect to the feedback received from the stakeholders, the committee discussed and approved for incorporation/ modifications in the curriculum for the Academic session 2019-18.

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- New courses added into the curriculum are provided in *Annexure A*.
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Agenda 3: **Inclusion of courses on Domain, life skills and value addition**

For their overall development and wellbeing of the students, it was advised that students enroll in the various life skills and value-adding courses that are offered by the university. The Board members agreed and gave their approval to the same.

Deatials of Domain courses, life skill and value added courses introduced are mentioned in *Annexure C*.

The Dean, SoPAHS extended sincere thanks to all the members of the Board.

The meeting ended with a vote of thanks to the Chair.

Dean, SoPAHS
Prof. Sunil Kumar Jha
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Annexure A

List of new courses added

Sl. No	Course Title	Type (Skill/ Employability/ Entrepreneurship)	Credit
	MSc MLT		
1.	Clinical Pathology lab	Entrepreneurship	2
2.	Microbiology lab	Entrepreneurship	2
3.	Immunology lab	Employability	2
4.	Biochemistry lab	Employability	2
5.	Histopathology lab	Employability	2
6.	Mini Project	Employability	2
	MSc CMB		
1.	Clinical Pathology	Entrepreneurship	4
2.	Parasitology and Mycology lab	Employability	2
3.	Immunology lab	Employability	2
4.	Histopathology lab	Employability	2
5.	Biochemistry lab	Employability	2
6.	Mini Project	Employability	2
	BSc MLT		
1.	Clinical Pathology lab	Entrepreneurship	2
2.	Microbiology lab	Entrepreneurship	2
3.	Molecular Biology	Entrepreneurship	4
4.	Immunology lab	Employability	2
5.	Histopathology lab	Employability	2
6.	Biochemistry lab	Employability	2
7.	Parasitology lab	Employability	2
8.	Mycology and Virology lab	Employability	2
9.	Mini Project	Employability	2
	BSc CMB		
1.	Clinical Pathology lab	Entrepreneurship	2
2.	Microbiology lab	Entrepreneurship	2
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4.	Analytical Biochemistry	Employability	4
5.	Industrial Microbiology lab	Employability	2
6.	Public Health Microbiology lab	Employability	2
7.	Biochemistry lab	Employability	2
8.	Diagnostic Bacteriology lab	Employability	2
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Centurion University

Annexure B

List of existing courses where syllabus was changed

Basket/ Semester	Name of Course	No. of Modules/Topics revised	Revised Modules/Topics (details)
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	Project	1	Credits modified to 10 credits based on experts suggestion
	Internship	1	Credits modified to 10 credits based on experts suggestion
BSc CMB			

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	Public Health Microbiology	3	Credits modified from 4 to 3 credits based on experts' suggestion
	Industrial Microbiology	3	Credits modified from 4 to 3 credits based on experts' suggestion
	Basic Computer and Information Science	3	Credits modified from 4 to 2 credits based on experts' suggestion
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Annexure C

List of Domain courses approved

Sl. No	Domain Course Title	Credit	(T+P+P)
1.	Microbiology	28	(14+8+6)
2.	Medical Lab Technician	28	(12+10+6)
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List of Skill courses (Basket) approved

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Centurion University

CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Paramedics and Allied Health Sciences

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For their overall development and wellbeing of the students, it was advised that students enroll in the various life skills and value-adding courses that are offered by the university. The Board members agreed and gave their approval to the same.

Deatials of Domain courses, life skill and value added courses introduced are mentioned in *Annexure C*.

The Dean, SoPAHS extended sincere thanks to all the members of the Board.

The meeting ended with a vote of thanks to the Chair.

Dean, SoPAHS
Prof. Sunil Kumar Jha
DEAN
School of Paramedics & Allied Health Sciences
Centurion University of Technology & Management
Odisha-752050

Dean, Academics
Dean - Academic
Centurion University of Technology & Management
Bhubaneswar, Khurda, Odisha-752050

12/6/17
HOD, SoPAHS
Dr. Sowmya Das
Associate Professor & HOD
School of Paramedics & Allied Health Sciences
Centurion University of Technology & Management
Ramachandrapur, Bhubaneswar - 752050

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Annexure A

List of new courses added

Sl. No	Course Title	Type (Skill/ Employability/ Entrepreneurship)	Credit
	MSc MLT		
1.	Clinical Pathology lab	Entrepreneurship	2
2.	Microbiology lab	Entrepreneurship	2
3.	Immunology lab	Employability	2
4.	Biochemistry lab	Employability	2
5.	Histopathology lab	Employability	2
6.	Mini Project	Employability	2
	MSc CMB		
1.	Clinical Pathology	Entrepreneurship	4
2.	Parasitology and Mycology lab	Employability	2
3.	Immunology lab	Employability	2
4.	Histopathology lab	Employability	2
5.	Biochemistry lab	Employability	2
6.	Mini Project	Employability	2
	BSc MLT		
1.	Clinical Pathology lab	Entrepreneurship	2
2.	Microbiology lab	Entrepreneurship	2
3.	Molecular Biology	Entrepreneurship	4
4.	Immunology lab	Employability	2
5.	Histopathology lab	Employability	2
6.	Biochemistry lab	Employability	2
7.	Parasitology lab	Employability	2
8.	Mycology and Virology lab	Employability	2
9.	Mini Project	Employability	2
	BSc CMB		
1.	Clinical Pathology lab	Entrepreneurship	2
2.	Microbiology lab	Entrepreneurship	2
3.	Virology and Mycology lab	Employability	2
4.	Analytical Biochemistry	Employability	4
5.	Industrial Microbiology lab	Employability	2
6.	Public Health Microbiology lab	Employability	2
7.	Biochemistry lab	Employability	2
8.	Diagnostic Bacteriology lab	Employability	2
9.	Mini Project	Employability	2

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Annexure B

List of existing courses where syllabus was changed

Basket/ Semester	Name of Course	No. of Modules/Topics revised	Revised Modules/Topics (details)
MSc MLT			
	Research Methodology	3	Credits modified from 4 to 3 credits based on experts' suggestion
	Immunology and Parasitology	1	Cells and organs of Immune system
	Project	1	Credits modified to 10 credits based on experts suggestion
	Research Methodology	3	Credits modified from 4 to 3 credits based on experts' suggestion
	Immunology and Parasitology	1	Cells and organs of Immune system
MSc CMB			
	Research Methodology	3	Credits modified from 4 to 3 credits based on experts' suggestion
	Project	1	Credits modified to 10 credits based on experts suggestions
	Internship	1	Credits modified to 10 credits based on experts suggestion
BSc MLT			
	Analytical Biochemistry	2	Electrophoresis and Chromatography was included based on industry requirement
	Basic Computer and Information Science	3	Credits modified from 4 to 2 credits based on experts' suggestion
	Introduction to Quality and Patient Safety	3	Credits modified from 4 to 3 credits based on experts' suggestion
	Medical Law and Ethics	3	Credits modified from 4 to 3 credits based on experts' suggestion
	Research Methodology	3	Credits modified from 4 to 3 credits based on experts' suggestion
	Project	1	Credits modified to 10 credits based on experts suggestion
	Internship	1	Credits modified to 10 credits based on experts suggestion
BSc CMB			

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	Public Health Microbiology	3	Credits modified from 4 to 3 credits based on experts' suggestion
	Industrial Microbiology	3	Credits modified from 4 to 3 credits based on experts' suggestion
	Basic Computer and Information Science	3	Credits modified from 4 to 2 credits based on experts' suggestion
	Epidemiology	2	Credits modified from 4 to 2 credits based on experts' suggestion
	Diagnostic Bacteriology	3	Credits modified from 4 to 3 credits based on experts' suggestion
	Medical Law and Ethics	3	Credits modified from 4 to 3 credits based on experts' suggestion
	Research Methodology	3	Credits modified from 4 to 3 credits based on experts' suggestion
	Project	1	Credits modified to 10 credits based on experts suggestion
	Internship	1	Credits modified to 10 credits based on experts suggestion

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Annexure C

List of Domain courses approved

Sl. No	Domain Course Title	Credit	(T+P+P)
1.	Microbiology	28	(14+8+6)
2.	Medical Lab Technician	28	(12+10+6)
3.	Radiology and Imaging Technology	30	(14+10+6)

List of Skill courses (Basket) approved

Sl. No	Course Title	Credit	(T+P+P)
1.	Ophthalmic Lens and spectacle manufacturing Techniques	4	0+3+1
2.	Medical Diagnostic Techniques	4	0+3+1
3.	Refraction Technology	4	0+3+1
4.	Emergency Medical Technology	4	0+3+1
5.	Medical Lab Technology	4	0+3+1
6.	Operating Theatre Technology	4	0+3+1
7.	Radiology Technology	4	0+3+1
8.	Phlebotomy Technology	4	0+3+1
9.	First Aid Service	4	0+3+1
10.	General Duty Assistance Service	4	0+3+1
11.	X- ray Technology	4	0+3+1

List of value-added courses approved

Sl. No	Course Title	Hrs. of input
1.	Human Rights (FCMG0115)	30 hrs
2.	Gender Issues in Development (FCMG0401)	30 hrs

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SLNO	NAME	PLACE	SIGNATURE
1	Dr. Debi Prasad Ratti	M-81, Kapil Prasad Phase II Bhimtangi, BBSR.	22/6
2.	Dr. Debasish Saha	Af/Po Ghatikia, BBSR-3	22/6
3	Dr. Amalendu Chowdhury	Hitechmedical college	22/6
4	S. K. Jha	Dean SPAHS	22/6/19
5.	Dr. Soumya Jal	HoD, SPAHS	22/6/19
6.	Sonali Dash	Visiting faculty SPAHS	Sonali 22/6/19

Centurion University

School of Fisheries

Minutes of Board of Studies Meeting -2019

Date: 22.06.2019

Agenda; Revision of Curriculum -2019

The Board of Studies (BoS) meeting of School of Fisheries was held on 30.06.2018 at 11 a.m. in the Board Room, CUTM Bhubaneswar. The following members were present:

1. Dr. Jitendra Kumar Sundaray, Principal Scientist, CIFA
2. Dr. Smabid Swain, HOD, Fisheries, CUTM
3. Dr.B P Mishra, Dean SoABE, CUTM, PKD

The discussion was carried out on the addition and revision of syllubus of following subjects for 2017-21 batch, 2018-22 batch and 2019-23 batch,

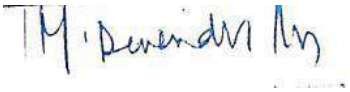
1. In 5th semester following courses are offered,
   FSAQ-3105, FSRM-3105, FSHM-3103, FSHM 3105, FSRM-3107, FSEE-3104, FSFF-3105, FSRM-3108, FSEM-3108, FSHM-2202, FSPT-3209.
   Note: The Courses of Microbial and Parasitic Disease of Fish and Shellfish (FSHM-2202) and Aquaculture Engineering (FSFE-2102) will be offered to the students of 2018-2022 and 2019-2023 batches in their 4th and 3rd Semesters but for 2017-2021 batch these courses will be offered in the 5th and 6th Semesters respectively.
2. Quality Assurance of Fish and Fish products course will be offered in 6th Semester for 2018-2022 and 2019-2023 batches but for 2017-2021 batch the same course will be offered in 5th semester.
3. Taxonomy of Shellfish (FSRM-1102) which is offered in 1st semester will be shifted to 2nd semester for the convenience of the students from 2019 batch.
4. Aquaculture on Reservoirs (FSAQ-1207) which is offered in the 2nd semester will be shifted to 1st semester from 2019 batch.

Addition of matters in theroy courses,

1. Soil and Water Chemistry (FSEM-1102): Aeration, chlorination, ozonization and UV-radiation, waste and water treatment practices, algal bloom control and eutrophication, aquatic weed management, soil probiotics.
2. Freshwater Aquaculture (FSAQ-1202) : Biofloc Technology (BFT), Zero water aquaculture, Intensive system for Aquaculture, Imapct of Aquaculture to Environment, Quarantine.
3. Fish Food Organisms (FSAQ-2109): Copepod, polycheats.
4. Ornmental Fish Production and Management (FSAQ-2103): Value addition, colour enhancement, Gene editing and production of new strain, hybrids.
5. Coastal Aquaculture and Mariculture (FSAQ-2204) – Pompano, Reef fisheries, Hilsa.
6. Therapeutics in Aquaculture (FSHM): Introduction to Antimicrobial Resistance (AMR)
7. Shellfish Hatchery Mamnagement (FSAQ-2206) – L. vennamei Breeding and Hatchery Management
8. Fish Toxicology (FSHM-3105) – Endocrine disrupter chemicals

9. Fisheries Co-operative and Marketing (FSEE-3104)- NCDC, FISHCOFED, NFDB, MPEDA
10. Fisheries policy and Law (FSEE-3203): Odisha, Fisheries Policy - 2015

The meeting concluded with vote of thanks to the Chair.



Head School of Fisheries

Dean (Academics) ,MSSSoA

22/6/19

DR JITENDRA KUMAR SUNDARAY
HEAD OF DIVISION
(FISH GENETICS & BIOTECHNOLOGY)
ICAR CIFA, BHUBANESWAR

22/6/19

Mr. SAMBID SWAIN
HOD, ~~Fisheries~~, Department of fisheries
MSSCOA, CUTM, PKD

22/6/19
B. P. Mishra
Dean (SOABE)

Centurion University

CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

MS Swaminathan School of Agriculture

Date:22.06.2019

MINUTES OF BOARD OF STUDIES MEETING held on 22.06.2019

Venue: Board Room, CUTM, Bhubaneswar

Time: 11.00 a.m.

The Board of Studies (BoS) meeting of MS Swaminathan School of Agriculturewas held on 22.06.2019at 11 a.m. in the Board Room, CUTM Bhubaneswar. The following members were present:

1. Prof.P.K.Mahapatro
2. Prof.B K Mishra
3. Prof. M.Devender Reddy
4. Prof. Satya Prasad Nanda
5. HOD Agronomy
6. HOD Plant Pathology
7. HOD Entomology
8. HOD Soil Science
9. HOD Extension
10. HOD GBP
11. HOD Biotechnology
12. HOD Plant Physiology
13. HOD Horticulture
14. Alumni

The Chairperson welcomed all members of the Board and briefly outlined the purpose of the meeting. Thereafter, the Dean of the MS Swaminathan School of Agriculturepresented the achievements and improvements of the department in the areas of academics, research, consultancy and infrastructure.

The following agenda items were taken up subsequently:

Agenda 1: **The minutes of the last meeting of the BoS held on 22.06.2019were confirmed.**

1. All the external BoS members appreciated the structure and course outline of different courses and domains. They mentioned that the courses are well structured, organized and application oriented as per academics and industry is concerned. They also appreciated the on-line class delivery initiative of the University.
2. Prof. P. K. Mahapatro, Retd. Dean, OUAT, suggested and emphasized to incorporate the smart agriculture management practice in production courses of UG and PG courses. He also suggested to give importance to on Biofertilizer production and utilization in organic production systems.

Agenda 2:Discussion and approval on any revision required in the Curriculum of B.Sc Agriculture

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- The Dean Agriculture. gave a presentation on the feedback received on curriculum outlining the suggestions made by the various stakeholders. Based on this , the Board accepted and approved a few suggestions for course revision to be implemented from the Academic Year 2018-19.

- Discussion and Resolutions taken (Syllabus/Evaluation systems etc.);

Students should be more and more exposed towards industries and gain industrial experience, entrepreneurship skills and start ups.

Students should be trained in Digital Marketing Skills and in improving the personality

Reshuffling of courses in UG

***Agenda 3:*Inclusion of courses on life skills and value addition**

It was suggested that students take up the various courses offered by the University in the areas of life skills and value addition for their overall improvement and well being.The same was agreed upon and approved by the Board members.

1.under high tech horticulture, production of quality planting materials should be kept under ELP programme

2.Increase of organic farming production of biofertilizer a) 2 bio pesticides b)production technologies for field crops c)production technologies for horticultural crops should be kept under AELP track -1 and production of an individual crops under AELP track-2

3. It was decided to introduce new supporting and minor courses in M. Sc. (Ag) and follow the guideline of BSMA, ICAR from time to time. Newly formed domains for B.Sc (agriculture) like Organic Farming, Dairy processing and development, Intensive aquaculture, Seed production using manual and molecular method, Genetic engineering genomics, Smart Agriculture, Protected agriculture, Food processing, Commodity and food storage, Fish processing, Fish processing technology and several Skill courses.

The Dean , MS Swaminathan School of Agriculture. extended sincere thanks to all members of the Board.

The meeting ended with a voteof thanks to the Chair.

22.6.2019

Convenor of BoS& Dean MSSSoA(Academics)

Dean Administration

22.6.19

22/6/19

DR JITENDRA KUMAR SUNDARAY
HEAD OF DIVISION
(FISH GENETICS & BIOTECHNOLOGY)
ICAR CIFA, BHUBANESWAR

22/6/19

Mr. SAMBID SWAIN
HOD, ~~Fisheries~~, Department of fisheries
MSSCOA, CUTM, PKD

22/6/19
B. P. Mishra
Dean (SOABE)

Centurion University

2018-19

CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Engineering & Technology

Department of Civil Engineering

Date: 30/06/2018

MINUTES OF BOARD OF STUDIES MEETING held on 30/06/2018

Venue: Board Room, CUTM, Bhubaneswar

Time: 11.00 a.m.

The Board of Studies (BoS) meeting of Department of Civil Engineering was held on **30/06/2018** at 11 a.m. in the Board Room, CUTM Bhubaneswar.

The following are the members:

1. Prof. C.N.V. Satyanarayan Reddy, Professor, Dept. of Civil Eng., Andhra University
2. Prof. Manoj Ku Rath, Prof. Dept. of Civil Engg, CUTM,BBSR Campus
3. Prof. R. C. Padhy, General Major
4. Dr. Siba Mishra, Assosiate Prof. Dept. of Civil Engg, CUTM,BBSR Campus
5. Prof. Prafulla Kumar Panda, HOD Dept. of Civil Engg, CUTM,PKD Campus
6. Prof. Sagarika Panda, HOD Dept. of Civil Engg, CUTM,BBSR Campus

The Chairperson welcomed all members of the Board and briefly outlined the purpose of the meeting. Thereafter, the Head of the Department of Civil Engineering presented the achievements and improvements of the department in the areas of academics, research, consultancy and infrastructure.

The following agenda items were taken up subsequently:

Agenda 1: **The minutes of the last meeting of the BoS held on 12.06.2017 were confirmed.**

Agenda 2: **Approval for B.Tech Civil Engineering Course structure and syllabus for basket 3 and 4 of CBCS system.**

The HoD, Civil Engg. gave a presentation on the feedback received on curriculum outlining the suggestions made by the various stakeholders. Based on this , the Board accepted and approved a few suggestions for course revision to be implemented from the Academic Year 2017-18.

- Contact hour need to be less and more hours should be allotted for practice.
- As per the AICTE Regulation, to give extra 20 credits for specialization as major degree and minor degree.
- Subject wise feedback was given for courses in basket 3 and basket 4.
- This subject has been renamed in CBCS basket IV and the content has been modified.
- Two courses from each domain in basket V is to be carried over to basket IV as advanced learning.
- The new domain planning, design and drawing has been restructured and the new courses are to be incorporated. Architectural Design, Green building design, 3D modeling and VR experience of Building, Earthquake Resistant design, Barrier free design, and intelligent Building design with project and internship. (*Annexure A*)

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- The Board approved the changes suggested in the Hydraulics and hydraulics machines, Hydrology and water resources engineering, GIS and Digital cartography, Workshop Practice as per the latest Software and technology being used by the industry. List of existing courses where syllabus was revised in (*Annexure B)*

Agenda 3: **Inclusion of courses on Domain, skills and value addition**

It was suggested that students take up the various courses offered by the University in the areas of life skills and value addition for their overall improvement and well being.The same was agreed upon and approved by the Board members.*(Annexure C)*

The HoD, Department of Civil Engg. extended sincere thanks to all members of the Board.

The meeting ended with a voteof thanks to the Chair.

Dean, SoET

Dean, SOET
Centurion University of Technology & Management
Odisha

Dean, Academics

Dean - Academic
Centurion University of Technology & Management
Bhubaneswar, Khurda, Odisha-752050

HoD, Civil Engineering

HOD
Dept. of Civil Engineering
Centurion University of
Technology & Management,BBSR

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Annexure-A

List of new courses

Sl. No	Course Title	Type (Skill/Employability/Entrepreneurship	Credit
1	Disaster Preparedness & Planning management	Entrepreneurship	2
2	Functional planning and DPR	Employability	3
3	Site Supervision & Measurement Methods.	Employability	4
4	Tendering Process, Bidding Contract Agreements & Arbitration.	Employability	3
5	Green Building Design	Employability	3
6	Barrier Free Design	Employability	2
7	Intelligent Building Design	Employability	2
8	3D Modelling and VR experience of Building	Skill Development	4
9	Geospatial Technology and its Application	Employability	5
10	Photogrammetry and its Application	Employability	4
11	Concrete Technology	Skill Development	2

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Annexure-B

List of existing courses where syllabus was revised

Basket/ Semester	Name of Course	No. of Modules/Topics revised	Revised Modules/Topics (details)
IV	Pre-Fabricated Structures	1	One module has been added depending on the industry requirement
IV	Transportation Engineering	2	One module has been added depending on the industry requirement
IV	Water supply & Waste water Management	2	One module has been added and another module is merged with slight change as per industry requirement
IV	Hydrology &Water Resources Engineering	1	One module has been added depending on the industry requirement
IV	Quality Control and Risk Management in Construction	1	One module has been added depending on the industry requirement
IV	Geotechnical Investigations	1	One module has been added depending on the industry requirement
IV	Repairs, Renovation and Rehabilitation of Structures	1	One module has been added depending on the industry requirement
IV	Software Based Project Scheduling and Management	1	One module has been added depending on the industry requirement
IV	Earthquake Resistant Design	1	One module has been added depending on the industry requirement
IV	Architectural Design	1	One module has been added depending on the industry requirement
IV	Remote Sensing & Digital Image Processing	1	One module has been added depending on the industry requirement
IV	Lidar Remote Sensing and its Applications	1	One module has been added depending on the industry requirement
IV	Smart City Planning	1	One module has been added depending on the industry requirement
IV	Geometric Modeling Lab	1	One module has been added depending on the industry requirement
IV	Hydraulics & Hydraulic Machine	2	One module has been added depending on the industry requirement
IV	Pre-Fabricated Structures	1	One module has been added depending on the industry requirement
IV	Foundation Engineering	1	One module has been added depending on the industry requirement
IV	Computer Aided Design of Concrete Structure	1	One module has been added depending on the industry requirement
IV	GIS and Digital Cartography	2	One module has been added depending on the industry requirement
IV	Construction Equipment Management	2	One module has been added depending on the industry requirement
IV	Geotechnical Investigations	2	One module has been added depending on the industry requirement
IV	Software Based Project Scheduling and Management	3	One module has been added depending on the industry requirement
IV	Architectural Design	1	One module has been added

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			depending on the industry requirement
IV	Remote Sensing and Digital Image Processing	1	One module has been added depending on the industry requirement

Annexure-C

List of Skill courses (Basket) approved

Sl. No	Course Title	Credit	(T+P+P)
1	Introduction to Composite Manufacturing	CUTM3042	0+3+1
2	3D Modelling and Printing	CUTM3043	0+3+1
3	Precast Concrete Manufacturing	CUTM3045	0+3+1
4	Fabrication	CUTM3046	0+3+1
5	Hi-Tech Surveying	CUTM3047	0+3+1
6	Internet of Things	CUTM3048	0+3+1
7	Mechatronics System Design	CUTM3049	0+3+1
8	Introduction to Nanotechnology	CUTM3051	0+3+1
9	Drone Piloting	CUTM3052	0+3+1
10	Camera Operation	CUTM3053	0+3+1
11	Editor	CUTM3054	0+3+1
12	Desktop Publishing	CUTM3055	0+3+1
13	Introduction to Blender and Unity tools	CUTM3056	0+3+1

List of Domain courses

	Name of the Domain	Credit	Category
1	Cyber Security and Digital Forensic	20	A/B
2	Data Science and Machine Learning	26	A/B/D
3	Microbiology	28	A/C
4	Medical Lab Technician	28	A/C
5	Pharmaceutical Chemistry	20	A/B/C
6	Radiology and Imaging Technology	30	A/C
7	Unity Gaming	26	B
8	Cyber Security and Digital Forensic	20	A/B
9	Data Science and Machine Learning	26	A/B/D
10	Microbiology	28	A/C
11	Medical Lab Technician	28	A/C
12	Pharmaceutical Chemistry	20	A/B/C
13	Radiology and Imaging Technology	30	A/C
14	Unity Gaming	26	B

List of value added courses

Sl. No	Course Title	Hrs. of input
1	LSD-2	30
2	Conduct in daily Life-Insights from The Panchatantra	30
3	Human Rights	30
4	Renewable Energy	30
5	Data science & ML	30
6	Introduction to Nutraceuticals	30
7	Introduction to Tableau	30
8	Basics of Photography	30
9	Innovation Management	30
10	Effective Writing	30

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11	Indian Culture and History	30
12	Critical Thinking	30
13	Disability, Diversity and Development	30
14	Intellectual Property Rights	30
15	Emotional Intelligence	30
16	Home remedies for healthy living	30
17	Self-Management: Insights from Srimad Bhagavad Gita	30

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Proceedings of Board of Studies in Civil Engg held on 30/06/2018 at Jatni Campus.

Considered the syllabus Basket 3 & 4 and following recommendations were made.

Recommendation - 1.
→ Inclusion of Soil mechanics in basket IV as it is strongly recommended.

Recomendation - 2
→ In foundation Engg. course, the following changes are suggested.
Mod 1: Shallow foundation
Mod 2: Deep foundations.
Mod 3: Earth pressure & stability of slopes.
Mod 4: Computer aided design of shallow & deep foundation.
→ Module name: mention.

* Recommendation - 3
→ In Transportation Engg module-2, in place of conc. pavement design write flexible & rigid pavement design & analysis, pavement failures.

* Recommendation - 4
Highway materials characterisation.

* Recommendation - 5
Credit reduction from one each, TE, QCCI, Functional planning & DPR.

1. Prof. C.H.V. Satyanarayana Reddy
2. Prof. Manoj Kumar Rauth
3. General, Prof. R. C. Padhy
4. Dr. Siba Mishra

Centurion University

CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Engineering & Technology

Department of Computer Science and Engineering

Date: 30.06.2018

MINUTES OF BOARD OF STUDIES MEETING held on 30.06.2018

Venue: Board Room, CUTM, Bhubaneswar

Time: 10.00 a.m.

The Board of Studies (BoS) meeting of Department of Computer Science and Engineering was held on 30.06.2018 at 10 a.m. in the Board Room, CUTM Bhubaneswar. The following are the board members:

1. Dr. Debi Prasad Dogra, Asst. Prof, IIT, Bhubaneswar
2. Rajesh Francis V.P, Exuber Software Solutions
3. A Anurag, Pro Vice Chancellor, CUTM
4. K.V Kalyan, Asst. prof, CUTM AP
5. K. Santosh Chandra Rao, HOD., CSE, PKD
6. Dr. Prasant Kumar Mohanty, HOD, CSE, BBSR & Dean, SoET

The Chairperson welcomed all members of the Board and briefly outlined the purpose of the meeting. Thereafter, the Head of the Department of Computer Science Engineering presented the achievements and improvements of the department in the areas of academics, research, consultancy and infrastructure.

The following agenda items were taken up subsequently:

Agenda 1: **The minutes of the last meeting of the BoS held on 02.06.2017 were confirmed.**

Agenda 2: **Discussion and approval on any revision required in the Curriculum of B.Tech, Computer Science Engg.**

- The HoD, Computer Science and Engg. gave a presentation on the feedback received on curriculum outlining the suggestions made by the various stakeholders. Based on this , the Board accepted and approved a few suggestions for course revision to be implemented from the Academic Year 2018-19.
- The Board approved the changes suggested in the existing syllabus and some new courses added as per the latest Software and technology being used by the industry .*(Annex-1)*
- B.Tech CSE Basket V domain courses revision has been made as per the latest Software and technology being used by the industry.*(Annex 2)*
- The board approved one-month orientation program to be conducted for new joining students where exposure on project, domain, value added course are to be given.
- To facilitate exposure on industry practice, boot camp activity and workshop to be conducted which was approved by the Board.

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Agenda 3: **Inclusion of courses on life skills and value addition**

For the students general development and wellbeing, it was recommended that students enrol in the different life skills and value-added courses the university offers. The Board members concurred and gave their approval to the same. *(Annex 3 and Annex 4)*

The HoD, Department of Computer Science and Engg. extended sincere thanks to all members of the Board.

The meeting ended with a vote of thanks to the Chair.

Dean, SoET

Dean, SOET
Centurion University of Technology & Management
Odisha

Dean, Academics

Dean Academics
Centurion University of Technology & Management
Odisha

HoD, Computer Science & Engineering

HOD CSE
Centurion Institute of Technology

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Annexure-I

No. of new courses added with credit

Sl. No	Course Title	Type(Skill/Employability/Entrepreneurship	Credit
1	Programming for Problem Solving – Java	Skill And Employability	3
2	Data Base Management System	Skill And Employability	3
3	Problem Solving & Programming	Skill And Employability	3
4	Data Structures and C Programming	Skill And Employability	4
5	Operating System	Skill And Employability	4
6	Big Data Analytics	Skill And Employability	4
7	Block Chain and Smart Contracts	Skill And Employability	3
8	Programming Internet of Things	Skill And Employability	3
9	AI Tools, Techniques and applications	Skill And Employability	4
10	Cloud Computing and its applications using Linux OS	Skill	4
11	Problem Solving using Python	Skill And Employability	3
12	Object Oriented Programming through Java	Skill And Employability	4
13	Web Technologies	Skill And Employability	4
14	Software Engineering using Agile	Skill	4
15	Internet of Things	Skill And Employability	3
16	Build your own Computer	Skill And Employability	2
17	Cloud Computing Application	Skill And Employability	4
18	Mobile App Development	Skill And Employability	4
19	Introduction to Gamming & Simulation	Skill And Employability	3
20	Introduction to Cyber Security	Skill And Employability	3
21	AI & ML using Python	Skill And Employability	3

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22	Object Oriented Analysis and Design	Skill And Employability	4
23	Systems Programming	Skill	4
24	Computer Networks	Skill And Employability	3
25	Cloud Infrastructure	Skill And Employability	4
26	Project	Skill And Employability	2
27	Computer Organization and Architecture	Skill And Employability	3
28	Formal Language and Automata Theory	Skill	4
29	Design Analysis and Algorithms	Skill	4
30	Network Security and Cryptography	Skill	3
31	Data Warehousing and Data Mining	Skill	4
32	Introduction to Gamming & Simulation	Skill And Employability	4
33	Game Assets & Game Objects	Skill And Employability	4
34	Building Game Environment	Skill And Employability	4
35	Game Animation, Scripting & UI	Skill And Employability	4
36	Binary Deployment and Cross-Platform Controls	Skill And Employability	4

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List of existing courses where syllabus was revised

Basket/ Semester	Name of Course	No. of Modules/Topics revised
IV	Operating System	Introduction: Architecture, Goals & Structures of O.S, Basic functions, Interaction of O. S. & hardware architecture, System calls, Batch, multiprogramming. Multitasking, time sharing, parallel, distributed & real -time O.S. Process Management: Process Concept, Process states, Process control, Threads, Uni- processor Scheduling: Types of Scheduling,Scheduling algorithms : FCFS, SJF, RR, Priority, Thread Scheduling, Real Time Scheduling. System calls like ps, fork, join, exec family, wait.

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Appendix 2

Domain Courses

1	Cyber Security and Digital Forensic	20	A/B
2	Data Science and Machine Learning	26	A/B/D
3	Microbiology	28	A/C
4	Medical Lab Technician	28	A/C
5	Pharmaceutical Chemistry	20	A/B/C
6	Radiology and Imaging Technology	30	A/C
7	Unity Gaming	26	B

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Annexure-3

Skill Courses approved by the University

S NO	Course Name	Course Code	Credit
1	Introduction to Composite Manufacturing	CUTM3042	4
2	3D Modelling and Printing	CUTM3043	4
3	Precast Concrete Manufacturing	CUTM3045	4
4	Fabrication	CUTM3046	4
5	Hi-Tech Surveying	CUTM3047	4
6	Internet of Things	CUTM3048	4
7	Mechatronics System Design	CUTM3049	4
8	Introduction to Nanotechnology	CUTM3051	4
9	Drone Piloting	CUTM3052	4
10	Camera Operation	CUTM3053	4
11	Editor	CUTM3054	4
12	Desktop Publishing	CUTM3055	4
13	Introduction to Blender and Unity tools	CUTM3056	4
14	Introduction to Composite Manufacturing	CUTM3042	4

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Appendix 4

Value Added Courses approved by the University

S NO	Course Name	Course Code	Credit
1	LSD-2	CUVA0011	30 Hours
2	Conduct in daily Life-Insights from The Panchatantra	CUVA0033	30 Hours
3	Human Rights	CUVA0034	30 Hours
4	Renewable Energy	CUVA0035	30 Hours
5	Data science & ML	CUVA0036	30 Hours
6	Introduction to Nutraceuticals	CUVA0037	30 Hours
7	Introduction to Tableau	CUVA0038	30 Hours
8	Basics of Photography	CUVA0039	30 Hours
9	Innovation Management	CUVA0048	30 Hours
10	Effective Writing	CUVA0049	30 Hours
11	Indian Culture and History	CUVA0050	30 Hours
12	Critical Thinking	CUVA0051	30 Hours
13	Disability, Diversity and Development	CUVA0066	30 Hours
14	Intellectual Property Rights	CUVA0065	30 Hours
15	Emotional Intelligence	CUVA0063	30 Hours
16	Home remedies for healthy living	CUVA0062	30 Hours
17	Self-Management: Insights from Srimad Bhagavad Gita	CUVA0061	30 Hours
18	LSD-2	CUVA0011	30 Hours
19	Conduct in daily Life-Insights from The Panchatantra	CUVA0033	30 Hours

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BOS MEETING (22/06/19) 17

Agenda — Approval of Mechanical engineering Basket IV and Basket V Syllabus for 2018 Batch students.

Date - 22/06/19

Venue - Cad lab, CIT Campus Jatani

Member Present — Signature

1. Prof. S. S Mohapatra (NIT Rourkela) Mohapatra
2. S. S. Mohanty (Nilaushal Ispat Nigam Ltd)
3. Mr. Rabindra Sah (CUTM, BBSR)
4. Prof. P. S Rao (CUTM, PKD)
5. Dr. A. M Mohanty (PRO. VC)
6. Mr. Tapan Rath (CUTM, BBSR)
7. Dr. R. C Mohanty (CUTM, BBSR)
8. Prof. Amrit Mallick (CUTM, PKD) Amrit mallick.
9. Prajna Paramita Debuta (HOD, ME)
10. Mrs Ipsita Mishra
11. Mr M. K Rath.
12. Sudeep Kumar Singh (Asst Prof. Mechanical Eng)

CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Applied Sciences
Department of Chemistry

Date: 30.06.2018

MINUTES OF BOARD OF STUDIES MEETING held on 30.06.2018

Venue: Board Room, CUTM, Bhubaneswar

Time: 11.00 a.m.

The Board of Studies (BoS) meeting of Department of Chemistry was held on 30.06.2018 at 11 a.m. in the Board Room, CUTM Bhubaneswar. The following members were present:

1. Dr. Prafulla Kumar Sahoo ,Utkal University (Subject expert)
2. Dr. SK Biswal (Dean SoAS) ,CUTM ,BBSR Campus
3. Dr.Dojalisa Sahu(HoD,Chemistry), CUTM ,BBSR Campus
4. Dr Chandana Adhukari,CUTM ,Rayagarh Campus
5. Dr Suman Panda,CUT M,Bolangir Campus
6. MLN Acharyulu,CUTM ,VIZAG Campus

The Chairperson welcomed all members of the Board and briefly outlined the purpose of the meeting. Thereafter, the Head of the Department of Chemistry presented the achievements and improvements of the department in the areas of academics, research, consultancy and infrastructure.

The following agenda items were taken up subsequently:

Agenda 1: **The minutes of the last meeting of the BoS held on 12.06.2017 were confirmed.**

*Agenda 2:***Discussion and approval in the domain content(Pharmaceutical Chemistry) Curriculum of** B.Sc (Hons.)

- The B.Sc. (Hons.) core syllabus is not changed only one domain course is introduced .The syllabus of the domain (Pharmaceutical Chemistry) is prepared by the following pharmacy council of India syllabus.(Annexure-1)
- The domain syllabus is received by the external members Prof (Dr.) Prafulla Kumar Sahoo. The syllabus has been recommended for the implementation in the coming semester for 2018-2019 batch.

Agenda 3: Discussion and modification in B.Tech (CBCS) for Basket-I to be approved

- Dr MLN Acharyalu has suggested some modification in the B.Tech (CBCS)Basket –I syllabus .However ,the members of BOS has not been recommended the said modification for immediate implementation(Annexure-2)

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***Agenda 4:*Inclusion of courses on life skills and value addition**

It was suggested that students take up the various courses offered by the University in the areas of life skills and value addition for their overall improvement and well being.The same was agreed upon and approved by the Board members.*(Annexure-3)*

The HoD, Department of Chemistry. extended sincere thanks to all members of the Board.

The meeting ended with a vote of thanks to the Chair.

HoD, Chemistry
30.6.2018
Department of Chemistry
School of Applied Sciences
UNIVERSITY OF TECHNOLOGY & MANAGEMENT
Bhubaneswar, Odisha

Dean,SoAS
30.6.2018
DEAN
School of Applied Sciences
CENTURION UNIVERSITY OF TECHNOLOGY & MANAGEMENT
Bhubaneswar,Odisha

Dean, Academics
Dean - Academic
Centurion University of Technology & Management
Bhubaneswar, Khurda, Odisha-752050

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Annexure I

B. Sc. Chemistry Syllabus (III to VI semester)

Type of curriculum; CBCS/Elective/NEP: B.Sc : CBCS

List of new courses added

Sl. No	Course Title	Type(Skill/Employability/ Entrepreneurship	Credit
		B.Sc(Semester -III)	
1	Inorganic chemistry-II	Employability	6
2	Organic Chemistry-II	Employability	6
3	Physical Chemistry-III	Employability	6
4	Inorganic Chemistry-III	Employability	6
		B.Sc(Semester -IV)	
1	Organic Chemistry-III	Employability	6
2	Physical Chemistry-IV	Employability	6
3	Organic Chemistry-IV	Employabilityand Skill	6
4	Physical Chemistry-V	Employability and Skill	6
		B.Sc(Semester -V)	
5	Inorganic Chemistry-IV	Employabilityand Skill	6
6	Organic Chemistry-V	Skill	6
7	Environmental Science	Employability and Skill	6
8	Industrial Chemicals and Environment	Employability	6
9	Inorganic Materials of Industrial Importance	Skill	6
10	Research Methodology for Chemistry	Skilland Employability	6
		B.Sc(Semester -VI)	
11	Instrumental Methods of Chemical Analysis	Skill	6
12	Basic Pharmaceutical Chemistry	Skill	6
13	Analytical Clinical	Skill	6

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	Biochemistry		
14	Green Methods in Chemistry	Skill	6
15	Basic Analytical Chemistry	Skill	6

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Annexure-II

BASKET - I (B.Tech-All programs)

Course Code	Course Title	Course Type	Credits	Prerequisite	Department Offering
FCBS0401	Applied Analytical Chemistry	Theory + Practice	3	Nil	Chemistry
FCBS0402	Industrial Chemistry	Theory + Practice	3	Nil	Chemistry
FCBS0403	Applied Engineering Materials	Theory + Practice	3	Nil	Chemistry
FCBS 0101	Environmental Science	Theory	3	Nil	Chemistry

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Annexure-III

List of Value added courses

List of Skill Courses

Sl. No	Course Title	Type(Skill/Employability/Entrepreneurship	Credit
1	Basic Herbal Technology	Skill	2
2	Extraction and Isolation of Drugs	Skill	2
3	Chemical Identification of Drugs	Skill-Chemical identification of drugs	2
4	Chemistry of Biomolecules	Employability and Skill	4
5	Physical Chemistry of Pharmaceuticals	Employability and Skill	4
6	Essentials of Pharmaceutical Chemistry	Employability and Skill	4
7	Analytical Techniques for Pharmaceutical Drugs	Employability and Skill	4
8	Project	Skill	6

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Proceedings of Board of Studies Meeting on 22nd June, 2018

BOS meeting was held on Dean SAS office, CUTM Bhubaneswar

Member Present

External Member

1. Prof. S.K. Biswal
2. Dr Dojalisa Sahu
3. Dr. Chandana Adhikari (CUTM, Rayagada Campus)
4. Mr. Suman Panda (CUTM, Balangir Campus)
5. Dr. MLN Acharyulu (CUTM, AP)

Prof. Pratulla Ku. Sahoo
Utkal University

The following points has been reviewed and recommended:

1. The B.Se (Hons) core syllabus is not changed. Only one domain course is introduced. The syllabus of the domain (Pharmaceutical chemistry) is prepared by following Pharmacy Council of India syllabus.
2. The domain syllabus is reviewed by the external member Prof(Dr) Pratulla ku Sahoo. As per the suggestion of external member, the syllabus has been recommended for the implementation in the coming Semester for 2018-2019 Batch.

12

3. Dr. MLN Acharyulu has suggested some modification in the B.Tech (CBCS) Basket-1 syllab However the members of BOS has not recommended the said modification for immideali implementation

30/6/18
(Prof P K Sahu)
Utkal University

30/06/18

30.6.18

30th June 2018
(CUTM Balangir)

30.6.18

30.6.18
(Dr MLN Acharyulu)
CUTM, A.P)

CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Management

Date: 06.07.2018

MINUTES OF BOARD OF STUDIES MEETING held on 30.06.2018

Venue: Board Room, CUTM, Bhubaneswar

Time: 11.00 a.m.

The Board of Studies (BoS) meeting of School of Management was held on 30.06.2018 at 11 a.m. in the Board Room, CUTM Bhubaneswar. The following members were present:

1. Dr. Smita Mishra Panda, Director Research, CUTM
2. Dr. Anita Patra, Registrar, CUTM
3. Dr. Prasanta Kumar Mohanty, Dean, Academics, CUTM
4. Dr. Ashok Kumar Mohanty, Retd. Professor, Berhamur University
5. Dr. Rashmi Ranjan Parida, PGP Coordinator, CUTM
6. Dr. Pramod Kumar Patjoshi, Faculty, CUTM
7. Dr. Bibhunandini Das, Faculty, CUTM
8. Dr. Umakanta Nayak, Faculty, CUTM
9. Prof. Shiv Sankar Das, Faculty, CUTM
10. Prof. KVD Prakash, Faculty, CUTM
11. Dr. Bijay Bhujabal, Dean, SoM, CUTM

The Chairperson, CUTM welcomed all members of the Board and briefly outlined the purpose of the meeting. Thereafter, the Dean, SoM presented the achievements and improvements of the School in the areas of academics, research, consultancy and infrastructure.

The following agenda items were taken up subsequently:

Agenda 1: **The minutes of the last meeting of the BoS held on 12.06.2017 were confirmed.**

Agenda 2: **Discussion and approval on revision required in the Curriculum of MBA Program**

- The Dean, SoM presented the MBA curriculum based on the feedback and suggestions made by the various stakeholders. Board discussed the curriuculum throughly and approved the following suggestions for course revision to be implemented from the Academic Year 2018-19 (*Annexure-I*).
    - A new Area of Electives was introduced in Hospital Management with 48 credits.

Agenda 3: **Discussion and approval on revision required in the Curriculum of MBA-DM & ABM program**

The Dean, SoM presented the MBA- DM&ABM syllabus developed in collaboration with representatives of Norwegian University of Science and Technology (NTNU) and suggestions made by the various stakeholders . The Board accepted and approved the curriculum to be implemented from the Academic Year 2018-19 (*Annexure-II*).

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Agenda 4: **Discussion and approval on revision required in the Curriculum of BBA program**

- BBA syllabus was presented based on the suggestions made by the various stakeholders . The Board accepted and approved the existing syllabus without changes for the academic year Year 2018-19.

Agenda 5: **Discussion and approval on revision required in the Curriculum of BBA program**

- B.Com syllabus was presented based on the suggestions made by the various stakeholders . The Board accepted and approved the existing syllabus without changes for the academic year Year 2018-19.

Agenda 6: **Inclusion of courses on life skills and value addition**

Various courses were presented to be offered by the University in the areas of life skills and value addition for the overall improvement and well being of students. The same was agreed upon and approved by the Board members. *(Annexure-III)*

The Dean, SoM extended sincere thanks to all members of the Board.

The meeting ended with a vote of thanks to the Chair.

Dean, SoM

Dean
School of Management
Centurion University, Odisha

Dean, Academics

Dean - Academic
Centurion University of Technology & Management
Bhubaneswar, Khurda, Odisha-752050

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Annexure-I

(i) List of new courses added in MBA

Sl. No	Course Title	Type (Skill/ Employability/ Entrepreneurship	Credit
Electives of Semester III and IV			
1	Power Distribution Management	Employability	4
2	Power Plant System	Employability	4
3	Project Planning, Analysis and Management	Employability, Entrepreneurship	4
4	Electricity Industry Structure and Act	Employability	4
5	Integrated Energy Management & Power Planning	Employability	4
6	Financing Energy Sector Projects	Employability, Entrepreneurship	4
7	Power Pricing & Power Purchase Agreement	Employability, Entrepreneurship	4
8	Power Trading	Employability	4
9	Power Station Management	Employability	2
10	Renewable Energy for a Sustainable Future	Employability, Entrepreneurship	4
11	Risk Hazard and Environment	Employability	2
12	Energy Conservation & Update	Employability	4
13	Maintenance Management and Inventory Control	Employability	4

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Annexure-II

List of new courses added in **MBA DM & ABM**

Sl. No	Course Title	Type (Skill/ Employability/ Entrepreneurship	Credit
Semester-I			
1	Introduction to Indian Society	Employability	2
2	Marketing Management	Employability & Entrepreneurship	4
3	Accounting for Managers	Employability & Entrepreneurship	4
Semester-II			
3	Financial Management	Employability & Entrepreneurship	4
4	Sustainable Entrepreneurship Development	Employability & Entrepreneurship	4
5	Skill Ecosystem Development	Employability	4
6	Innovation and Regional Development	Employability	4
7	Project Management	Employability & Entrepreneurship	4
Semester-III			
8	Summer Internship	Employability & Entrepreneurship	8
9	Development and Globalisation	Employability	7.5
10	Global Production Network	Employability	7.5
11	Research Methods	Employability & Entrepreneurship	7.5
12	Gender Issues in Development	Employability	3.5
13	Introduction to Ethics	Employability	1
Semester-IV			
14	Development Action Research Thesis	Skill development	10
16	Agriculture Action Research Thesis	Skill development	10

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Annexure-III

Skill Courses approved by university

Sl. No.	Course Title	Credit
1	Introduction to Composite Manufacturing	4
2	3D Modelling and Printing	4
3	Precast Concrete Manufacturing	4
4	Fabrication	4
5	Hi-Tech Surveying	4
6	Internet of Things	4
7	Mechatronics System Design	4
8	Introduction to Nanotechnology	4
9	Drone Piloting	4
10	Camera Operation	4
11	Editor	4
12	Desktop Publishing	4
13	Introduction to Blender and Unity tools	4

Value Added courses approved by university

	Course Title	Credit
1	LSD-2	30 Hours
2	Conduct in daily Life-Insights from The Panchatantra	30 Hours
3	Human Rights	30 Hours
4	Renewable Energy	30 Hours
5	Data science & ML	30 Hours
6	Introduction to Nutraceuticals	30 Hours
7	Introduction to Tableau	30 Hours
8	Basics of Photography	30 Hours
9	Innovation Management	30 Hours
10	Effective Writing	30 Hours
11	Indian Culture and History	30 Hours
12	Critical Thinking	30 Hours
13	Disability, Diversity and Development	30 Hours
14	Intellectual Property Rights	30 Hours
15	Emotional Intelligence	30 Hours
16	Home remedies for healthy living	30 Hours
17	Self-Management: Insights from Srimad Bhagavad Gita	30 Hours

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BoS Meeting held on dt. 30th June 2018
SCHOOL OF MANAGEMENT, Venue-

MEMBERS PRESENT

External

1. Mr. P.K. Das
2. Mr. P.K. Mishra
3. Mr. A.K. Mohanty

Internal

1. Prof. Anita Pat
2. Prof. Bijay Bhuje
3. Prof. P.K. Mohanty
4. Prof. K.V.D Prasad
5. Prof. Umakanta Na
6. Prof. Shiv Sonwar Du
7. Prof. Rashmi Ranjan Pa
8. Prof. Pramod Patjoshi
9. Prof. Bishnupriya Du

NBA Program.

- Simulated Internship program to be introduced in semester-02 of 2 credit.
- From EFC (Ability Foundation course) - Sales & Distribution management will revert back to Semester - (II)
- 4th elective to be introduced in Semester - (II).
- Power Management course was discussed & explained by Mr. P.K. Das

NBA (DM).

- Prof. Rashmi Parida explained about the course NBA (DM) which is to be Jointly given by NTNU and CUTM.

SIGNATURES OF MEMBERS.

...NAL MEMBERS.

SIGNATURES

R. P.K. DAS

R. P.K. MISHRA

R. A.K. MOHANTY

...ERNAL MEMBERS.

SIGNATURES

Prof. ANITA PATRA (REGISTRAR) (Professor SOM)

Prof. KVD PRAKASH (DEAN-IIE&HRD)

Prof. BIJAY BHUJABAL

Prof. P.K. MOHANTY

Prof. UMAKANT NAYAK

Prof. SHIVSANKAR DAS

Prof. BIBHUNANDIN DAS

Prof. PRAMOD PATJOSHI

Prof. RASHMI RANJAN PARIDA

30/6/2018

30/6/2018

30/06/18

CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Media and Communication

Date: 06.07.2018

MINUTES OF BOARD OF STUDIES MEETING held on 30.06.2018

Venue: Board Room, CUTM, Bhubaneswar

Time: 11.00 a.m.

The Board of Studies (BoS) meeting of Department of Civil Engineering was held on 30.06.2018 at 11 a.m. in the Board Room, CUTM Bhubaneswar. The following members were present:

1. Prof. Chandrabhanu Pattanayak, Director, SoMC, CUTM
2. Dr. Jayant Kumar Swain, Assistant Professor and Co-ordinator,PG Department of Journalism & Mass Communication, Ravenshaw University
3. Mr. Ashok Kumar Panda, Journalist
4. Dr. Ambika Sankar Mishra, HoD, SoMC

The Chairperson welcomed all members of the Board and briefly outlined the purpose of the meeting. Thereafter, the Head of the Department of Civil Engineering presented the achievements and improvements of the department in the areas of academics, research, consultancy and infrastructure.

The following agenda items were taken up subsequently:

Agenda 1: **The minutes of the last meeting of the BoS held on 12.06.2017 were confirmed.**

Agenda 2: **Discussion and approval on revision required in the Curriculum of MAMC**

- The Director, SoMC gave a presentation based on the feedback received on curriculum outlining the suggestions made by the various stakeholders. Based on that, the Board accepted and approved the incorporation of new courses to the syllabus for the academic year 2018-19 (*Annexure-I*)
    - Courses on reseach methods, digital media and new electives were introduced

Agenda 3: **Discussion and approval on revision required in the Curriculum of BAMC**

- BAMC syllabus was presented based on the suggestions made by the various stakeholders . The Board accepted and approved the incorporation of new courses in the syllabus for the academic year Year 2018-19 *(Annexure-II).*
    - Courses on electronic, digital media and new electives were introduced

Agenda 4: **Inclusion of courses on life skills and value addition**

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It was suggested that students take up the various courses offered by the University in the areas of life skills and value addition for their overall improvement and well being. The same was agreed upon and approved by the Board members. *(Annexure-III)*

The Director, SoMC extended sincere thanks to all members of the Board.

The meeting ended with a vote of thanks to the Chair.

Director, SoMC

Dean,Academics

HoD, SoMC

Dean - Academic
Centurion University of Technology & Management
Bhubaneswar, Khurda, Odisha-752050

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Annexure-I

List of new courses added in MA-MC

Sl. No	Course Title	Type (Skill/ Employability/ Entrepreneurship	Credit
1	Communication Research Methods	Skill development	4
2	Introduction to Print & Electronic Media	Skill development	4
3	Society, Media and Communication	Skill development	4
4	Advanced Digital Media	Skill development	4
5	Digital Media Platforms	Employability	4
6	Film studies	Employability	4
7	Advertising and Public Relations	Employability	4
8	Thesis	Employability	4
9	Camera Operator	Skills development	2
10	Video Editor	Skill development	4
11	Sound Engineer	Skill development	2
12	Adobe tools and Illustrations	Skill Development and Employability	4
13	Advance Skill Course	Skill Development	4

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Annexure-II

List of new courses added in BA-MC

Sl. No	Course Title	Type (Skill/Employability/ Entrepreneurship)	Credit
1	Introduction to Print and Electronic Media	Skill Development	7
2	Introduction to Social Media	Employability	7
3	Electronic Media	Skill development and Employability	7
4	Film Studies	Employability	7
5	PR and Advertising	Employability	7
6	Digital Media	Skill Development	7
7	Camera Operator	Skill Development	7
8	Video Editor	Skill Development	7
9	Sound Engineer	Skill Development	7
10	Adobe tools and Illustrations	Skill Development	7

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Annexure-III

Skill Courses approved by university

Sl. No.	Course Title	Credit
1	Apparel Production & Marketing	4
2	Line Stitching Supervising	4
3	Apparel Production	4
4	Light Motor Vehicle Driving	4
5	Fork Lift Operation	4
6	Heavy Vehicle Technology	4
7	Two Wheeler Service Technology	4
8	Four Wheeler Service Technology	4
9	E-Vehicle Assembly and Service Technology	4
10	Robotics	4
11	Poultry Farming	4
12	CNC Programming (CAM)	4
13	Design Supervising Wooden and Modular Furniture	4

Value Added courses approved by university

	Course Title	Credit
1	LSD-2	30 Hours
2	Development of Concentration and Memory- Application of 'Raja Yoga' in daily life	30 Hours
3	Self defence for Girls	30 Hours
4	Digital Marketing	30 Hours
5	Bio-fertilizer	30 Hours
6	Gender Issues	30 Hours
7	Solid Waste Management	30 Hours
8	Smart Agriculture	30 Hours
9	Adobe Tools	30 Hours

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Centurion University,
Institute of Knowledge Society
Date: 30-06-2018.

The Second Board of Studies Meeting, of the School of Media and Communication, Institute of Knowledge Societies, met on 30-06-2018. The following members were present:

1. Chandrabhanu Pattanayak.
2. Ashok Kumar Panda.
3. Jayant Kumar Swain.
4. Ambaika Sankar Mishra.

At the outset, Chandrabhanu Pattanayak, initiated the discussions and gave a rationale for making changes to the existing Curriculum.

After a lot of discussion, the following changes were effected and incorporated.

1. Digital Media as a specialization was added to the Bachelor's Course.
2. Gaming, Motion Capture and VFX, as topics were introduced in the Core-papers – "Digital Media."
3. New papers such as Advertising and PR, Introduction to Social Media, ~~and~~ Digital Media and Film Studies ~~in~~ were incorporated in the Core Courses of BA and MA.
4. Introduction to Print Media and Introduction to Electronic Media, which were originally two papers have been merged and made one.

5. Media Sustainability and International communication, which were originally two papers have been merged to one paper under the nomenclature "~~Socie~~ Media, Society and Communication.

6. New electives such as
   1. Camera operator.
   2. Video Editor
   3. Sound Engineer
   4. Animator
   5. Adobe tools and Illustrator

have been included as Electives along with other Electives which were there earlier. These Five courses are also stated to be delivered as three months certificate Programmes in Collaboration with our partn "KOSHISH".

7. It is Suggested, that, the Bachelor and Masters Courses be re-positioned to reflect new and cutting edge technology and disections. Details are in the appendi

Jayant Kumar Swain. Ashok Ku Pandu

ASM
Ambika Sankar Mishra.

CHANDRABHANU PATTANA

CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Media and Communication

Date: 06.07.2018

MINUTES OF BOARD OF STUDIES MEETING held on 30.06.2018

Venue: Board Room, CUTM, Bhubaneswar

Time: 11.00 a.m.

The Board of Studies (BoS) meeting of Department of Civil Engineering was held on 30.06.2018 at 11 a.m. in the Board Room, CUTM Bhubaneswar. The following members were present:

1. Prof. Chandrabhanu Pattanayak, Director, SoMC, CUTM
2. Dr. Jayant Kumar Swain, Assistant Professor and Co-ordinator,PG Department of Journalism & Mass Communication, Ravenshaw University
3. Mr. Ashok Kumar Panda, Journalist
4. Dr. Ambika Sankar Mishra, HoD, SoMC

The Chairperson welcomed all members of the Board and briefly outlined the purpose of the meeting. Thereafter, the Head of the Department of Civil Engineering presented the achievements and improvements of the department in the areas of academics, research, consultancy and infrastructure.

The following agenda items were taken up subsequently:

Agenda 1: **The minutes of the last meeting of the BoS held on 12.06.2017 were confirmed.**

Agenda 2: **Discussion and approval on revision required in the Curriculum of MAMC**

- The Director, SoMC gave a presentation based on the feedback received on curriculum outlining the suggestions made by the various stakeholders. Based on that, the Board accepted and approved the incorporation of new courses to the syllabus for the academic year 2018-19 (*Annexure-I*)
    - Courses on reseach methods, digital media and new electives were introduced

Agenda 3: **Discussion and approval on revision required in the Curriculum of BAMC**

- BAMC syllabus was presented based on the suggestions made by the various stakeholders . The Board accepted and approved the incorporation of new courses in the syllabus for the academic year Year 2018-19 *(Annexure-II).*
    - Courses on electronic, digital media and new electives were introduced

Agenda 4: **Inclusion of courses on life skills and value addition**

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It was suggested that students take up the various courses offered by the University in the areas of life skills and value addition for their overall improvement and well being. The same was agreed upon and approved by the Board members. *(Annexure-III)*

The Director, SoMC extended sincere thanks to all members of the Board.

The meeting ended with a vote of thanks to the Chair.

Director, SoMC

Dean,Academics

HoD, SoMC

Dean - Academic
Centurion University of Technology & Management
Bhubaneswar, Khurda, Odisha-752050

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Annexure-I

List of new courses added in MA-MC

Sl. No	Course Title	Type (Skill/ Employability/ Entrepreneurship	Credit
1	Communication Research Methods	Skill development	4
2	Introduction to Print & Electronic Media	Skill development	4
3	Society, Media and Communication	Skill development	4
4	Advanced Digital Media	Skill development	4
5	Digital Media Platforms	Employability	4
6	Film studies	Employability	4
7	Advertising and Public Relations	Employability	4
8	Thesis	Employability	4
9	Camera Operator	Skills development	2
10	Video Editor	Skill development	4
11	Sound Engineer	Skill development	2
12	Adobe tools and Illustrations	Skill Development and Employability	4
13	Advance Skill Course	Skill Development	4

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Annexure-II

List of new courses added in BA-MC

Sl. No	Course Title	Type (Skill/Employability/ Entrepreneurship)	Credit
1	Introduction to Print and Electronic Media	Skill Development	7
2	Introduction to Social Media	Employability	7
3	Electronic Media	Skill development and Employability	7
4	Film Studies	Employability	7
5	PR and Advertising	Employability	7
6	Digital Media	Skill Development	7
7	Camera Operator	Skill Development	7
8	Video Editor	Skill Development	7
9	Sound Engineer	Skill Development	7
10	Adobe tools and Illustrations	Skill Development	7

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Annexure-III

Skill Courses approved by university

Sl. No.	Course Title	Credit
1	Apparel Production & Marketing	4
2	Line Stitching Supervising	4
3	Apparel Production	4
4	Light Motor Vehicle Driving	4
5	Fork Lift Operation	4
6	Heavy Vehicle Technology	4
7	Two Wheeler Service Technology	4
8	Four Wheeler Service Technology	4
9	E-Vehicle Assembly and Service Technology	4
10	Robotics	4
11	Poultry Farming	4
12	CNC Programming (CAM)	4
13	Design Supervising Wooden and Modular Furniture	4

Value Added courses approved by university

	Course Title	Credit
1	LSD-2	30 Hours
2	Development of Concentration and Memory- Application of 'Raja Yoga' in daily life	30 Hours
3	Self defence for Girls	30 Hours
4	Digital Marketing	30 Hours
5	Bio-fertilizer	30 Hours
6	Gender Issues	30 Hours
7	Solid Waste Management	30 Hours
8	Smart Agriculture	30 Hours
9	Adobe Tools	30 Hours

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Centurion University,
Institute of Knowledge Society
Date: 30-06-2018.

The Second Board of Studies Meeting, of the School of Media and Communication, Institute of Knowledge Societies, met on 30-06-2018. The following members were present:

1. Chandrabhanu Pattanayak.
2. Ashok Kumar Panda.
3. Jayant Kumar Swain.
4. Ambaika Sankar Mishra.

At the outset, Chandrabhanu Pattanayak, initiated the discussions and gave a rationale for making changes to the existing Curriculum.

After a lot of discussion, the following changes were effected and incorporated.

1. Digital Media as a specialization was added to the Bachelor's Course.
2. Gaming, Motion Capture and VFX, as topics were introduced in the Core-papers – "Digital Media."
3. New papers such as Advertising and PR, Introduction to Social Media, ~~and~~ Digital Media and Film Studies ~~in~~ were incorporated in the Core Courses of BA and MA.
4. Introduction to Print Media and Introduction to Electronic Media, which were originally two papers have been merged and made one.

5. Media Sustainability and International communication, which were originally two papers have been merged to one paper under the nomenclature "~~Socie~~ Media, Society and Communication.

6. New electives such as
   1. Camera operator.
   2. Video Editor
   3. Sound Engineer
   4. Animator
   5. Adobe tools and Illustrator

have been included as Electives along with other Electives which were there earlier. These Five courses are also stated to be delivered as three months certificate Programmes in Collaboration with our partn "KOSHISH".

7. It is Suggested, that, the Bachelor and Masters Courses be re-positioned to reflect new and cutting edge technology and disections. Details are in the appendi

Jayant Kumar Swain. Ashok Ku Pandu

ASM
Ambika Sankar Mishra.

CHANDRABHANU PATTANA

Centurion University

2017-18

CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Engineering & Technology

Department of Civil Engineering

Date: 12.06.2017

MINUTES OF BOARD OF STUDIES MEETING held on 12.06.2017

Venue: Board Room, CUTM, Bhubaneswar

Time: 11.00 a.m.

The Board of Studies (BoS) meeting of Department of Civil Engineering was held on 12.06.2017 at 11 a.m. in the Board Room, CUTM Bhubaneswar. The following are the members:

1. Prof. C.N.V. Satyanarayan Reddy, Professor, Dept. of Civil Eng., Andhra University
2. Prof. Manoj Ku Rath, Prof. Dept. of Civil Engg, CUTM,BBSR Campus
3. Prof. R. C. Padhy, General Major
4. Dr. Siba Mishra, Assosiate Prof. Dept. of Civil Engg, CUTM,BBSR Campus
5. Prof. Prafulla Kumar Panda, HOD Dept. of Civil Engg, CUTM,Pkd Campus
6. Prof. Sagarika Panda, HOD Dept. of Civil Engg, CUTM,BBSR Campus

The Chairperson welcomed all members of the Board and briefly outlined the purpose of the meeting. Thereafter, the Head of the Department of Civil Engineering presented the achievements and improvements of the department in the areas of academics, research, consultancy and infrastructure.

The following agenda items were taken up subsequently:

Agenda 1: **The minutes of the last meeting of the BoS held on 02/06/2016 were confirmed.**

Agenda 2: **Discussion and approval on any revision required in the Curriculum of B.Tech, Civil Engg.**

The HoD, Civil Engg. gave a presentation on the feedback received on curriculum outlining the suggestions made by the various stakeholders. Based on this , the Board accepted and approved a few suggestions for course revision to be implemented from the Academic Year 2017-18.

- Approval for B.Tech Civil Engg. Course structure and syllabus for basket 5(domain specific subjects) of CBCS system .
- Reviewed CBCS system and explained about various basket and credit structure.
- All basket 5 Civil domains were examined and course structure was finalized.
- Smart City, Planning, and Design domain syllabus are updated as per the latest Software and technology being used by the industry.
- The entire domain person should have contact with industry for further feedback and progress.
- All the basket 5 Civil domains to be changed.
- The Board approved the updation of the courses important from higher studies point of view and replacement of contents of open basket with new courses with greater practice component. *(Annexure A)*
- The Board approved the revision of the syllabus of the Construction Domain in keeping with the latest requirements of the industry.

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Agenda 3: **Inclusion of courses on life skills and value addition**

It was suggested that students take up the various courses offered by the University in the areas of life skills and value addition for their overall improvement and well being.The same was agreed upon and approved by the Board members.*(Annexure B)*

The HoD, Department of Civil Engg. extended sincere thanks to all members of the Board.

The meeting ended with a vote of thanks to the Chair.

Dean, SoET

Dean, SOET
Centurion University of Technology & Management
Odisha

Dean, Academics

Dean - Academic
Centurion University of Technology & Management
Bhubaneswar, Khurda, Odisha-752050

HoD, Civil Engineering

HOD
Dept. of Civil Engineering
Centurion University of
Technology & Management,BBSR

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Annexure-A

List of new courses added

Sl. No	Course Title	Type(Skill/Employability/Entrepreneurship)	Credit
1	Concrete Technology	Skill And Employability	3
2	Geotechnical Engineering - I	Skill And Employability	3
3	Foundation Engineering	Skill And Employability	3
4	Highway Engineering	Skill And Employability	3
5	Hydrology & Irrigation	Skill And Employability	3
6	Quality Control and Risk Management in Construction	Skill And Employability	3
7	GIS and Digital Cartography	Skill And Employability	3
8	Strength of Material	Skill And Employability	3
9	Hydraulics & Hydraulic Machine	Skill And Employability	3
10	Water Supply & Sanitary Engineering	Skill And Employability	3
11	Computer Aided Design of Steel Structure	Skill And Employability	3

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Annexure-B

List of Skill courses (Basket) approved

Sl. No	Course Title	Credit	(T+P+P)
1	Apparel Production & Marketing	4	0+3+1
2	Line Stitching Supervising	4	0+3+1
3	Apparel Production	4	0+3+1
4	Light Motor Vehicle Driving	4	0+3+1
5	Fork Lift Operation	4	0+3+1
6	Heavy Vehicle Technology	4	0+3+1
7	Two Wheeler Service Technology	4	0+3+1
8	Four Wheeler Service Technology	4	0+3+1
9	E-Vehicle Assembly and Service Technology	4	0+3+1
10	Robotics	4	0+3+1
11	Poultry Farming	4	0+3+1
12	CNC Programming (CAM)	4	0+3+1
13	Design Supervising Wooden and Modular Furniture	4	0+3+1

List of Domain courses approved

Sl. No.	Name of the Domain	Credit	Category
1	Automotive Design	40	B
2	Cloud Technology	18	B
3	Construction Planning Monitoring and Project Management	16	A/B
4	Data Analytics	20	A/B/D
5	Embedded System Design	18	B
6	Industrial Automation	24	B
7	Information Security	41	B
8	Internet Security	38	B
9	Manufacturing (Conventional, CNC And Additive)	26	A/B
10	Planning, Design & Drawing	47	B
11	Software Technology	20	A/B
12	Surveying	36	A
13	VLSI Design & Verification	42	A
14	Web Technology	38	A/B
15	Welding And Inspection	24	A/B

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List of value added courses approved

Sl. No	Course Title	Hrs. of input
1	LSD-2	30
2	Development of Concentration and Memory- Application of 'Raja Yoga' in daily life	30
3	Self defence for Girls	30
4	Digital Marketing	30
5	Bio-fertilizer	30
6	Gender Issues	30
7	Solid Waste Management	30
8	Smart Agriculture	30
9	Adobe Tools	30

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Proceedings of Board of Studies in Civil Engineering dt 12-06-2017 at JNTUA, Anp

Considered the syllabus under Domains 1, 2, & 3. and the following recommendations were made.

Rec 1. The course on Geotech & Insert & G.I.T. to be recommended as Geotech investigation and the topics related to Ground Improvement to be covered in a new subject "Geo synthetics and Ground Improvement Technics" under a separate Domain (General Domain).

Recommendation-2: To add the following subjects in the Proposed "General Domain".

(a) Transportation Engineering (Railway, Airport and Harbour Engineering)
(b) Green Buildings.
(c) 3D-Building Technology.
(d) GeoSynthetics & Ground Improvement Technics.
(e) Concrete Technology.

Recommendation-3: Syllabus related to the above subjects under the "General Domain" shall be ~~decided~~ framed by the external experts and shall be communicated to prof: M.K. Rath and prof: M.L. Narasimham.

Recommendation-4: The Syllabi of the Domain-1, Domain-2 & Domain-3 are approved.
~~Sylla~~ Syllabi for M.Tech courses in also approved.

C.V. Reddy
(prof. C.N.V. Satyanarayana Reddy A.U.)

12/6/17
(Prof. M.L. Narasimham)

12/6/17
(Vijayakumar G.)

12/06/2017
Prof. S.P. Behera

12.6.2017

2

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CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Engineering & Technology

Department of Electronics and Communication Engineering

Date: 12.06.2017

MINUTES OF BOARD OF STUDIES MEETING held on 12.06.2017

Venue: Room 205, CUTM, Bhubaneswar

Time: 11.00 a.m.

The Board of Studies (BoS) meeting of Department of Electronics and Communication Engineering was held on 12.06.2017 at 11 a.m. in the Room no. 205, CUTM Bhubaneswar. The following are the members:

1. Mr. Managobinda Mishra, Director, Nemhans
2. Dr. D. P. Acharya, NIT Rourkela
3. Dr. S. K. Mandal, HoD, SoET
4. Dr. Satyasis Mishra, Dept. ECE
5. Dr. Satyanarayan Padhi, Asst. Prof., ECE
6. Dr. Prasant Kumar Mohanty, Convenor of BoS & Dean, SoET

The Chairperson welcomed all members of the Board and briefly outlined the purpose of the meeting. Thereafter, the Head of the Department of Electronics and Communication Engineering presented the achievements and improvements of the department in the areas of academics, research, consultancy and infrastructure.

The following agenda items were taken up subsequently:

Agenda 1: **The minutes of the last meeting of the BoS held on 02.6.2016 were confirmed.**

Agenda 2: **Discussion and approval on any revision required in the Curriculum of B.Tech, Electronics and Communucation Engg.**

- The HoD, Electronics and Communucation Engg. gave a presentation on the feedback received on curriculum outlining the suggestions made by the various stakeholders. Based on this , the Board accepted and approved a few suggestions for course revision to be implemented from the Academic Year 2017-18.
- The syllabus of 3rd to 8th semester of B. Tech, Electronics and Communication Engg. was considered and approved by the Board.
- Courses that can be executed in Practice mode were placed for approval to be reconfigured to Theory + Practice and Project + Practice.
- The Board approved the changes suggested in the existing syllabus and some new courses added as per the latest Software and technology being used by the industry .*(Annex-1)*

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Agenda 3: **Inclusion of courses on life skills and value addition**

It was suggested that students take up the various courses offered by the University in the areas of life skills and value addition for their overall improvement and well being. The same was agreed upon and approved by the Board members. *(Annex 2 and Annex 3)*

The HoD, Department of Electronics and Communucation Engg. extended sincere thanks to all members of the Board.

The meeting ended with a vote of thanks to the Chair.

Dean, SoET

Dean, SOET
Centurion University of Technology & Management
Odisha

Dean, Academics

Dean - Academic
Centurion University of Technology & Management
Bhubaneswar, Khurda, Odisha-752050

HoD, Electronics & Communication Engg.

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Annexure-I

List of new courses added

Sl. No	Course Title	Type(Skill/Employability/Entrepreneurship	Credit
	Basket 3		
1	Sensors & IoT	Skill	3
	Basket 4		
2	Embedded Software and Development	Employability	4
3	Microwave and Radar Communication	Employability	4
4	Antenna and Wave Propagation	Employability	3
	Basket 5		
5	Linux System Programming	Employability	5
6	Embedded Linux using Beagle Bone Black	Employability	5
7	Linux Kernel & Device Driver	Employability	3
8	Computer Vision	Employability	2
9	Embedded System Design using LABVIEW	Employability	5
10	Satellite and TV Communication	Employability	2
11	4G LTE and 5G Communication	Employability	2
12	Digital Image Processing	Employability	5
13	Antenna design and manufacturing	Employability	3
14	Information Theory & Coding	Skill	4
15	Mobile Communication	Employability	4
16	MATLAB for Electronics	Skill	3
17	PCB Design and Analysis	Skill	3

Syllabus revised

Sl. No	Course Title	Type	Credit	Details of modification
1	Electromagnetic Field Theory and Transmission line	Employability	4	Module VII is updated

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Annexure 2

Group A : Agriculture/ Agri Engineering/Phyto pharma/ Dairy Tech/ Fisheries/ Biological Sciences
Group B: All other Engineering/Physical and Mathematical Science/Vocational or Skills
Group C: Pharmacy and Allied Health
Group D: Management & Media and Communication

Sl. No.	Name of the Domain	Credit	Category	Year of introduction
1	Automotive Design	40	B	2017
2	Cloud Technology	18	B	2017
3	Construction Planning Monitoring and Project Management	16	A/B	2017
4	Data Analytics	20	A/B/D	2017
5	Embedded System Design	18	B	2017
6	Industrial Automation	24	B	2017
7	Information Security	41	B	2017
8	Internet Security	38	B	2017
9	Manufacturing (Conventional, CNC And Additive)	26	A/B	2017
10	Planning, Design & Drawing	47	B	2017
11	Software Technology	20	A/B	2017
12	Surveying	36	A	2017
13	VLSI Design & Verification	42	A	2017
14	Web Technology	38	A/B	2017
15	Welding And Inspection	24	A/B	2017

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Annexure-3

Skill Courses approved by university

S No	Course	Course Code	Credit
1	Apparel Production & Marketing	CUTM3029	4
2	Line Stitching Supervising	CUTM3030	4
3	Apparel Production	CUTM3031	4
4	Light Motor Vehicle Driving	CUTM3032	4
5	Fork Lift Operation	CUTM3033	4
6	Heavy Vehicle Technology	CUTM3034	4
7	Two Wheeler Service Technology	CUTM3035	4
8	Four Wheeler Service Technology	CUTM3036	4
9	E-Vehicle Assembly and Service Technology	CUTM3037	4
10	Robotics	CUTM3038	4
11	Poultry Farming	CUTM3039	4
12	CNC Programming (CAM)	CUTM3040	4
13	Design Supervising Wooden and Modular Furniture	CUTM3041	4

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Annexure 4

Value Added courses offered by the University

S No	Couse	Course code	Credit Hours
1	LSD-2	CUVA0011	30 Hours
2	Development of Concentration and Memory- Application of 'Raja Yoga' in daily life	CUVA0025	30 Hours
3	Self defence for Girls	CUVA0026	30 Hours
4	Digital Marketing	CUVA0027	30 Hours
5	Bio-fertilizer	CUVA0028	30 Hours
6	Gender Issues	CUVA0029	30 Hours
7	Solid Waste Management	CUVA0030	30 Hours
8	Smart Agriculture	CUVA0031	30 Hours
9	Adobe Tools	CUVA0032	30 Hours

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Date :- 12-06-2017

Venue :- CUTM, BBSR

→ Preparation of course structure and syllabus of B.Tech CBCS for ECE branch '2017-18 onwards.

→ Revised course structure of 4th year for 2014-18 batch

→ Following tracks / domains are added to Basket-V of ECE

i) Domain course
- Embedded System
- VLSI Design and verification
- communication System.
- Solar Energy

ii) Skill course

iii) Gate

→ M.Tech courses
- → VLSI Design (Regular)
- → M.Tech by Research in
  - i) communication system Engineering
  - ii) VLSI Design.

Based on syllabus and pedagogy, BOS members suggested following points

i) To include RF engineering and drive test in communication domain.

ii) To include Practical component (field based) for study on 4G LTE technology.

iii) Comment on VLSI and embedded system domain is attached.

iii) Domain of Solar Energy Syllabus is discussed with the experts from ECE & Mechanical as the course is interdisciplinary. Suggestions are incorporated.

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Sl. No.	NAME	PLACE	SIGNATURE
1.	Dr. S.K. Mandal	CUTM, Bhubaneswar	
2.	Mr. Managobinda Mishra	NEMHANS, Bhubaneswar	
3.	Dr. Satyasis Mishra	CUTM, Bhubaneswar, ECE	S. Mishra.
4.	Prof. Satya Narayan Padhy	CUTM, Paralakhemundi	Padhy
5.	Dr. D.P. Acharya	NIT, Rourkela	→ refer mail

Centurion
UNIVERSITY

CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Engineering & Technology

Department of Mechanical Engineering

Date: 12.06.2017

MINUTES OF BOARD OF STUDIES MEETING held on 12.06.2017

Venue: Board Room, CUTM, Bhubaneswar

Time: 11.00 a.m.

The Board of Studies (BoS) meeting of Department of Mechanical Engineering was held on 12.06.2017 at 11 a.m. in the Board Room, CUTM Bhubaneswar. The following are the members:

1. Prof. S.K. Mohapatra , IIT, Bhubaneswar
2. Shri Ali Kishore Patnaik, Managing Director, Odisha Diesel(Ashok Layland)
3. Prof. P.S. Rao , Dean Research, CUTM Paralakhemundi
4. Prof. PSV Ramana Rao, Dean, CUTM,AP
5. Prof.Ipsita Mishra , HOD,ME, BBSR
6. Dr. R.C Mohanty, Professor,SOET,Mechanical
7. Mr. Sudeep Kumar Singh, CUTM, Jatani Campus
8. Prof. B.P. Mishra , Dean,SOET, Paralakhemundi
9. Prof. D.Raghuveer, HOD,ME, Paralakhemundi
10. Prof.Babuli Jena , Assistant Professor
11. Mr.Mukundjee Pandey Assistant Professor
12. Mr. Manas Ranjan Padhy Assistant Professor
13. Mr. Girija Nanda Arka Assistant Professor
14. Mr. Chandan Kumar Jena, Student
15. Mr. Ravi Kumar, Student
16. Mr. Hrusikesh Mishra, Alumni
17. Mr. Mohit Singh, Alumni

The Chairperson welcomed all members of the Board and briefly outlined the purpose of the meeting. Thereafter, the Head of the Department of Mechanical Engineering presented the achievements and improvements of the department in the areas of academics, research, consultancy and infrastructure.

The following agenda items were taken up subsequently:

Agenda 1: **The minutes of the last meeting of the BoS held on 2/06/2016 were confirmed.**

Agenda 2: **Discussion and approval on any revision required in the Curriculum of B.Tech, Mechanical Engg.**

The HoD, Mechanical Engg. gave a presentation on the feedback received on curriculum outlining the suggestions made by the various stakeholders. Based on this , the Board accepted and approved a few suggestions for course revision to be implemented from the Academic Year 2017-18.

- Approval for B.Tech Mechanical Engg. Course structure and syllabus for basket 5(domain specific subjects) of CBCS system .
- Reviewed CBCS system and explained about various basket and credit structure.

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- All basket 5 mechanical domains were examined and course structure was finalized.
- In Automobile domain maintenance of Diesel engine forklift is to be supplemented with hydraulic equipment such as escalators and loader.
- The entire domain person should have contact with industry for further feedback and progress.
- Basic metallurgy to be included in basket 3 as per expert.
- All the basket 5 mechanical domains to be changed.
- Automobile domain to be supplemented by hydraulic equipment courses.
- 3D experience domain is introduced which was highly appreciated by experts.
- The Board approved the updation of the courses important from higher studies point of view and replacement of contents of open basket with new courses with greater practice component. List of new courses added in *(Annexure A.)*
- The Board approved the revision of the syllaubus of the Construction Domain in keeping with the latest requirements of the industry.
- The Board approved the changes suggested in the Basic Metallurgy, Geometric Modelling, Metrology, Workshop Practice, Digital Manufacturing, Fluid Mechanics and Heat Transfer, Operation and Maintenance of Diesel Forklift and Hydraulic Equipment as per the latest Software and technology being used by the industry. List of existing courses where syllabus was revised in *(Annexure B)*

Agenda 3: **Inclusion of courses on life skills and value addition**

It was suggested that students take up the various courses offered by the University in the areas of life skills and value addition for their overall improvement and well being.The same was agreed upon and approved by the Board members.*(Annexure C)*

The HoD, Department of Mechanical Engg. extended sincere thanks to all members of the Board.

The meeting ended with a vote of thanks to the Chair.

Dean, SoET

Dean, SOET
Centurion University of Technology & M.
Odisha

Dean, Academics

Dean - Academic
Centurion University of Technology & Management
Bhubaneswar, Khurda, Odisha-752050

HoD, Mechanical Engineering

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Annexure-A

List of new courses added

Sl. No	Course Title	Type(Skill/Employability/Entrepreneurship)	Credit
1	Manufacturing Technology 1	Skill And Employability	3
2	Manufacturing Technology 2	Skill And Employability	3
3	Internal Combustion Engines	Skill And Employability	3
4	Renewable Energy Systems	Skill And Employability	3
5	Fluid Power	Skill And Employability	3
6	Mechanics of Machines	Skill And Employability	3
7	Fluid Mechanics and Heat Transfer	Skill And Employability	3
8	Strength of Material	Skill And Employability	3
9	Finite Element Analysis	Skill And Employability	3
10	Introduction to Refrigeration & HVAC	Skill And Employability	3
11	Control System for Refrigeration & Air Conditioning	Skill And Employability	3
12	Design and Maintenance of Automobile Air Conditioning	Skill And Employability	3
13	Maintenance and Testing of Refrigerator	Skill And Employability	3
14	Maintenance and Testing of Coolers, Window and Split AC	Skill And Employability	3
15	Design and Maintenance of Central Air Conditioning Plant	Skill And Employability	3
16	Design and Maintenance of Cold Storage	Skill And Employability	3
17	Joining Processes & Technology	Skill And Employability	3
18	Arc Welding, Gas Welding & Brazing	Skill And Employability	3
19	Metal Transfer & Weld Metallurgy	Skill And Employability	3
20	Design of Welded Joints	Skill And Employability	3
21	Welding of Stainless Steel, Aluminium, Copper, Cast Iron and Hard Surfacing	Skill And Employability	3
22	Testing of Welded Joints (DT, NDT & Microstructure)	Skill And Employability	3
23	Introduction to Automobile Engineering	Skill And Employability	3

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24	Subsystems of Automobile	Skill And Employability	3
25	Design and Maintenance of Electric Vehicles	Skill And Employability	3
26	Entrepreneurship Opportunities in Automobile Trade	Skill And Employability	3
27	Maintenance of 4 Wheeler	Skill And Employability	3
28	Maintenance of 2 Wheeler	Skill And Employability	3
29	Operation and Maintenance of Diesel Forklift and Hydraulic Equipments	Skill And Employability	3
30	Project	Skill And Employability	3
31	Internship	Skill And Employability	3
32	Courses of 3D Experience Domain	Skill and Employability	35

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Annexure-B

List of existing courses where syllabus was changed

Basket/ Semester	Name of Course	No. of Modules/Topics revised	Revised Modules/Topics (details)
1	Basic Metallurgy	1	Course type was changed with little modification in content.
2	Geometric Modeling	1	Course type was changed with little modification in content.
3	Metrology	1	Course type was changed with little modification in content.
4	Workshop Practice	1	Course name was been changed with little modification in content.
5	Digital Manufacturing	1	Course type was changed with little modification in content.
6	Fluid Mechanics and Heat Transfer	1	Course type was changed with little modification in content.
7	Operation and Maintenance of Diesel Forklift and Hydraulic Equipment	2	Some practice have been included

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Annexure-C

List of Skill courses (Basket) approved

Sl. No	Course Title	Credit	(T+P+P)
1	Apparel Production & Marketing	4	0+3+1
2	Line Stitching Supervising	4	0+3+1
3	Apparel Production	4	0+3+1
4	Light Motor Vehicle Driving	4	0+3+1
5	Fork Lift Operation	4	0+3+1
6	Heavy Vehicle Technology	4	0+3+1
7	Two Wheeler Service Technology	4	0+3+1
8	Four Wheeler Service Technology	4	0+3+1
9	E-Vehicle Assembly and Service Technology	4	0+3+1
10	Robotics	4	0+3+1
11	Poultry Farming	4	0+3+1
12	CNC Programming (CAM)	4	0+3+1
13	Design Supervising Wooden and Modular Furniture	4	0+3+1

List of Domain courses approved

Sl. No	Domain Course Title	Credit	(T+P+P)
1	Welding and Inspection	24	8+8+6
2	Manufacturing (Conventional, CNC And additive)	26	2+16+8

List of value added courses approved

Sl. No	Course Title	Hrs. of input
1	LSD-2	30
2	Development of Concentration and Memory- Application of 'Raja Yoga' in daily life	30
3	Self defence for Girls	30
4	Digital Marketing	30
5	Bio-fertilizer	30
6	Gender Issues	30
7	Solid Waste Management	30
8	Smart Agriculture	30
9	Adobe Tools	30

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* Proceedings of 4th BoS meeting for the session

Agenda - Approval for B.Tech mechanical Engineering Course structure & Syllabus for BoS Set-X (Domain specific subjects) for CBCS for academic year and M.Tech by Research

DOM :- 12-6-2017

Venue :- CAD lab, CIT Campus; JATNI.

Members present :-

1) Prof. S.K. Mahapatra, IIT. Bhubaneswar
2) Shri. Ali Kishor patnaik, managing director, orissa diesel. (Ashok Leyland)
3) Prof. P.S. Rao, DEAN R&D, Parlakhemundi
4) Prof. B.P. Mishra, DEAN, SOET, Parlakhemundi
5) Prof. R.C. Mohanty, Dept of Mech Engineering, CIT
6) Mrs. Ipsita Mishra, HOD, Dept of mech, CIT
7) Mr. D. Raghuveer, HOD, Dept of Mech, Parlakhemundi
8) Mr. Babuli Kumar Jena, Dept of mech, CIT
9) Mr. Manas Ranjan Padhi., Dept of Mech, CIT
10) Mr. G.N. Arka, Dept of Mech, CIT
11) Mr. Sudeep Singh, Dept of Mech, CIT
12) Mukundjee Pandey, Dept of Mech, CIT, Jatni

Shri. A Li Kishore Patnaik
MD, Orissa diesel.

Smt. P.S. Rao
DG.IN. R&D

Prof. R.C. Mohanty
Dept of Mech.

Mrs. Gopika Mishra
HoD, Mech, CET

Mr. D. Raghuveer
HoD, Mech, Narlakhemundi.

Prof S.K. Mahapatra
Professor, IIT BBSR

CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Applied Sciences

Department of Botany

Date: 12.06.2017

MINUTES OF BOARD OF STUDIES MEETING held on 12.06.2017

Venue: CUTM, Bhubaneswar

Time: 11.00 a.m.

The Board of Studies (BoS) meeting of Department of Botany was held on 12.06.2017 at 11 a.m. in the Board Room, CUTM Bhubaneswar. The following members are the board members:

1. Prof. Padan Kumar Jena, Ravenshaw University (External expert)
2. Registrar, CUTM, Bhubaneswar (Chairperson)
3. Prof. Susanta Kumar Biswal, Dean, SoAS, CUTM, Bhubaneswar (Member)
4. Miss Kalpita Bhatta, Lecturer, Department of Botany, SoAS, CUTM, Bhubaneswar (Member)

The Chairperson welcomed all members of the Board and briefly outlined the purpose of the meeting. Thereafter, the Head of the Department of Botany presented the achievements and improvements of the department in the areas of academies, research and infrastructure.

The following agenda items were taken up subsequently:

Agenda 1: **The minutes of the last meeting of the BoS held on 2nd June, 2016 were confirmed.**

Agenda 2: **Discussion and introduction of II, IV, V and VI semester courses in the Curriculum of B.Sc. (Botany) to be approved.**

- Ms. Kalpita Bhatta, lecturer, Department of Botany gave a presentation on the feedback received on curriculum outlining the suggestions made by the various stakeholders. Based on this, the Board accepted and approved a few suggestions for the courses and programme to be implemented from the Academic Year 2017-18.
- The syllabus of 3rd to 6th semester of B. Sc. Botany (Hons) (CBCS) pattern was prepared as per UGC guidelines with some minor changes, considered and approved by the Board. **(Annexure I)**

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Agenda 3: **Introduction of new programme (M.Sc. Botany)**

- The M.Sc. Botany programme was introduced as per the suggestions made by the various stakeholders and the syllabus for I, II, III and IV semester was prepared and approved after necessary modification as per UGC Guideline. **(Annexure-II)**
- The list of practical to be included for different semesters was prepared keeping in view the availability of infrastructure, specimen and local needs.
- Invited external experts suggested for incorporation of two more subject experts for BoS meeting.

Agenda 4: **Inclusion of courses on life skills and value addition**

- Board members agreed for inclusion of four skill courses in B.Sc. Botany (Hons.) and five skill courses in M. Sc. Botany and approved by the Board members. It was suggested that students take up the various courses offered by the University in the areas of life skills and value addition for their overall improvement and well-being. The same was agreed upon and approved by the Board members. **(Annexure-III)**

Ms. Kalpita Bhatta, lecturer, Department of Botany extended sincere thanks to all members of the Board.

The meeting ended with a vote of thanks to the Chair.

Dean, SoAS

12.6.2017

DEAN
School of Applied Sciences
CENTURION UNIVERSITY OF TECHNOLOGY & MANAGEMENT
Bhubaneswar,Odisha

Dean, Academics

Dean - Academic
Centurion University of Technology & Management
Bhubaneswar, Khurda, Odisha-752050

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Annexure I

B. Sc. Botany Syllabus (3rd to 6th semester)

Semester-III

Sl. No.	Code	Subject Name	Type (L-T-P)	Credits
1	BSBO2301	Anatomy of Angiosperms	3-1-3	6
2	BSBO2302	Economic Botany	3-1-3	6
3	BSBO2303	Basics of Genetics	3-1-3	6
4	GE-3"	Inter Disciplinary Subject		6
5	SEC-1"	Skill Enhancement Course-1	0-0-3	2
		Total		26

Semester-IV

Sl. No.	Code	Subject Name	Type (L-T-P)	Credits
1	BSBO2401	Molecular Biology	3-1-3	6
2	BSBO2402	Plant Ecology and Phytogeography	3-1-3	6
3	BSBO2403	Plant Systematics	3-1-3	6
4	GE-4@	Inter Disciplinary Subject		6
5	SEC -2#	Skill Enhancement Course-2	0-0-3	2
		Total		26

Semester- V

Sl. No	Code	Subject Name	Type (L-T-P)	Credits
1	BSBO3501	Reproductive Biology of Angiosperm	3-1-3	6
2	BSBO3502	Plant Physiology	3-1-3	6
3	DSE*	Discipline Specific Elective-1		6
4	DSE*	Discipline Specific Elective-2		6
		Total		24

Semester- VI

Sl. No.	Code	Subject Name	Type (L-T-P)	Credits
1	BSBO3601	Plant Metabolism	3-1-3	6
2	BSBO3602	Plant Biotechnology	3-1-3	6
3	DSE*	Discipline Specific Elective-3		6
4	DSE*	Discipline Specific Elective-4		6
		Total		**24**

Discipline Specific Elective Courses (DSE)

Sl. No.	Code	Subject Name	Type (L-T-P)	Credits
1	BSBO3503	DSE I Analytical Techniques in Plant Sciences	3-1-3	6
2	BSBO3504	DSE II Biostatistics	3-1-3	6
3	BSBO3603	DSE III Bioinformatics	3-1-3	6
4	BSBO3604	DSE IV Natural Resource Management	3-1-3	6

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Annexure II

M. Sc. Botany Syllabus (1st to 4th semester)

Course Structure-2017

Semester-I

Sl. No.	Code	Subject Name	Type (L-T-P)	Credits
1	MSBO1101	Microbiology	3-1-0	04
2	MSBO1102	Plant Diversity	3-1-0	04
3	MSBO1103	Cell Biology	3-1-0	04
4	MSBO1104	Plant Ecology	3-1-0	04
5	MSBO1105	Botany Laboratory-I	0-0-6	04
		Skill I	0-0-3	04
		Total		**24**

Semester-II

Sl. No.	Code	Subject Name	Type (L-T-P)	Credits
1.	MSBO1201	Genetics and Molecular Biology	3-1-0	04
2.	MSBO1202	Plant Physiology, Metabolism, and Biochemistry	3-1-0	04
3.	MSBO1203	Biostatics and Instrumentation	3-1-0	04
4.	MSBO1204	Environmental Pollution and Management	3-1-0	04
5.	MSBO1205	Botany Laboratory-II	0-0-6	04
		Skill II	0-0-3	04
		Total		**24**

Semester-III

Sl. No.	Code	Subject Name	Type (L-T-P)	Credits
1.	MSBO2301	Systematics and Pathology	3-1-0	04
2.	MSBO2302	Natural Resource Management and Utilization	3-1-0	04
3.	MSBO2303	Embryology and Anatomy	3-1-0	04
4.	MSBO2304	Techniques of Tissue Culture	3-1-0	04
5.	MSBO2305	Botany Laboratory-III	0-0-6	04
6.	MSRM5101	Introduction to Research	2-0-0	02
7.	MSBP2301	Scientific visit	0-0-3	02
		Total		**24**

Semester-IV

Sl. No.	Code	Subject Name	Type (L-T-P)	Credits
1.	MSBO2401	Plant Biotechnology and Bioinformatics	3-1-0	04
2.	MSBO2402	Eco toxicology & Waste Management	3-1-0	04
3.	MSBO2403	Microbial Technology &Physiology	3-1-0	04
4.	MSBP2401	Project/Dissertation	0-0-6	08
5.	MSBS2401	Seminar	0-0-3	04
		Total		24

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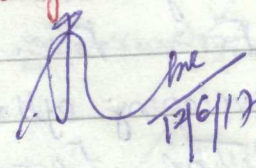
Sl.NO	Name	Place	Signature
1	Dr. Padmakar Jena	Reverenshaw University, Cuttack odisha	 17/6/17
2.	Kalpita Bhatta	CUTM, Bhubaneswar	Kalpita Bhatta

For Academic Session (2017-18)

MINUTES OF BoS MEETINGS

The Board of studies meeting in applied sciences (Botany) was held on 12/6/17 at CUTM Campus Bhubaneswar.

The following members were present:

1. Dr.Padan Kr. Jena .Associate Prof.of Botany,Revenshwa University,Cuttack.
2. MS. Kalpita Bhatta,Lecturer in Botany,CUTM,Bhubaneswar.

i) The B.Sc Botany (Hons) syllabus for III,IV,V & VI semester (CBCS) pattern was prepared and approved after necessary modifications.

ii) The syllabus were prepared as per UGC guidelines with some minor changes or modifications.

iii) The M.Sc Botany syllabus for I,II,III&IV semester was prepared and approved after necessary modification as per UGC Guideline.

iv) The list of practical to be included for different semesters were prepared keeping in view the availability of infrastructure , specimen and local needs.

v) Invited experts suggested for incorporation of two more subject experts for BOS meeting .

12/6/17
(Padan Kr. Jena)

Kalpita Bhatta
12/6/17

Centurion University

CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Applied Sciences

Department of Physics

Date: 12.06.2017

MINUTES OF BOARD OF STUDIES MEETING held on 12.06.2017

Venue: CUTM, Bhubaneswar

Time: 11.00 a.m.

The Board of Studies (BoS) meeting of Department of Physics was held on 12.06.2017 at 11 a.m. in CUTM Bhubaneswar. The following are the board members:

1. Dr. Goutam Tripathy, Prof IOP, Bhubaneswar, External expert
2. Dr. S.K.Biswal, Dean SoAS
3. Dr. Anita Patra, Registrar,CUTM
4. Dr. Padmaja Patnaik, HoD, Department of Physics, CUTM BBSR
5. Dr. J.K.Meher, Prof, CUTM Bolangir
6. Mr. Gyanendra kumar Misra, Lecturer, CUTM Bolangir

The Chairperson welcomed all members of the Board and briefly outlined the purpose of the meeting. The Head of the Department of Physics presented the achievements and improvements of the department in the areas of academics, research and infrastructure.

The following agenda items were taken up subsequently:

Agenda 1: **The minutes of the last meeting of the BoS held on 02.06.2016 were confirmed.**

Agenda 2: **Discussion and approval on revision required in the Curriculum of B.Sc. and M.Sc Physics.**

- The HoD, Physics, gave a presentation on the feedback received on curriculum outlining the suggestions made by the various stakeholders. Based on this , the Board accepted and approved the revised course for the Academic Year 2017-18.
- The syllabus of B.Sc. CBCS courses are designed for 3rd, 4th, 5th and 6th semester and approved by the Board. *(Annexure-1)*
- The structure of M.Sc syllabus has been modified for the 1st to 4th semester for the newly admitted batch. Two specializations- Electronics and Material Science were put for approval. *(Annexure-2)*
- The Board approved the updation of the courses important from higher studies point of view and replacement of contents of open basket with new courses with greater practice component.
- Courses that can be executed in Practice mode were placed for approval to be reconfigured as Theory + Practice, Theory + Practice+ Project or Project + Practice type.

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Agenda 3: **Inclusion of courses on life skills and value addition**

It was suggested that students will take up the various courses offered by the University in the areas of life skills and value addition for their overall improvement and well being. The same was agreed upon and approved by the Board members. *(Annexure-3)*

The HoD, Department of Physics. extended sincere thanks to all members of the Board.

The meeting ended with a vote of thanks to the Chair.

Dean SoAS

12.6.2017

Dean, Academics

Dean - Academic
Centurion University of Technology & Management
Bhubaneswar, Khurda, Odisha-752050

HoD, Physics

12/6/17

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Annexure-1

List of new courses added

Sl. No	Course Title	Type(Skill Employability Entrepreneurship higher studies Industry)	Credit
B.Sc. Physics			
SEMESTER III			
1	Skill Enhancement Course-1	Skill	2
2	Mathematical Physics II	Skill	6
3	Electricity and Magnetism	Employability	6
4	Analog systems and Applications	Employability	6
5	Inter Disciplinary Subject	Employability	6
SEMESTER IV			
1	Skill Enhancement Course-2	Skill	2
2	Mathematical Physics III	Skill	6
3	Elements of Modern Physics	Employability & Skill	6
4	Digital systems and Applications	Employability & Skill	6
5	Inter Disciplinary Subject	Employability	6
SEMESTER V			
1	Quantum Mechanics & Applications	Employability & Skill	6
2	Solid State Physics	Employability & Skill	6
3	Discipline Specific Elective-1	Employability	6
4	Discipline Specific Elective-2	Employability	6
SEMESTER VI			
1	Electro-magnetic Theory	Skill	6
2	Statistical Mechanics	Skill	6
3	Discipline Specific Elective-3	Employability	6
4	Discipline Specific Elective-4	Employability	6
Skill Enhancement Courses			
1	Physics Workshop Skills	Skill	2
2	Computational Physics Skills	Skill	2
3	Electrical circuits and Network Skills	Skill	2
4	Basic Instrumentation Skills	Skill	2
5	Applied Optics	Skill	2
Discipline Specific Elective			
1	Experimental Techniques	Employability & Skill	6
2	Embedded systems- Introduction to Microcontroller	Employability & Skill	6
3	Physics of Devices and Communication	Employability & Skill	6
4	Advanced Mathematical Physics-I	Skill	6
5	Advanced Mathematical Physics-II	Employability	6
6	Classical Dynamics	Employability	6
7	Applied Dynamics	Employability	6
8	Communication System	Employability	6
9	Nuclear and Particle Physics	Employability	6
10	Astronomy and Astrophysics	Employability & Skill	6
11	Dissertation	Employability & Skill	6

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Annexure-2

New (Modified) syllabus for M.Sc. Physics (For 2017-2019 batch)

Sl. No	Course Title	Type(Skill/Employability/Entrepreneurship/higher studies/Industry)	Credit
	Semester-I		
1	Mathematical Physics	Skill	4
2	Classical Mechanics	Employability	4
3	Quantum Physics I	Employability	4
4	Electrodynamics & Special Relativity	Employability	4
5	Modern Physics Lab	Skill	4
6	Skill I	Skill	4
	Semester-II		
1	Statistical Physics	Employability	4
2	Solid State Physics	Employability	4
3	Electronics Devices and Circuits	Employability	4
4	Computational Physics	Skill	4
5	Computational Physics Lab	Skill	2
6	Electronics Devices Lab	Skill	2
7	Skill II	Skill	4
	Semester-III		
1	Atomic and Molecular Physics	Employability	4
2	Nuclear and Particle Physics	Employability	4
3	Introduction to Research	Employability	2
4	Quantum Physics II	Employability	4
5	Seminar I	Skill	2
6	Special Paper I	Employability	4
7	Special Paper Lab I	Skill	4
	Semester-IV		
1	Special paper II	Employability	4
2	Special paper III	Employability	4
3	Special paper Lab II	Skill	4
4	Seminar II	Skill	4
5	Project/Dissertation	Employability & Skill	8
	Stream-1: Electronics Special Paper		
1	Microprocessor and Interfacing devices	Employability	4
2	Microprocessor lab	Skill	4
3	Electronics Communication System	Employability	4
4	Embedded System	Employability	4
5	Electronics simulation Lab	Skill	4
	Stream-2: Material Science Special Paper		
1	Soft Matter Physics	Employability	4
2	Materials Lab I	Skill	4
3	Introduction to Bio- and Nano-materials	Employability	4

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4	Advanced Solid State Physics	Employability	4
5	Materials Lab II	Skill	4

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Annexure-3

Skill Courses approved by university

Sl. No.	Course Title	Credit
1	Apparel Production & Marketing	4
2	Line Stitching Supervising	4
3	Apparel Production	4
4	Light Motor Vehicle Driving	4
5	Fork Lift Operation	4
6	Heavy Vehicle Technology	4
7	Two Wheeler Service Technology	4
8	Four Wheeler Service Technology	4
9	E-Vehicle Assembly and Service Technology	4
10	Robotics	4
11	Poultry Farming	4
12	CNC Programming (CAM)	4
13	Design Supervising Wooden and Modular Furniture	4

Value Added courses offered by university

	Course Title	Credit
1	LSD-2	30 Hours
2	Development of Concentration and Memory- Application of 'Raja Yoga' in daily life	30 Hours
3	Self-defence for Girls	30 Hours
4	Digital Marketing	30 Hours
5	Bio-fertilizer	30 Hours
6	Gender Issues	30 Hours
7	Solid Waste Management	30 Hours
8	Smart Agriculture	30 Hours
9	Adobe Tools	30 Hours

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Board of studies meeting held on 12/06/2017 11 SP

Members Present :-

1. Dr. Goutam Tripathy, Prof IOP, Bhubaneswar As external expert.
2. Dr. Padmaja Pattnaik, Asst prof, CUTM, Jatni
3. Dr. J.K. Meher, Prof, CUTM, Bolangir
4. Gyanendra kumar Mishra, Lecturer, CUTM, Bolangir

Agenda of the meeting :-

1. For B SC programme → BSc CBCS courses are designed for 3rd, 4th, 5th & 6th semesters. All core papers, elective papers are designed.

2. For MSc programme → Syllabus structure has been modified for the 1st, 2nd, 3rd & 4th Semester MSc Physics. Two specializations are to be given, Electronics and Material science. New papers are introduced keeping latest trends and different exams for students.

Deliberations

1. B.Sc. Syllabus finalised and approved
2. MSc Syllabus finalised for 2017 admitted batch finalised and approved.
3. MSc syllabus for 2016 batch is slightly modified by ~~adopting~~ few papers.
4. Some changes has been suggested by the expert, which will be made in the detailed syllabus.
4. M.Phill in Physics is introduced from this year. Syllabus is finalized.

Padmaja 12/6/17 | G. Tripathy 12/6/17 | 12/6/17 | 12/06/2017

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CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Paramedics and Allied Health Sciences

Date: 12/06/2017

MINUTES OF BOARD OF STUDIES MEETING held on 12/06/2017

Venue: Board Room, CUTM, Bhubaneswar

Time: 11.00 AM

Board of Studies (BoS) meeting for School of Paramedics and Allied Health Sciences (SoPAHS) was held on 12/06/2017 at 11 AM in the Board Room, CUTM Bhubaneswar. The following are the board members:

1. Dr. P. C. Mohapatra, Ophthalmologist
2. Dr. Bachaspati Dash, Radiologist
3. Dr. Debasish Sahoo, MD, Microbiology
4. Dr. Ashish Kumar Sen, Adjunct Professor, SoPAHS
5. Prof. Sunil Kumar Jha, Dean, SoPAHS
6. Mr. Vivek Kumar Sinha, Lecturer of Optometry
7. Ms. Priyanka Parbin, Lecturer of Microbiology
8. Ms. Sansita Mohakud, Lecturer

All the members were welcomed to the session by the Chairperson and were briefed regarding the purpose of the meeting. Thereafter, the Dean of SoPAHS presented on the achievements of the department in terms of academics and infrastructure.

Following are the programs offered by SoPAHS:

MSc Medical Laboratory Technology (MSc MLT)
MSc Applied and Clinical Microbiology (MSc CMB)
BSc Medical Laboratory Technology (BSc MLT)
BSc Clinical Microbiology (BSc CMB)
BSc Radiology and Imaging Technology (BSc RIT)
BSc Optometry (BSc Optom)

Agenda of the meeting:

Agenda 1: **The minutes of the last meeting of the BoS held on 02/06/2016 were confirmed.**

Agenda 2: **Discussion and approval on the content of syllabus for various courses of SoPAHS.**

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The Dean of SoPAHS presented on the feedback received on the curriculum of the school, from various stakeholders. Further, he presented the syllabus for incorporation for the Academic session 2017-18.

- The syllabus was highly appreciated as the courses were relevant to the need of the health industry.
- The Board approved the updation of the courses, wherein the syllabus for 3rd, 4th, 5th and 6th semester of BSc MLT and BSc RIT were approved and syllabus for 3rd and 4th semester of MSc MLT and MSc CMB were approved by the board.
- The new syllabus for BSc CMB was approved by the committee.
- List of new courses are added in *Annexure A*.
- The syllabus for BSc Optometry was approved without any further revision.
- It was discussed during the meeting that the core courses should focus on clinical orientation.

The Dean, SoPAHS extended sincere thanks to all the members of the Board.

The meeting ended with a vote of thanks to the Chair.

Dean, SoPAHS

Prof. Sunil Kumar Jha
DEAN
School of Paramedics & Allied Health Sciences
Centurion University of Technology & Management
Bhubaneswar, Odisha-752050

Dean, Academics

Dean - Academic
Centurion University of Technology & Management
Bhubaneswar, Khurda, Odisha-752050

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Annexure A

List of new courses added

Sl. No	Course Title	Type (Skill/ Employability/ Entrepreneurship)	Credit
	BSc RIT		
1	Applied Radiation Physics & Radiation Protection	Employability	4
2	Advanced Radiographic Techniques	Employability	4
3	Special Radiographic Technique & Procedures	Employability	4
4	Basic Equipments In Radiodiagnosis	Entrepreneurship	4
5	Medical Imaging Lab II	Entrepreneurship	4
6	Communicative Practice Laboratory 2	Skill	2
7	Radiotherapy & Branchy Therapy Techniques In Malignant And Non Malignant Disease	Employability	4
8	Applied Equipments Of Radio Diagnosis	Entrepreneurship	4
9	Interventional Radiology & Drug Used In Diagnostic Radiology	Employability	4
10	Human Values & Professional Ethics	Skill	4
11	Basic Computer And Information Science	Skill	4
12	Hospital Posting-Medical Imaging Lab III	Entrepreneurship	4
13	Basic Of X-Ray and Digital X-Ray Imaging	Employability	4
14	Computerized Tomography (CT Scanning) Method and Procedure	Employability	4
15	Basic Of Magnetic Resonance Imaging	Employability	4
16	Orientation In Clinical Sciences Course Contents	Employability	4
17	Medical Imaging Lab IV	Entrepreneurship	4
18	Medical Law and Ethics	Skill	4
19	Project	Skill	12
20	Internship	Skill	12
	BSc MLT		
1	Immunology	Employability	4
2	Applied Hematology	Employability	4
3	Molecular Biology	Employability	4
4	Basic Histology	Entrepreneurship	4
5	Community Practice Laboratory- 2	Skill	2
6	Immunology, Histology Lab	Skill	4

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7	Parasitology	Employability	4
8	Analytical Biochemistry	Entrepreneurship	2
9	Advance Hematology	Entrepreneurship	4
10	Immunopathology	Employability	4
11	Human Values & Professional Ethics	Skill	4
12	Basic Computers and Information Science	Skill	4
13	Biochemistry lab	Entrepreneurship	4
14	Transfusion Medicine	Employability	4
15	Medical Laboratory Management	Enterpreunership	4
16	Immunopathology	Employability	4
17	Introduction To Quality and Patient Safety	Employability	4
18	Medical Law and Ethics	Skill	4
19	Mycology & Virology	Employability	4
20	Mycology & Virology Lab	Skill	4
21	Project	Skill	12
22	Internship	Skill	12
	MSc MLT		
1	Immunology, Bacterial Serology & Parasitology	Employability	4
2	Clinical Hematology	Entrepreneurship	4
3	Biochemistry	Employability	4
4	Histology	Entrepreneurship	4
5	Research Methodology	Skill	4
6	Communicative Practice Laboratory–II	Skill	2
7	Immunology, Biochemistry & Histopathology Lab	Employability	4
8	Project	Skill	12
9	Internship	Skill	12
	MSc CMB		
1	Immunology & Virology	Employability	4
2	Diagnostic Bacteriology	Entrepreneurship	4
3	Biochemistry	Employability	4
4	Histology	Entrepreneurship	4

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5	*Research Methodology*	*Skill*	*4*
6	*Communicative Practice Laboratory–II*	*Skill*	*2*
7	*Immunology, Histopathology & Biochemistry Lab*	*Entrepreneurship*	*4*
8	*Project*	*Skill*	*12*
9	*Internship*	*Skill*	*12*
	BSc CMB		
1	*Introductory Cell Biology*	*Employability*	*4*
2	*Human Anatomy & Physiology*	*Employability*	*4*
3	*Basic Haematology*	*Entrepreneurship*	*4*
4	*Instrumentation & Techniques*	*Entrepreneurship*	*4*
5	*Human Anatomy, Physiology & Haematology Practical*	*Entrepreneurship*	*4*
6	*Environmental Science*	*Skill*	*4*
7	*Foundations of English Communication*	*Skill*	*2*
8	*General Microbiology*	*Employability*	*4*
9	*Clinical Biochemistry*	*Entrepreneurship*	*4*
10	*Clinical Pathology & Diagnosis*	*Entrepreneurship*	*4*
11	*Clinical Pathology, Biochemistry &Microbiology Practical*	*Entrepreneurship*	*4*
12	*Immunology*	*Employability*	*4*
13	*Systemic Bacteriology*	*Employability*	*4*
14	*Molecular Biology*	*Employability*	*4*
15	*Systemic Virology & Mycology*	*Employability*	*4*
16	*Communicative Practice Laboratory- II*	*Skill*	*2*
17	*Bacteriology, Virology &Mycology Practical*	*Skill*	*4*
18	*Public Heath Microbiology*	*Employability*	*4*

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19	Pharmaceutical Microbiology	Employability	4
20	Industrial Microbiology	Entrepreneurship	4
21	Biochemistry	Employability	4
22	Basic Computer & Information technique	Employability	4
23	Industrial, Public Health Microbiology & Biochemistry Lab.	Skill	4
24	Epidemiology	Employability	4
25	Diagnostic Bacteriology	Employability	4
26	Diagnostic Virology	Employability	4
27	Diagnostic Mycology	Employability	4
28	Diagnostic Parasitology	Employability	4
29	Research Methodology	Skill	4
30	Epidemiology & Diagnosis microbiology lab	Skill	4
31	Project	Skill	12
32	Internship	Skill	12

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CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Paramedics and Allied Health Sciences

Date: 12/06/2017

MINUTES OF BOARD OF STUDIES MEETING held on 12/06/2017

Venue: Board Room, CUTM, Bhubaneswar

Time: 11.00 AM

Board of Studies (BoS) meeting for School of Paramedics and Allied Health Sciences (SoPAHS) was held on 12/06/2017 at 11 AM in the Board Room, CUTM Bhubaneswar. The following are the board members:

1. Dr. P. C. Mohapatra, Ophthalmologist
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4. Dr. Ashish Kumar Sen, Adjunct Professor, SoPAHS
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6. Mr. Vivek Kumar Sinha, Lecturer of Optometry
7. Ms. Priyanka Parbin, Lecturer of Microbiology
8. Ms. Sansita Mohakud, Lecturer

All the members were welcomed to the session by the Chairperson and were briefed regarding the purpose of the meeting. Thereafter, the Dean of SoPAHS presented on the achievements of the department in terms of academics and infrastructure.

Following are the programs offered by SoPAHS:

MSc Medical Laboratory Technology (MSc MLT)
MSc Applied and Clinical Microbiology (MSc CMB)
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BSc Clinical Microbiology (BSc CMB)
BSc Radiology and Imaging Technology (BSc RIT)
BSc Optometry (BSc Optom)

Agenda of the meeting:

Agenda 1: **The minutes of the last meeting of the BoS held on 02/06/2016 were confirmed.**

Agenda 2: **Discussion and approval on the content of syllabus for various courses of SoPAHS.**

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The Dean of SoPAHS presented on the feedback received on the curriculum of the school, from various stakeholders. Further, he presented the syllabus for incorporation for the Academic session 2017-18.

- The syllabus was highly appreciated as the courses were relevant to the need of the health industry.
- The Board approved the updation of the courses, wherein the syllabus for 3rd, 4th, 5th and 6th semester of BSc MLT and BSc RIT were approved and syllabus for 3rd and 4th semester of MSc MLT and MSc CMB were approved by the board.
- The new syllabus for BSc CMB was approved by the committee.
- List of new courses are added in *Annexure A*.
- The syllabus for BSc Optometry was approved without any further revision.
- It was discussed during the meeting that the core courses should focus on clinical orientation.

The Dean, SoPAHS extended sincere thanks to all the members of the Board.

The meeting ended with a vote of thanks to the Chair.

Dean, SoPAHS

Prof. Sunil Kumar Jha
DEAN
School of Paramedics & Allied Health Sciences
Centurion University of Technology & Management
Bhubaneswar, Odisha-752050

Dean, Academics

Dean - Academic
Centurion University of Technology & Management
Bhubaneswar, Khurda, Odisha-752050

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Annexure A

List of new courses added

Sl. No	Course Title	Type (Skill/ Employability/ Entrepreneurship)	Credit
	BSc RIT		
1	*Applied Radiation Physics & Radiation Protection*	*Employability*	*4*
2	*Advanced Radiographic Techniques*	*Employability*	*4*
3	*Special Radiographic Technique & Procedures*	*Employability*	*4*
4	*Basic Equipments In Radiodiagnosis*	*Entrepreneurship*	*4*
5	*Medical Imaging Lab II*	*Entrepreneurship*	*4*
6	*Communicative Practice Laboratory 2*	*Skill*	*2*
7	*Radiotherapy & Branchy Therapy Techniques In Malignant And Non Malignant Disease*	*Employability*	*4*
8	*Applied Equipments Of Radio Diagnosis*	*Entrepreneurship*	*4*
9	*Interventional Radiology & Drug Used In Diagnostic Radiology*	*Employability*	*4*
10	*Human Values & Professional Ethics*	*Skill*	*4*
11	*Basic Computer And Information Science*	*Skill*	*4*
12	*Hospital Posting-Medical Imaging Lab III*	*Entrepreneurship*	*4*
13	*Basic Of X-Ray and Digital X-Ray Imaging*	*Employability*	*4*
14	*Computerized Tomography (CT Scanning) Method and Procedure*	*Employability*	*4*
15	*Basic Of Magnetic Resonance Imaging*	*Employability*	*4*
16	*Orientation In Clinical Sciences Course Contents*	*Employability*	*4*
17	*Medical Imaging Lab IV*	*Entrepreneurship*	*4*
18	*Medical Law and Ethics*	*Skill*	*4*
19	*Project*	*Skill*	*12*
20	*Internship*	*Skill*	*12*
	BSc MLT		
1	*Immunology*	*Employability*	*4*
2	*Applied Hematology*	*Employability*	*4*
3	*Molecular Biology*	*Employability*	*4*
4	*Basic Histology*	*Entrepreneurship*	*4*
5	*Community Practice Laboratory- 2*	*Skill*	*2*
6	*Immunology, Histology Lab*	*Skill*	*4*

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7	Parasitology	Employability	4
8	Analytical Biochemistry	Entrepreneurship	2
9	Advance Hematology	Entrepreneurship	4
10	Immunopathology	Employability	4
11	Human Values & Professional Ethics	Skill	4
12	Basic Computers and Information Science	Skill	4
13	Biochemistry lab	Entrepreneurship	4
14	Transfusion Medicine	Employability	4
15	Medical Laboratory Management	Enterpreunership	4
16	Immunopathology	Employability	4
17	Introduction To Quality and Patient Safety	Employability	4
18	Medical Law and Ethics	Skill	4
19	Mycology & Virology	Employability	4
20	Mycology & Virology Lab	Skill	4
21	Project	Skill	12
22	Internship	Skill	12
	MSc MLT		
1	Immunology, Bacterial Serology & Parasitology	Employability	4
2	Clinical Hematology	Entrepreneurship	4
3	Biochemistry	Employability	4
4	Histology	Entrepreneurship	4
5	Research Methodology	Skill	4
6	Communicative Practice Laboratory–II	Skill	2
7	Immunology, Biochemistry & Histopathology Lab	Employability	4
8	Project	Skill	12
9	Internship	Skill	12
	MSc CMB		
1	Immunology & Virology	Employability	4
2	Diagnostic Bacteriology	Entrepreneurship	4
3	Biochemistry	Employability	4
4	Histology	Entrepreneurship	4

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5	*Research Methodology*	*Skill*	*4*
6	*Communicative Practice Laboratory–II*	*Skill*	*2*
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2	*Human Anatomy & Physiology*	*Employability*	*4*
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4	*Instrumentation & Techniques*	*Entrepreneurship*	*4*
5	*Human Anatomy, Physiology & Haematology Practical*	*Entrepreneurship*	*4*
6	*Environmental Science*	*Skill*	*4*
7	*Foundations of English Communication*	*Skill*	*2*
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14	*Molecular Biology*	*Employability*	*4*
15	*Systemic Virology & Mycology*	*Employability*	*4*
16	*Communicative Practice Laboratory- II*	*Skill*	*2*
17	*Bacteriology, Virology &Mycology Practical*	*Skill*	*4*
18	*Public Heath Microbiology*	*Employability*	*4*

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22	Basic Computer & Information technique	Employability	4
23	Industrial, Public Health Microbiology & Biochemistry Lab.	Skill	4
24	Epidemiology	Employability	4
25	Diagnostic Bacteriology	Employability	4
26	Diagnostic Virology	Employability	4
27	Diagnostic Mycology	Employability	4
28	Diagnostic Parasitology	Employability	4
29	Research Methodology	Skill	4
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Centurion
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CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

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- List of new courses are added in *Annexure A*.
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Annexure A

List of new courses added

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	BSc RIT		
1	*Applied Radiation Physics & Radiation Protection*	*Employability*	*4*
2	*Advanced Radiographic Techniques*	*Employability*	*4*
3	*Special Radiographic Technique & Procedures*	*Employability*	*4*
4	*Basic Equipments In Radiodiagnosis*	*Entrepreneurship*	*4*
5	*Medical Imaging Lab II*	*Entrepreneurship*	*4*
6	*Communicative Practice Laboratory 2*	*Skill*	*2*
7	*Radiotherapy & Branchy Therapy Techniques In Malignant And Non Malignant Disease*	*Employability*	*4*
8	*Applied Equipments Of Radio Diagnosis*	*Entrepreneurship*	*4*
9	*Interventional Radiology & Drug Used In Diagnostic Radiology*	*Employability*	*4*
10	*Human Values & Professional Ethics*	*Skill*	*4*
11	*Basic Computer And Information Science*	*Skill*	*4*
12	*Hospital Posting-Medical Imaging Lab III*	*Entrepreneurship*	*4*
13	*Basic Of X-Ray and Digital X-Ray Imaging*	*Employability*	*4*
14	*Computerized Tomography (CT Scanning) Method and Procedure*	*Employability*	*4*
15	*Basic Of Magnetic Resonance Imaging*	*Employability*	*4*
16	*Orientation In Clinical Sciences Course Contents*	*Employability*	*4*
17	*Medical Imaging Lab IV*	*Entrepreneurship*	*4*
18	*Medical Law and Ethics*	*Skill*	*4*
19	*Project*	*Skill*	*12*
20	*Internship*	*Skill*	*12*
	BSc MLT		
1	*Immunology*	*Employability*	*4*
2	*Applied Hematology*	*Employability*	*4*
3	*Molecular Biology*	*Employability*	*4*
4	*Basic Histology*	*Entrepreneurship*	*4*
5	*Community Practice Laboratory- 2*	*Skill*	*2*
6	*Immunology, Histology Lab*	*Skill*	*4*

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7	Parasitology	Employability	4
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20	Mycology & Virology Lab	Skill	4
21	Project	Skill	12
22	Internship	Skill	12
	MSc MLT		
1	Immunology, Bacterial Serology & Parasitology	Employability	4
2	Clinical Hematology	Entrepreneurship	4
3	Biochemistry	Employability	4
4	Histology	Entrepreneurship	4
5	Research Methodology	Skill	4
6	Communicative Practice Laboratory–II	Skill	2
7	Immunology, Biochemistry & Histopathology Lab	Employability	4
8	Project	Skill	12
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1	Immunology & Virology	Employability	4
2	Diagnostic Bacteriology	Entrepreneurship	4
3	Biochemistry	Employability	4
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5	*Research Methodology*	*Skill*	*4*
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Annexure A

List of new courses added

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	BSc RIT		
1	*Applied Radiation Physics & Radiation Protection*	*Employability*	*4*
2	*Advanced Radiographic Techniques*	*Employability*	*4*
3	*Special Radiographic Technique & Procedures*	*Employability*	*4*
4	*Basic Equipments In Radiodiagnosis*	*Entrepreneurship*	*4*
5	*Medical Imaging Lab II*	*Entrepreneurship*	*4*
6	*Communicative Practice Laboratory 2*	*Skill*	*2*
7	*Radiotherapy & Branchy Therapy Techniques In Malignant And Non Malignant Disease*	*Employability*	*4*
8	*Applied Equipments Of Radio Diagnosis*	*Entrepreneurship*	*4*
9	*Interventional Radiology & Drug Used In Diagnostic Radiology*	*Employability*	*4*
10	*Human Values & Professional Ethics*	*Skill*	*4*
11	*Basic Computer And Information Science*	*Skill*	*4*
12	*Hospital Posting-Medical Imaging Lab III*	*Entrepreneurship*	*4*
13	*Basic Of X-Ray and Digital X-Ray Imaging*	*Employability*	*4*
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20	*Internship*	*Skill*	*12*
	BSc MLT		
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2	*Applied Hematology*	*Employability*	*4*
3	*Molecular Biology*	*Employability*	*4*
4	*Basic Histology*	*Entrepreneurship*	*4*
5	*Community Practice Laboratory- 2*	*Skill*	*2*
6	*Immunology, Histology Lab*	*Skill*	*4*

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7	Parasitology	Employability	4
8	Analytical Biochemistry	Entrepreneurship	2
9	Advance Hematology	Entrepreneurship	4
10	Immunopathology	Employability	4
11	Human Values & Professional Ethics	Skill	4
12	Basic Computers and Information Science	Skill	4
13	Biochemistry lab	Entrepreneurship	4
14	Transfusion Medicine	Employability	4
15	Medical Laboratory Management	Enterpreunership	4
16	Immunopathology	Employability	4
17	Introduction To Quality and Patient Safety	Employability	4
18	Medical Law and Ethics	Skill	4
19	Mycology & Virology	Employability	4
20	Mycology & Virology Lab	Skill	4
21	Project	Skill	12
22	Internship	Skill	12
	MSc MLT		
1	Immunology, Bacterial Serology & Parasitology	Employability	4
2	Clinical Hematology	Entrepreneurship	4
3	Biochemistry	Employability	4
4	Histology	Entrepreneurship	4
5	Research Methodology	Skill	4
6	Communicative Practice Laboratory–II	Skill	2
7	Immunology, Biochemistry & Histopathology Lab	Employability	4
8	Project	Skill	12
9	Internship	Skill	12
	MSc CMB		
1	Immunology & Virology	Employability	4
2	Diagnostic Bacteriology	Entrepreneurship	4
3	Biochemistry	Employability	4
4	Histology	Entrepreneurship	4

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5	*Research Methodology*	*Skill*	*4*
6	*Communicative Practice Laboratory–II*	*Skill*	*2*
7	*Immunology, Histopathology & Biochemistry Lab*	*Entrepreneurship*	*4*
8	*Project*	*Skill*	*12*
9	*Internship*	*Skill*	*12*
	BSc CMB		
1	*Introductory Cell Biology*	*Employability*	*4*
2	*Human Anatomy & Physiology*	*Employability*	*4*
3	*Basic Haematology*	*Entrepreneurship*	*4*
4	*Instrumentation & Techniques*	*Entrepreneurship*	*4*
5	*Human Anatomy, Physiology & Haematology Practical*	*Entrepreneurship*	*4*
6	*Environmental Science*	*Skill*	*4*
7	*Foundations of English Communication*	*Skill*	*2*
8	*General Microbiology*	*Employability*	*4*
9	*Clinical Biochemistry*	*Entrepreneurship*	*4*
10	*Clinical Pathology & Diagnosis*	*Entrepreneurship*	*4*
11	*Clinical Pathology, Biochemistry &Microbiology Practical*	*Entrepreneurship*	*4*
12	*Immunology*	*Employability*	*4*
13	*Systemic Bacteriology*	*Employability*	*4*
14	*Molecular Biology*	*Employability*	*4*
15	*Systemic Virology & Mycology*	*Employability*	*4*
16	*Communicative Practice Laboratory- II*	*Skill*	*2*
17	*Bacteriology, Virology &Mycology Practical*	*Skill*	*4*
18	*Public Heath Microbiology*	*Employability*	*4*

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19	Pharmaceutical Microbiology	Employability	4
20	Industrial Microbiology	Entrepreneurship	4
21	Biochemistry	Employability	4
22	Basic Computer & Information technique	Employability	4
23	Industrial, Public Health Microbiology & Biochemistry Lab.	Skill	4
24	Epidemiology	Employability	4
25	Diagnostic Bacteriology	Employability	4
26	Diagnostic Virology	Employability	4
27	Diagnostic Mycology	Employability	4
28	Diagnostic Parasitology	Employability	4
29	Research Methodology	Skill	4
30	Epidemiology & Diagnosis microbiology lab	Skill	4
31	Project	Skill	12
32	Internship	Skill	12

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Sl No.	NAME	PLACE	SIGNATURE
1.	Dr. P.C Mahapatra	CUTM, BBSR	12/06/17
2.	Dr. Bachaspati Dash	CUTM, BBSR	12.6.17
3.	Dr. Ashish Ku. Sen	CUTM, BBSR	
4.	Sunil Ku. Jha	CUTM, BBSR	12/6/17
5.	Dr. Debashish Sahoo	CUTM, BBSR	
6.	Vivek Ku. Sinha	CUTM, BBSR	12/6/17
7.	Priyanka Parbin	CUTM, BBSR	12/06/17
8.	Sansita Mohakud	CUTM, BBSR	12.6.17

CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Management

Date: 20.06.2017

MINUTES OF BOARD OF STUDIES MEETING held on 12.06.2017

Venue: Board Room, CUTM, Bhubaneswar

Time: 11.00 a.m.

The Board of Studies (BoS) meeting of School of Management was held on 12.06.2017 at 11 a.m. in the Board Room, CUTM Bhubaneswar. The following are the board members:

1. Dr. Haribandhu Panda, Vice Chancellor, CUTM
2. Dr. Smita Mishra Panda, Director Research, CUTM
3. Dr. Anita Patra, Registrar, CUTM
4. Dr. Prasanta Kumar Mohanty, Dean Academics, CUTM
5. Dr. Ashok Kumar Mohanty, Retd. Professor, Berhamur University
6. Mr. Mathew Anthony, Director, iNurture
7. Prof. Rashmi Ranjan Parida, PGP Coordinator, CUTM
8. Dr. Pramod Kumar Patjoshi, Faculty, CUTM
9. Dr. Ansuman Jena, Faculty, CUTM
10. Prof. Umakanta Nayak, Faculty, CUTM
11. Prof. KVD Prakash, Dean, SoM, CUTM

The Chairperson, CUTM welcomed all members of the Board and briefly outlined the purpose of the meeting. Thereafter, the Dean, SoM presented the achievements and improvements of the School in the areas of academics, research, consultancy and infrastructure.

The following agenda items were taken up subsequently:

Agenda 1: **The minutes of the last meeting of the BoS held on 02.06.2016 were confirmed.**

Agenda 2: **Discussion and approval on revision required in the Curriculum of MBA program**

- The Dean, SoM gave a presentation based on the feedback received on curriculum outlining the suggestions made by the various stakeholders. Based on that, the Board accepted and approved the following suggestions for course revision to be implemented from the Academic Year 2017-18 (*Annexure-I*).
    - A new Area of Electives was introduced in Hospital Management with 40 credits.
    - A new Area of Electives was introduced in Digital Marketing & E-Commerce with 42 credits.
    - Courses in which revision was undertaken were Quantitative Techniques in Semester-I and Operation Research in Semester-II. (Decision Perspective of Management of 2 credit was converted into two subjects i.e. QT and OR comprising of six credit) of two subjects.

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Agenda 3: **Discussion and approval on revision required in the Curriculum of MBA-DM & ABM program**

- The Dean, SoM presented the feedback received on curriculum outlining the suggestions made by the various stakeholders . Based on that, the Board accepted and approved the following suggestions for course revision to be implemented from the Academic Year 2017-18 (*Annexure-II*).
    - A new area of elective was approved to be offered in Agri-business management.
    - The name of the programme was changed to MBA- DM &ABM.

Agenda 4: **Discussion and approval on revision required in the Curriculum of BBA program**

- BBA syllabus was presented based on the suggestions made by the various stakeholders . The Board accepted and approved the existing syllabus without changes for the academic year Year 2017-18.

Agenda 5: **Discussion and approval on revision required in the Curriculum of B.Com program**

- The Dean, SoM presented the newly developed syllabus for B.Com and after thorough discussion of courses, the program and syllabus was approved (*Annexure-III*).

Agenda 6: **Inclusion of courses on life skills and value addition**

It was suggested that students take up the various courses offered by the University in the areas of life skills and value addition for their overall improvement and well being. The same was agreed upon and approved by the Board members. *(Annexure-IV)*

The Dean, SoM extended sincere thanks to all members of the Board.

The meeting ended with a Vote of Thanks to the Chair.

Dean, SoM

Dean
School of Management
Centurion University, Odisha

Dean, Academics

Dean - Academic
Centurion University of Technology & Management
Bhubaneswar, Khurda, Odisha-752050

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Annexure-I

List of new courses added in MBA

Sl. No		Course Title	Type (Skill/ Employability/ Entrepreneurship	Credit
Electives of Semester III and IV				
1		Hospital Administration	Employability	4
2		Management Information Systems for Hospital	Employability & Skill development	2
3		Management of Out-Patient Department	Employability & Skill development	4
4		Risk and Disaster Management	Employability	4
5		Management of Quality	Employability	4
6		Legal and Ethical Issues for Hospitals	Employability	4
7		Health Insurance	Employability	2
8		Project Management in Health Care	Employability	4
9		Marketing of Hospital Services	Employability, Entrepreneurship	4
10		Clinical, Diagnostic & Therapeutic Services	Employability	4
11		Patient Care and Behavior	Employability & Skill development	4
12		Web Traffic Generation	Employability, Entrepreneurship & Skill development	2
13		Link Building & e-WoM	Employability, Entrepreneurship & Skill development	2
14		Social Media Marketing	Employability, Entrepreneurship & Skill development	4
15		Branded Content and the Future of Media	Employability	4
16		Ideas, Brands and Business	Employability	2
17		Brand Planning and Consumer Insights	Employability, Entrepreneurship	4
18		Digital Strategies and Planning	Employability & Entrepreneurship	4
19		Mobile & E-Mail Marketing	Skill development	4
20		Search Engine Optimization	Skill development	2
21		Search Engine Marketing	Skill development	4
22		Technology of e-Commerce	Skill development	2

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23		Online Reputation Management	Skill development	4
24		Affiliate Marketing	Skill development	2
25		Web Content Writing	Skill development	2

List of existing courses where syllabus was revised for **MBA**

Basket/ Semester	Name of Course	No. of Modules/Topics revised	Revised Modules/Topics (details)
I	Quantitative Techniques	1	Nature, Scope and limitations of statistics; uses of statistics to business and industrial activities, Statistical Data –primary and secondary data, Collection of data, Classification and tabulation of data, Diagrammatic and graphic representation of data. Questionnaire –its characteristics and drafting
II	Operation Research	1	Game Theory introduced

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Annexure-II

List of new courses added in MBA DM & ABM

Sl. No	Course Title	Type (Skill/ Employability/ Entrepreneurship	Credit
Electives of Semester I and II			
1	Individual and Group Behaviour	Employability	2
2	Principles of Management	Skill development	2
3	ICT in Agriculture	Skill development	2
4	Logistics and Supply Chain Management	Employability	2
5	Agricultural Marketing	Employability	2
6	Economic Environment for Agriculture	Employability	4
7	Operation Research	Employability	2
8	Management Information Systems	Employability	2
Semester-III of ABM			
9	Study of an Organization	Employability, Entrepreneurship	6
10	Field Intervention/(Ag. Development Action)	Employability, Entrepreneurship	6
11	Sales and Distribution Management	Employability	2
12	Agricultural Extension Management	Employability	2
13	Corporate Social Responsibility	Employability	2
14	Disaster Management	Employability	2
15	Food Retail Management	Employability	2
16	Post-harvest and Processing Management	Employability	2
17	Insurance and Risk Management	Employability	2
Semester-IV of ABM			
18	Management Action Component-1	Employability	6
19	Management Action Component - 2	Employability	6
20	Live-stock Management	Employability, Entrepreneurship	2
21	Agri-export and WTO	Employability, Entrepreneurship	2
22	Total Quality Management	Employability	2
23	Contract Farming	Employability	2
24	Micro-finance and FI	Employability	2
25	Commodity Market and Trading	Employability, Entrepreneurship	2
26	Social Entrepreneurship	Skill development	4

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Annexure-III

List of new courses in **B.Com (New Syllabus)**

Sl. No	Course Title	Type (Skill/ Employability/ Entrepreneurship	Credit
Semester I			
1	Proficiency in English	Employability	2
2	Management Principles and Applications	Employability	4
3	Computer Application in Business	Skill Development	4
4	Financial Accounting I	Employability & Entrepreneurship	4
5	Business Mathematics	Employability & Entrepreneurship	4
6	Business Economics	Employability & Entrepreneurship	6
Semester II			
7	Reading to Writing	Employability	2
8	Business Law	Employability & Entrepreneurship	6
9	Business Statistics	Employability & Entrepreneurship	6
10	Introduction to Banking	Employability	4
11	Business Environment	Employability & Entrepreneurship	4
12	Financial Accounting II	Employability & Entrepreneurship	4
Semester III			
13	Financial Management	Employability & Entrepreneurship	6
14	Direct Tax	Employability	4
15	Indirect Taxes / GST	Employability & Entrepreneurship	4
16	Tally.ERP 9	Skill Development	6
17	Cost & Management Accounting	Employability & Entrepreneurship	4
18	Corporate Law	Employability & Entrepreneurship	4
Semester IV			
19	E-Commerce	Employability	4
20	Advanced Excel	Skill Development	4
21	Quantitative Techniques for Business	Employability	4
22	Entrepreneurship Development	Entrepreneurship	6
23	Auditing	Employability	4
24	Business Ethics & Governance	Employability, Entrepreneurship	4
Semester V			

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25	Corporate Accounting	Employability & Entrepreneurship	4
26	Financial Market Operation	Employability	4
27	On Job Internship-I	Employability, Entrepreneurship & Skill development	12
Semester VI			
28	Global Finance	Employability	4
29	Banking Law & Practice	Employability	4
30	On Job Internship-II	Employability, Entrepreneurship & Skill development	12
		Total Credit	**144**

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Annexure-IV

Skill Courses approved

Sl. No.	Course Title	Credit
1	Apparel Production & Marketing	4
2	Line Stitching Supervising	4
3	Apparel Production	4
4	Light Motor Vehicle Driving	4
5	Fork Lift Operation	4
6	Heavy Vehicle Technology	4
7	Two Wheeler Service Technology	4
8	Four Wheeler Service Technology	4
9	E-Vehicle Assembly and Service Technology	4
10	Robotics	4
11	Poultry Farming	4
12	CNC Programming (CAM)	4
13	Design Supervising Wooden and Modular Furniture	4

Value Added courses approved

	Course Title	Credit
1	LSD-2	30 Hours
2	Development of Concentration and Memory- Application of 'Raja Yoga' in daily life	30 Hours
3	Self defence for Girls	30 Hours
4	Digital Marketing	30 Hours
5	Bio-fertilizer	30 Hours
6	Gender Issues	30 Hours
7	Solid Waste Management	30 Hours
8	Smart Agriculture	30 Hours
9	Adobe Tools	30 Hours

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CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

18

SCHOOL OF MANAGEMENT

Board of Studies Meeting (Bhubaneswar Camp

Date : 12th June 2017
Time : 10:30 AM
Venue : Bhubaneswar Campus.

Members Present

1) Dr. Haribandhu Panda, VC, CUTM
2) Dr. Smita Mishra Panda, Director Research
3) Dr. Anita Patra, Registrar, CUTM
4) Dr. Ashok Kumar Mohanty, Expert
5) Mr. Mathew Anthony, Expert, Industry
6) Mr. Sukanta Parida, GM, ICA University Alliance
7) Dr. Prasanta Kumar Mohanty, Dean, Academic
8) Prof. Rashmi Ranjan Parida, PGP Coordinator, SOM
9) Prof. Umakanta Nayak, Faculty, SOM
10) Prof. Anuman Jena, Phd, Faculty, SOM
11) Prof. Bibhunandini Das, Phd, Faculty, SOM
12) Prof. Shiv Sankar Das, Faculty, SOM
13) Prof. K.V.D Prakash, Dean, SOM

* BBA and B. COM (ICA): The whole course was discussed and was approved by all members.

* MBA (Data Analytics): 5 subjects were added to the existing course structure, no changes were proposed for any existing courses.

* MBA (Hospital Management): New electives on Hospital management was introduced and was appro[illegible] The meeting came to an end after extending a vote of thanks to all present members.

Signatures of Members Present.

12/06/17 Ansuman Jena 12.06.2017 12/6/17

12/06/17 Shri Sankar Das 12/6/17

12/6/17

12/6 12/06/17 12/6/17

12/6/17

Anita Mishra 12 June 17 12/6/17

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CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Pharmacy and Life Sciences

Date: 12.06.2017

MINUTES OF BOARD OF STUDIES MEETING held on 12.06.2017

Venue: Board Room, CUTM, Bhubaneswar

Time: 11.00 a.m.

The Board of Studies (BoS) meeting of School of Pharmacy and Life Sciences(SoPLS) was held on 12.06.2017 at 11 a.m. in the Board Room, CUTM Bhubaneswar. The following are the board members:

1. Mr. Mahesh Pattnaik, Director SoPLS
2. Mr. Sisir Panigrahi, Director SoPLS
3. Dr. Gurudutta Pattnaik, Dean SoPLS
4. Dr. Amulyaratna Behera, Professor SoPLS
5. Dr. Susant Kumar Sahu, HOD UDPS, Utkal University

The Chairperson welcomed all members of the Board and briefly outlined the purpose of the meeting. Thereafter, the Dean of the School of Pharmacy and Life Sciences presented the achievements and improvements of the department in the areas of academics, research, consultancy and infrastructure.

The following agenda items were taken up subsequently:

Agenda 1: **The minutes of the last meeting of the BoS held on 16.06.2016 were confirmed.**

Agenda 2: **Course Curriculum Revision with implementation of elective course systems**

- Draft rules & syllabus for the B. Pharm course framed under the regulation 6,7 & 8 of the Bachelor of Pharmacy course 2014 by Pharmacy Council of India, New Delhi is here by discussed critically in presence of External Expert and it is decided that Principal SoPLS, CUTM is authorized to modify the courses regulation in case of any urgency, if required. deliverable.
- PCI, the apex affiliating body of Government of India, based upon different suggestions, review comments from different academic, industry and research have instructed to all the institutions throughout the India to adhere the new revised unified syllabus throughout the country in order to produce trend skilled man power.
- Following points are discussed: -

1. Short title & commencement.
2. Minimum qualification for admission.
3. Duration of Programme.
4. Medium of Instruction & exam.
5. Working days in each semester.
6. Attendance and progress.
7. Programme credit structure Minimum Credit Point required is 208
8. Academic work.
9. Course of study.
10. Program committee.

It is discussed that principal will take necessary steps to form and finalize the program committee.

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11. Examination & Assessment.
12. Few subjects carry 25 marks for internal assessment and 75 marks for end semester examination, few carry 15 as internal and 35 for external and some carries 10 internal and 15 for external examination.
13. Some subjects are included as Non university examination i.e. English & Biology.
14. Promotion and award of grade.
15. Minimum 50% mark is required in each subject which includes both internal and external exam to pass in the respective subject.
16. Carry forward of marks.
17. Improvement of Internal assessment.
18. Academic progression.
19. Grading of performance

% of mark obtained	Grade	Grade point	Performance
90.00 – 100	0	10	Outstanding
80.00-89.99	A	9	Excellent
70.00-79.99	B	8	Good
60.00-69.99	C	7	Fair
50.00-59.99	D	6	Average
<50	F	0	Fail
Absent	AB	0	Fail

Whereas E grade is completely obliterated.

20. Project work.

- The Board approved the revision of the syllaubus in keeping with the latest requirements of the industry.

Agenda 3: **Type of curriculum: CBCS/Elective/NEP: ELECTIVE**

Implementation of 2 Elective courses (Total 8 Credits) in B.Pharm 8th semester.

Any Other Points: Extension of Pharmacy courses at Balangir and Rayagada campus.

The Board of Studies after due deliberation approved to impart Pharmacy courses at its constituent campuses such as Balangir and Rayagada camps.

The Dean, School of Pharmacy and Life Sciences extended sincere thanks to all members of the Board.

The meeting ended with a vote of thanks to the Chair.

12/06/17

Dean, SoPLS

DEAN
SCHOOL OF PHARMACY AND LIFE SCIENCES
CUTM.BHUBANESWAR

Dean,Academics

Dean - Academic
Centurion University of Technology & Management
Bhubaneswar, Khurda, Odisha-752050

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Additional Documents

Appendix 1

List of new courses:

Sl. No	Course Title	Type(Skill/Employability /Entrepreneurship	Credit
1	Human Anatomy and Physiology I– Theory	Skill-Employability	4
2	Pharmaceutical Analysis I – Theory	Skill-Employability	4
3	Pharmaceutics I – Theory	Skill-Employability	4
4	Pharmaceutical Inorganic Chemistry – Theory	Employability	4
5	Communication skills – Theory *	Skill	2
6	Remedial Biology – Theory*	Employability	2
7	Remedial Mathematics – Theory*	Employability	2
8	Human Anatomy and Physiology – Practical	Skill-Employability	2
9	Pharmaceutical Analysis I – Practical	Skill-Employability	2
10	Pharmaceutics I – Practical	Skill-Employability	2
11	Pharmaceutical Inorganic Chemistry – Practical	Employability	2
12	Communication skills – Practical*	Skill	1
13	Remedial Biology – Practical*	Employability	1
14	Human Anatomy and Physiology II – Theory	Skill-Employability	4
15	Pharmaceutical Organic Chemistry I – Theory	Skill-Employability	4
16	Biochemistry – Theory	Employability	4
17	Pathophysiology – Theory	Skill	4
18	Computer Applications in Pharmacy – Theory *	Skill	3
19	Environmental sciences – Theory *	Employability	3
20	Human Anatomy and Physiology II – Practical	Skill-Employability	2
21	Pharmaceutical Organic Chemistry I– Practical	Employability	2
22	Biochemistry – Practical	Skill-Employability	2
23	Computer Applications in Pharmacy – Practical*	Skill-Employability	1
24	Pharmaceutical Organic Chemistry II – Theory	Skill-Employability	4
25	Physical Pharmaceutics I – Theory	Skill-Employability	4
26	Pharmaceutical Microbiology – Theory	Skill-Employability	4
27	Pharmaceutical Engineering – Theory	Skill-Employability	4
28	Pharmaceutical Organic Chemistry II – Practical	Employability	2
29	Physical Pharmaceutics I – Practical	Employability	2
30	Pharmaceutical Microbiology – Practical	Skill-Employability	2
31	Pharmaceutical Engineering – Practical	Skill -Employability-Entrepreneurship	2
32	Pharmaceutical Organic Chemistry III– Theory	Skill-Employability	4

33	Medicinal Chemistry I – Theory	**Employability**	4
34	Physical Pharmaceutics II – Theory	**Skill –Employability**	4
35	Pharmacology I – Theory	**Skill –Employability**	4
36	Pharmacognosy and Phytochemistry I– Theory	**Skill**	4
37	Medicinal Chemistry I – Practical	**Employability**	2
38	Physical Pharmaceutics II – Practical	**Skill –Employability**	2
39	Pharmacology I – Practical	**Skill –Employability**	2
40	Pharmacognosy and Phytochemistry I – Practical	**Skill –Employability**	2
41	Medicinal Chemistry II – Theory	**Employability**	4
42	Industrial Pharmacy– I Theory	**Skill –Employability**	4
43	Pharmacology II – Theory	**Skill –Employability**	4
44	Pharmacognosy and Phytochemistry II– Theory	**Skill –Employability**	4
45	Pharmaceutical Jurisprudence – Theory	**Employability**	4
46	Industrial Pharmacy I – Practical	**Skill -Employability-Entrepreneurship**	2
47	Pharmacology II – Practical	**Skill –Employability**	2
48	Pharmacognosy and Phytochemistry II – Practical	**Skill –Employability**	2
49	Medicinal Chemistry III – Theory	**Employability**	4
50	Pharmacology III – Theory	**Skill –Employability**	4
51	Herbal Drug Technology – Theory	**Skill –Employability**	4
52	Biopharmaceutics and Pharmacokinetics – Theory	**Skill –Employability**	4
53	Pharmaceutical Biotechnology – Theory	**Employability**	4
54	Quality Assurance –Theory	**Skill –Employability**	4
55	Medicinal chemistry III – Practical	**Employability**	2
56	Pharmacology III – Practical	**Skill –Employa**	2
57	Herbal Drug Technology – Practical	**Skill -Employability-Entrepreneurship**	2
58	Instrumental Methods of Analysis – Theory	**Skill –Employability**	4
59	Industrial Pharmacy –II Theory	**Skill –Employability**	4
60	Pharmacy Practice – Theory	**Skill –Employability**	4
61	Novel Drug Delivery System – Theory	**Skill –Employability**	4
62	Instrumental Methods of Analysis – Practical	**Skill –Employability**	2
63	Practice School*	**Employability**	6
64	Biostatistics and Research Methodology	**Skill**	4
65	Social and Preventive Pharmacy	**Skill –Employability**	4
66	Pharmaceutical Marketing (ELECTIVE)	**Skill -Employability-Entrepreneurship**	4
67	Pharmaceutical Regulatory Science (ELECTIVE)	**Skill -Employability-Entrepreneurship**	4
68	Project Work	**Skill -Employability-Entrepreneurship**	6

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Appendix 2

Elective subjects in B.Pharm:

Course Code	Name of the Course	No. of hours	Tutorial	Credit Points
BPHT4203	Pharma Marketing Management	3+3=6	1+1=2	4+4=8
BPHT4204	Pharmaceutical Regulatory Science			
BPHT4205	Pharmacovigilance			
BPHT4206	Quality Control and Standardizations of Herbals			
BPHT4207	Computer Aided Drug Design			
BPHT4208	Cell and Molecular Biology			
BPHT4209	Cosmetic Science			
BPHL4201	Experimental Pharmacology			
BPHL4202	Advanced Instrumentation Techniques			
BPHT4212	Dietary Supplements and Nutraceutical			

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Appendix 3

Skill Courses approved by university

Sl. No	Course Title	Credit
1	Apparel Production & Marketing	4
2	Line Stitching Supervising	4
3	Apparel Production	4
4	Light Motor Vehicle Driving	4
5	Fork Lift Operation	4
6	Heavy Vehicle Technology	4
7	Two Wheeler Service Technology	4
8	Four Wheeler Service Technology	4
9	E-Vehicle Assembly and Service Technology	4
10	Robotics	4
11	Poultry Farming	4
12	CNC Programming (CAM)	4
13	Design Supervising Wooden and Modular Furniture	4

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Appendix 4

Value Added courses offered by university

Sl. No	Course Title	Hrs. of input
1	LSD-2	30 Hours
2	Development of Concentration and Memory- Application of 'Raja Yoga' in daily life	30 Hours
3	Self defence for Girls	30 Hours
4	Digital Marketing	30 Hours
5	Bio-fertilizer	30 Hours
6	Gender Issues	30 Hours
7	Solid Waste Management	30 Hours
8	Smart Agriculture	30 Hours
9	Adobe Tools	30 Hours

* The MSc forensic Science course is going to be launched from the academic year 2017-18.

* The ~~of~~ faculty members of GFSU have visited the campus and ~~agreed~~ discussed the requirement.

* The syllabus, course curriculum credit point. Grade ~~point~~ as per CBCS system ~~are~~ discussed and finalized.

Members present:

External member

12.6.17

Dr. S. K. Sahu.
Reader & Head. UDPS.
Utkal Univ.

Internal member

12/06/17

Dr Gurudutta Pattnaik
Principal, SPLS.

12.6.17

Dr. A. Behera

SISIR Ranigrahi

12-06-17

C. C. Behera