



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

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2021-22

CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Paramedics and Allied Health Sciences

Date: 09/07/2021

MINUTES OF BOARD OF STUDIES MEETING held on 09/07/2021

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 **09/07/2021** at 11 AM in hybrid mode.

The following members were present:

Dr. Bhargavram (MD, Professor of Ophthalmology, Sandhya Eye Hospital, Andhra Pradesh)
Dr. Ajay Kumar Singh (MD, Professor of Ophthalmology)
Dr. L. S. Sunil Avagaada (Consultant Radiologist, Q1 Hospital, Health City, Arilova)
Dr. Debasish Sahoo (MD, Professor in Microbiology, SOA University)
Dr. Debi Prasad Rath (MD, Professor in Pathology, CARE Hospital, Bhubaneswar)
Dr. Ardhendu Praharaj (Ph. D. in Microbiology, District Microbiologist, Nabrangpur)
Dr. Harihar Praharaj (MD, Professor of Medicine, Ex-join Director, Dept. of Family Welfare)
Dr. Manas R. Baisakh (MD, Pathology, PDCC, Oncopathologist)
Dr. Shweta Kumari (RMRC, Bhubaneswar)
Prof. B. N. R Subudhi (Retd. Prof. and Ex- HOD, Department of Ophthalmology, MKCG Medical College)
Dr. Swarna Manjari Mohanty (Ex- Registrar, DMET, Odisha)
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)
MSc Optometry (MSc Optom)
BSc Medical Laboratory Technology (BSc MLT)
BSc Clinical Microbiology (BSc CMB)
BSc Medical Radiation Technology (BSc MRT)
BSc Optometry (BSc Optom)
BSc Anaesthesia Technology (BSc AT)
BSc Operation Theatre Technology (BSc OTT)
BSc Emergency Medicine Technology (BSc EMT)



Bachelor of Physiotherapy (BPT)

Agenda of the meeting:

Agenda 1: The minutes of the last meeting of the BoS held on 11.07.2020 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 2021-22.

- The following programmes were introduced in SoPAHS for the AY 2021: BSc Anaesthesia Technology; BSc Operation Theatre Technology; BSc Emergency Medicine Technology, Bachelor of Physiotherapy, MSc Optometry. All the programmes implemented the CBCS pattern into their curriculum.
- Syllabus for BSc Medical Radiation Technology; BSc Optometry, BSc Clinical Microbiology were approved without any revision.
- **Diploma in Community Health Practice:** Students can register for this course through the means of Lateral Entry after completion of Certificate Ward Technician Course (6 months). After completion of the Certificate Course, the student will be eligible to complete 1 and ½ years in Diploma in Community Health Practice. On successful completion of the course, the student will be eligible for receiving Registration number from DMET for Certificate Ward Technician and will receive Diploma Completion Certificate from CUTM.
- 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.

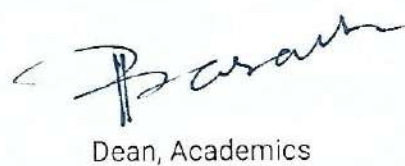
The Dean, SoPAHS extended sincere thanks to all the members of the Board.

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



Prof. Sunil Kumar Jha
Dean, SoPAHS

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 & HOD
School of Paramedics & Allied Health Sciences
Centurion University of Technology & Management
Rameshchandra, Bhubaneswar - 752050



Annexure A

List of new courses added

Sl. No	Course Title	Type (Skill/ Employability/ Entrepreneurship)	Credit
	BSc Anaesthesia Technology		
1.	General Anatomy	Employability	5
2.	General Physiology	Employability	5
3.	Biochemistry	Employability	4
4.	Cell Biology	Employability	4
5.	Basic Computer and Information Science	Employability	2
6.	Medical Law and Ethics	Employability	3
7.	Basics of Nursing	Employability	5
8.	Basics in Medical Physics and Electronics	Employability	4
9.	Microbiology	Employability	5
10.	Introduction to anaesthesia and OT Technology	Employability	4
11.	Pharmacology	Entrepreneurship	4
12.	Pharmacology related to Anaesthesia Technology	Employability	4
13.	Clinical Hospital Practice for AT-I	Employability	4
14.	Concepts of Diseases and Techniques in Regional & General Anaesthesia including Complications medical	Employability	4
15.	Clinical Hospital Practice for AT-II	Employability	4
16.	Anaesthesia for Specialty Surgeries	Employability	4
17.	Anaesthesia for Patients with Medical disorders	Employability	4
18.	Clinical Hospital Practice for AT-III	Employability	4
19.	Post Anaesthesia care Unit	Employability	4
20.	Health Care Management	Entrepreneurship	4
21.	Anaesthesia Techniques Including Complication	Employability	4
22.	Anaesthesia for Specialties (Including Critical Care Assistance and Ventilation)- Paper II	Employability	4
23.	Clinical Hospital Practice for AT-1V	Employability	4



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 Emergency Medicine Technology		
1.	General Anatomy	Employability	5
2.	General Physiology	Employability	5
3.	Biochemistry	Employability	4
4.	Cell Biology	Employability	4
5.	Microbiology	Employability	5
6.	Medical Terminology & Record keeping	Employability	3
7.	Basic principles of Hospital management	Entrepreneurship	4
8.	Hospital and clinical Pharmacy	Employability	5
9.	Introduction to emergency services- Part I	Employability	4
10.	Emergency Department Equipment Part - I	Entrepreneurship	4
11.	Emergency Department Pharmacology Part-I	Entrepreneurship	4
12.	Basic Computer and Information Science	Employability	2
13.	Pharmacology	Entrepreneurship	4
14.	Introduction to emergency services - Part II	Employability	4
15.	Emergency department equipment -Part II	Entrepreneurship	4
16.	Emergency Department Pharmacology-Part II	Entrepreneurship	4
17.	Medical Psychology	Employability	3
18.	Psychiatric, Geriatric & Obstetric Emergencies	Employability	2
19.	Medical emergencies - Part I	Employability	4
20.	Medical emergencies- Part II	Employability	4
21.	Medical Laboratory Management	Entrepreneurship	5
22.	Introduction to Quality and Patient Safety	Employability	5
23.	Medical Law and Ethics	Employability	3
24.	Clinical Pathology	Entrepreneurship	4
25.	Project	Employability	12
26.	Internship	Employability	12
27.	Environmental Studies	Employability	2
28.	Job Readiness	Employability	3
29.	Proficiency in English	Employability	2
	BSc Operation Theatre Technology		



1.	General Anatomy	Employability	3
2.	General Physiology	Employability	4
3.	Biochemistry	Employability	4
4.	Cell Biology	Employability	4
5.	Medical Terminology and Record keeping	Employability	3
6.	Basic computer and Information Science	Employability	2
7.	Medical Law and Ethics	Employability	3
8.	Introduction to Quality and Patient safety	Employability	5
9.	Practical orientation on Community and Health care sector industry	Employability	3
10.	Pharmacology	Entrepreneurship	4
11.	Microbiology	Employability	5
12.	Basic principles of Hospital Management	Entrepreneurship	4
13.	Clinical practices in hospital for OTT- I	Entrepreneurship	4
14.	Hospital & Clinical Pharmacy	Entrepreneurship	5
15.	Introduction to Anesthesia and OT Technology	Employability	4
16.	Clinical practices in hospital for OTT- II	Entrepreneurship	4
17.	Basics of Surgical procedures	Employability	3
18.	Basics in Medical Physics & Electronics	Employability	4
19.	CSSD Procedures	Employability	3
20.	Clinical practices in hospital for OTT- III	Entrepreneurship	4
21.	Advance surgical techniques	Employability	3
22.	Basic Intensive care	Employability	3
23.	Clinical practices in hospital for OTT- IV	Employability	4
24.	OTT Project	Employability	12
25.	OTT Internship	Employability	12
26.	Environmental Studies	Employability	2
27.	Job Readiness	Employability	3
28.	Proficiency in English	Employability	2
MSc Optometry			
1.	Research Methodology	Employability	3
2.	Business and Clinical Aspects of Optometry	Employability	3
3.	Recent Advancement in Optometry	Employability	4
4.	Applied Optometric Optics	Employability	4
5.	Advanced Ophthalmic Diagnostic Procedures & Instrumentation	Entrepreneurship	4



6.	Epidemiology and Community Optometry	Employability	3
7.	Introduction to LASER Technology	Employability	3
8.	LASER in Refractive Surgery	Employability	3
9.	Orthoptics and Vision Therapy	Entrepreneurship	4
10.	Advanced contact lens practice - I	Employability	4
11.	LASER in Anterior segment disorders & Glaucoma	Employability	4
12.	Paediatric Optometry and binocular Vision I	Employability	3
13.	LASER in Posterior segment disorders	Employability	3
14.	Paediatric Optometry and Binocular Vision II	Employability	3
15.	Advance contact lens practice II	Entrepreneurship	4
16.	Ocular diseases & Therapeutics	Employability	3
17.	Neuro Optometry	Employability	3
18.	Specialty Clinic	Employability	10
19.	Dissertation	Employability	12
20.	Environmental Studies	Employability	2
21.	Job Readiness	Employability	3
22.	Proficiency in English	Employability	2
	Bachelor of Physiotherapy		
1.	General Anatomy	Employability	5
2.	General Physiology	Employability	5
3.	Biochemistry	Employability	4
4.	Cell Biology	Employability	4
5.	Electrotherapy-I	Entrepreneurship	6
6.	Exercise Therapy	Entrepreneurship	5
7.	Psychology and Sociology	Employability	7
8.	Electrotherapy-II	Entrepreneurship	6
9.	Clinical Pathology	Entrepreneurship	4
10.	Microbiology	Employability	5
11.	Pharmacology	Entrepreneurship	4
12.	Basic Computer and Information Science	Employability	2
13.	Biomechanics and Kinesiology	Entrepreneurship	6
14.	Community Medicine	Entrepreneurship	3
15.	Physiotherapy in Cardio pulmonary condition	Employability	5
16.	Principle of Rehabilitation	Entrepreneurship	6
17.	Pediatrics and Geriatrics	Employability	5
18.	Surgery I	Employability	5
19.	Medicine I (General Medicine)	Employability	5
20.	Medicine II (Cardiology and Work Physiology)	Employability	4
21.	Medicine III (Neurology)	Employability	6



22.	General Orthopedics	Employability	7
23.	Surgery II	Employability	5
24.	Medicine IV (Psychiatry)	Employability	5
25.	Research Methodology	Employability	3
26.	Medical Law and Ethics	Employability	3
27.	Physical Diagnosis and Physical Fitness	Employability	5
28.	Yoga and Naturopathy	Entrepreneurship	4
29.	Physiotherapy in Medical Condition	Entrepreneurship	5
30.	Physiotherapy in Surgical Condition	Entrepreneurship	5
31.	Physiotherapy in Orthopedics	Entrepreneurship	5
32.	Physiotherapy in Neurological Conditions	Entrepreneurship	5
33.	Internship	Employability	12
34.	Project	Employability	12
35.	Environmental Studies	Employability	2
36.	Job Readiness	Employability	3
37.	Proficiency in English	Employability	2

List of Domain courses approved

Sl. No	Domain Course Title	Credit	(T+P+P)
1.	Health Care Assistancy	25	(8+7+10)

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
10.	Medical Diagnostic Techniques (CUTM3124)	4	0+3+1
11.	Ophthalmic Lens and Spectacles Manufacturing (CUTM3123)	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



CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Paramedics and Allied Health Sciences

Time: 11.00 AM


Date: 09.07.2021

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

Board of Studies Meeting

Attendance Sheet

Sl. No.	Name	Organization	Signature
1	Dr. Debasis Sahoo	MD, Professor of Microbiology, S'O'A University, Bhubaneswar	Attended online
2	Dr. Harihar Praharaj	MD, Professor of Medicine, Gerontology, Ex-Join Director, Dept. of Family Welfare	Attended online
3	Dr. Ajay Kumar Singh	MD, Professor of Ophthalmology, DHC Khordha	Attended online
4	Dr Manas R Baisakh	M.D Pathologist; PDCC (Oncopathologist)	Attended online
5	Dr. Ardhendu Praharaj	Ph.D, Microbiology, District Microbiologist, Nabrangpur	Attended online
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9	Prof B N R Subudhi	Retd. Prof and Ex HOD, Dept of Ophthalmology, MKCG Medical College	Attended online
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11	Dr. Swarna Manjari Mohanty	Ex Registrar DMET, Odisha	Attended online


Prof. Sunil Kumar Jha
Dean, SoPAHS

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Bhubaneswar, Odisha-752050


Dean, Academics

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


HOD, SoPAHS
Dr. Soumya Jal

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



CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

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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.

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BSc Optometry (BSc Optom)
BSc Anaesthesia Technology (BSc AT)
BSc Operation Theatre Technology (BSc OTT)
BSc Emergency Medicine Technology (BSc EMT)



Bachelor of Physiotherapy (BPT)

Agenda of the meeting:

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

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

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- 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.

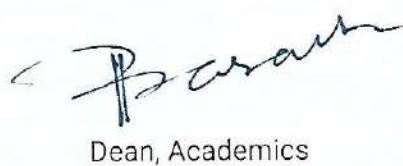
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Dean, SoPAHS

School of Paramedics & Allied Health Sciences
Centurion University of Technology & Management
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Dean, Academics

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Dr. Soumya Jal
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School of Paramedics & Allied Health Sciences
Centurion University of Technology & Management
Rameshchandra, Bhubaneswar - 752050



Annexure A

List of new courses added

Sl. No	Course Title	Type (Skill/ Employability/ Entrepreneurship)	Credit
	BSc Anaesthesia Technology		
1.	General Anatomy	Employability	5
2.	General Physiology	Employability	5
3.	Biochemistry	Employability	4
4.	Cell Biology	Employability	4
5.	Basic Computer and Information Science	Employability	2
6.	Medical Law and Ethics	Employability	3
7.	Basics of Nursing	Employability	5
8.	Basics in Medical Physics and Electronics	Employability	4
9.	Microbiology	Employability	5
10.	Introduction to anaesthesia and OT Technology	Employability	4
11.	Pharmacology	Entrepreneurship	4
12.	Pharmacology related to Anaesthesia Technology	Employability	4
13.	Clinical Hospital Practice for AT-I	Employability	4
14.	Concepts of Diseases and Techniques in Regional & General Anaesthesia including Complications medical	Employability	4
15.	Clinical Hospital Practice for AT-II	Employability	4
16.	Anaesthesia for Specialty Surgeries	Employability	4
17.	Anaesthesia for Patients with Medical disorders	Employability	4
18.	Clinical Hospital Practice for AT-III	Employability	4
19.	Post Anaesthesia care Unit	Employability	4
20.	Health Care Management	Entrepreneurship	4
21.	Anaesthesia Techniques Including Complication	Employability	4
22.	Anaesthesia for Specialties (Including Critical Care Assistance and Ventilation)- Paper II	Employability	4
23.	Clinical Hospital Practice for AT-1V	Employability	4



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 Emergency Medicine Technology		
1.	General Anatomy	Employability	5
2.	General Physiology	Employability	5
3.	Biochemistry	Employability	4
4.	Cell Biology	Employability	4
5.	Microbiology	Employability	5
6.	Medical Terminology & Record keeping	Employability	3
7.	Basic principles of Hospital management	Entrepreneurship	4
8.	Hospital and clinical Pharmacy	Employability	5
9.	Introduction to emergency services- Part I	Employability	4
10.	Emergency Department Equipment Part - I	Entrepreneurship	4
11.	Emergency Department Pharmacology Part-I	Entrepreneurship	4
12.	Basic Computer and Information Science	Employability	2
13.	Pharmacology	Entrepreneurship	4
14.	Introduction to emergency services - Part II	Employability	4
15.	Emergency department equipment -Part II	Entrepreneurship	4
16.	Emergency Department Pharmacology-Part II	Entrepreneurship	4
17.	Medical Psychology	Employability	3
18.	Psychiatric, Geriatric & Obstetric Emergencies	Employability	2
19.	Medical emergencies - Part I	Employability	4
20.	Medical emergencies- Part II	Employability	4
21.	Medical Laboratory Management	Entrepreneurship	5
22.	Introduction to Quality and Patient Safety	Employability	5
23.	Medical Law and Ethics	Employability	3
24.	Clinical Pathology	Entrepreneurship	4
25.	Project	Employability	12
26.	Internship	Employability	12
27.	Environmental Studies	Employability	2
28.	Job Readiness	Employability	3
29.	Proficiency in English	Employability	2
	BSc Operation Theatre Technology		



1.	General Anatomy	Employability	3
2.	General Physiology	Employability	4
3.	Biochemistry	Employability	4
4.	Cell Biology	Employability	4
5.	Medical Terminology and Record keeping	Employability	3
6.	Basic computer and Information Science	Employability	2
7.	Medical Law and Ethics	Employability	3
8.	Introduction to Quality and Patient safety	Employability	5
9.	Practical orientation on Community and Health care sector industry	Employability	3
10.	Pharmacology	Entrepreneurship	4
11.	Microbiology	Employability	5
12.	Basic principles of Hospital Management	Entrepreneurship	4
13.	Clinical practices in hospital for OTT- I	Entrepreneurship	4
14.	Hospital & Clinical Pharmacy	Entrepreneurship	5
15.	Introduction to Anesthesia and OT Technology	Employability	4
16.	Clinical practices in hospital for OTT- II	Entrepreneurship	4
17.	Basics of Surgical procedures	Employability	3
18.	Basics in Medical Physics & Electronics	Employability	4
19.	CSSD Procedures	Employability	3
20.	Clinical practices in hospital for OTT- III	Entrepreneurship	4
21.	Advance surgical techniques	Employability	3
22.	Basic Intensive care	Employability	3
23.	Clinical practices in hospital for OTT- IV	Employability	4
24.	OTT Project	Employability	12
25.	OTT Internship	Employability	12
26.	Environmental Studies	Employability	2
27.	Job Readiness	Employability	3
28.	Proficiency in English	Employability	2
MSc Optometry			
1.	Research Methodology	Employability	3
2.	Business and Clinical Aspects of Optometry	Employability	3
3.	Recent Advancement in Optometry	Employability	4
4.	Applied Optometric Optics	Employability	4
5.	Advanced Ophthalmic Diagnostic Procedures & Instrumentation	Entrepreneurship	4



6.	Epidemiology and Community Optometry	Employability	3
7.	Introduction to LASER Technology	Employability	3
8.	LASER in Refractive Surgery	Employability	3
9.	Orthoptics and Vision Therapy	Entrepreneurship	4
10.	Advanced contact lens practice - I	Employability	4
11.	LASER in Anterior segment disorders & Glaucoma	Employability	4
12.	Paediatric Optometry and binocular Vision I	Employability	3
13.	LASER in Posterior segment disorders	Employability	3
14.	Paediatric Optometry and Binocular Vision II	Employability	3
15.	Advance contact lens practice II	Entrepreneurship	4
16.	Ocular diseases & Therapeutics	Employability	3
17.	Neuro Optometry	Employability	3
18.	Specialty Clinic	Employability	10
19.	Dissertation	Employability	12
20.	Environmental Studies	Employability	2
21.	Job Readiness	Employability	3
22.	Proficiency in English	Employability	2
	Bachelor of Physiotherapy		
1.	General Anatomy	Employability	5
2.	General Physiology	Employability	5
3.	Biochemistry	Employability	4
4.	Cell Biology	Employability	4
5.	Electrotherapy-I	Entrepreneurship	6
6.	Exercise Therapy	Entrepreneurship	5
7.	Psychology and Sociology	Employability	7
8.	Electrotherapy-II	Entrepreneurship	6
9.	Clinical Pathology	Entrepreneurship	4
10.	Microbiology	Employability	5
11.	Pharmacology	Entrepreneurship	4
12.	Basic Computer and Information Science	Employability	2
13.	Biomechanics and Kinesiology	Entrepreneurship	6
14.	Community Medicine	Entrepreneurship	3
15.	Physiotherapy in Cardio pulmonary condition	Employability	5
16.	Principle of Rehabilitation	Entrepreneurship	6
17.	Pediatrics and Geriatrics	Employability	5
18.	Surgery I	Employability	5
19.	Medicine I (General Medicine)	Employability	5
20.	Medicine II (Cardiology and Work Physiology)	Employability	4
21.	Medicine III (Neurology)	Employability	6



22.	General Orthopedics	Employability	7
23.	Surgery II	Employability	5
24.	Medicine IV (Psychiatry)	Employability	5
25.	Research Methodology	Employability	3
26.	Medical Law and Ethics	Employability	3
27.	Physical Diagnosis and Physical Fitness	Employability	5
28.	Yoga and Naturopathy	Entrepreneurship	4
29.	Physiotherapy in Medical Condition	Entrepreneurship	5
30.	Physiotherapy in Surgical Condition	Entrepreneurship	5
31.	Physiotherapy in Orthopedics	Entrepreneurship	5
32.	Physiotherapy in Neurological Conditions	Entrepreneurship	5
33.	Internship	Employability	12
34.	Project	Employability	12
35.	Environmental Studies	Employability	2
36.	Job Readiness	Employability	3
37.	Proficiency in English	Employability	2

List of Domain courses approved

Sl. No	Domain Course Title	Credit	(T+P+P)
1.	Health Care Assistancy	25	(8+7+10)

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
10.	Medical Diagnostic Techniques (CUTM3124)	4	0+3+1
11.	Ophthalmic Lens and Spectacles Manufacturing (CUTM3123)	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



CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Paramedics and Allied Health Sciences

Time: 11.00 AM


Date: 09.07.2021

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

Board of Studies Meeting

Attendance Sheet

Sl. No.	Name	Organization	Signature
1	Dr. Debasis Sahoo	MD, Professor of Microbiology, S'O'A University, Bhubaneswar	Attended online
2	Dr. Harihar Praharaj	MD, Professor of Medicine, Gerontology, Ex-Join Director, Dept. of Family Welfare	Attended online
3	Dr. Ajay Kumar Singh	MD, Professor of Ophthalmology, DHC Khordha	Attended online
4	Dr Manas R Baisakh	M.D Pathologist; PDCC (Oncopathologist)	Attended online
5	Dr. Ardhendu Praharaj	Ph.D, Microbiology, District Microbiologist, Nabrangpur	Attended online
6	Dr. Debi Prasad Rath	MD, Professor of Pathology, CARE Hospital, Bhubaneswar	Attended online
7	Dr. Bhargavram	MD, Professor of Ophthalmology, Sandhya Eye Hospital, Andhra Pradesh	Attended online
8	Dr. Shweta Kumari	RMRC, Bhubaneswar, Odisha	Attended online
9	Prof B N R Subudhi	Retd. Prof and Ex HOD, Dept of Ophthalmology, MKCG Medical College	Attended online
10	Dr.LS.Sunil Avagaada	Consultant Radiologist, Q1 Hospitals, Health City, Arilova,	Attended online
11	Dr. Swarna Manjari Mohanty	Ex Registrar DMET, Odisha	Attended online


Prof. Sunil Kumar Jha
Dean, SoPAHS

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


HOD, SoPAHS
Dr. Soumya Jal

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



CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Paramedics and Allied Health Sciences

Date: 09/07/2021

MINUTES OF BOARD OF STUDIES MEETING held on 09/07/2021

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 **09/07/2021** at 11 AM in hybrid mode.

The following members were present:

Dr. Bhargavram (MD, Professor of Ophthalmology, Sandhya Eye Hospital, Andhra Pradesh)
Dr. Ajay Kumar Singh (MD, Professor of Ophthalmology)
Dr. L. S. Sunil Avagaada (Consultant Radiologist, Q1 Hospital, Health City, Arilova)
Dr. Debasish Sahoo (MD, Professor in Microbiology, SOA University)
Dr. Debi Prasad Rath (MD, Professor in Pathology, CARE Hospital, Bhubaneswar)
Dr. Ardhendu Praharaj (Ph. D. in Microbiology, District Microbiologist, Nabrangpur)
Dr. Harihar Praharaj (MD, Professor of Medicine, Ex-join Director, Dept. of Family Welfare)
Dr. Manas R. Baisakh (MD, Pathology, PDCC, Oncopathologist)
Dr. Shweta Kumari (RMRC, Bhubaneswar)
Prof. B. N. R Subudhi (Retd. Prof. and Ex- HOD, Department of Ophthalmology, MKCG Medical College)
Dr. Swarna Manjari Mohanty (Ex- Registrar, DMET, Odisha)
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)
MSc Optometry (MSc Optom)
BSc Medical Laboratory Technology (BSc MLT)
BSc Clinical Microbiology (BSc CMB)
BSc Medical Radiation Technology (BSc MRT)
BSc Optometry (BSc Optom)
BSc Anaesthesia Technology (BSc AT)
BSc Operation Theatre Technology (BSc OTT)
BSc Emergency Medicine Technology (BSc EMT)



Bachelor of Physiotherapy (BPT)

Agenda of the meeting:

Agenda 1: The minutes of the last meeting of the BoS held on 11.07.2020 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 2021-22.

- The following programmes were introduced in SoPAHS for the AY 2021: BSc Anaesthesia Technology; BSc Operation Theatre Technology; BSc Emergency Medicine Technology, Bachelor of Physiotherapy, MSc Optometry. All the programmes implemented the CBCS pattern into their curriculum.
- Syllabus for BSc Medical Radiation Technology; BSc Optometry, BSc Clinical Microbiology were approved without any revision.
- **Diploma in Community Health Practice:** Students can register for this course through the means of Lateral Entry after completion of Certificate Ward Technician Course (6 months). After completion of the Certificate Course, the student will be eligible to complete 1 and ½ years in Diploma in Community Health Practice. On successful completion of the course, the student will be eligible for receiving Registration number from DMET for Certificate Ward Technician and will receive Diploma Completion Certificate from CUTM.
- 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.

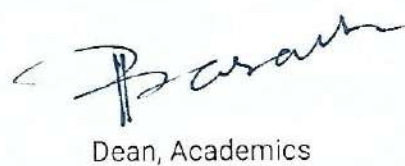
The Dean, SoPAHS extended sincere thanks to all the members of the Board.

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



Prof. Sunil Kumar Jha
Dean, SoPAHS

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 & HOD
School of Paramedics & Allied Health Sciences
Centurion University of Technology & Management
Rameshchandra, Bhubaneswar - 752050



Annexure A

List of new courses added

Sl. No	Course Title	Type (Skill/ Employability/ Entrepreneurship)	Credit
	BSc Anaesthesia Technology		
1.	General Anatomy	Employability	5
2.	General Physiology	Employability	5
3.	Biochemistry	Employability	4
4.	Cell Biology	Employability	4
5.	Basic Computer and Information Science	Employability	2
6.	Medical Law and Ethics	Employability	3
7.	Basics of Nursing	Employability	5
8.	Basics in Medical Physics and Electronics	Employability	4
9.	Microbiology	Employability	5
10.	Introduction to anaesthesia and OT Technology	Employability	4
11.	Pharmacology	Entrepreneurship	4
12.	Pharmacology related to Anaesthesia Technology	Employability	4
13.	Clinical Hospital Practice for AT-I	Employability	4
14.	Concepts of Diseases and Techniques in Regional & General Anaesthesia including Complications medical	Employability	4
15.	Clinical Hospital Practice for AT-II	Employability	4
16.	Anaesthesia for Specialty Surgeries	Employability	4
17.	Anaesthesia for Patients with Medical disorders	Employability	4
18.	Clinical Hospital Practice for AT-III	Employability	4
19.	Post Anaesthesia care Unit	Employability	4
20.	Health Care Management	Entrepreneurship	4
21.	Anaesthesia Techniques Including Complication	Employability	4
22.	Anaesthesia for Specialties (Including Critical Care Assistance and Ventilation)- Paper II	Employability	4
23.	Clinical Hospital Practice for AT-1V	Employability	4



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 Emergency Medicine Technology		
1.	General Anatomy	Employability	5
2.	General Physiology	Employability	5
3.	Biochemistry	Employability	4
4.	Cell Biology	Employability	4
5.	Microbiology	Employability	5
6.	Medical Terminology & Record keeping	Employability	3
7.	Basic principles of Hospital management	Entrepreneurship	4
8.	Hospital and clinical Pharmacy	Employability	5
9.	Introduction to emergency services- Part I	Employability	4
10.	Emergency Department Equipment Part - I	Entrepreneurship	4
11.	Emergency Department Pharmacology Part-I	Entrepreneurship	4
12.	Basic Computer and Information Science	Employability	2
13.	Pharmacology	Entrepreneurship	4
14.	Introduction to emergency services - Part II	Employability	4
15.	Emergency department equipment -Part II	Entrepreneurship	4
16.	Emergency Department Pharmacology-Part II	Entrepreneurship	4
17.	Medical Psychology	Employability	3
18.	Psychiatric, Geriatric & Obstetric Emergencies	Employability	2
19.	Medical emergencies - Part I	Employability	4
20.	Medical emergencies- Part II	Employability	4
21.	Medical Laboratory Management	Entrepreneurship	5
22.	Introduction to Quality and Patient Safety	Employability	5
23.	Medical Law and Ethics	Employability	3
24.	Clinical Pathology	Entrepreneurship	4
25.	Project	Employability	12
26.	Internship	Employability	12
27.	Environmental Studies	Employability	2
28.	Job Readiness	Employability	3
29.	Proficiency in English	Employability	2
	BSc Operation Theatre Technology		



1.	General Anatomy	Employability	3
2.	General Physiology	Employability	4
3.	Biochemistry	Employability	4
4.	Cell Biology	Employability	4
5.	Medical Terminology and Record keeping	Employability	3
6.	Basic computer and Information Science	Employability	2
7.	Medical Law and Ethics	Employability	3
8.	Introduction to Quality and Patient safety	Employability	5
9.	Practical orientation on Community and Health care sector industry	Employability	3
10.	Pharmacology	Entrepreneurship	4
11.	Microbiology	Employability	5
12.	Basic principles of Hospital Management	Entrepreneurship	4
13.	Clinical practices in hospital for OTT- I	Entrepreneurship	4
14.	Hospital & Clinical Pharmacy	Entrepreneurship	5
15.	Introduction to Anesthesia and OT Technology	Employability	4
16.	Clinical practices in hospital for OTT- II	Entrepreneurship	4
17.	Basics of Surgical procedures	Employability	3
18.	Basics in Medical Physics & Electronics	Employability	4
19.	CSSD Procedures	Employability	3
20.	Clinical practices in hospital for OTT- III	Entrepreneurship	4
21.	Advance surgical techniques	Employability	3
22.	Basic Intensive care	Employability	3
23.	Clinical practices in hospital for OTT- IV	Employability	4
24.	OTT Project	Employability	12
25.	OTT Internship	Employability	12
26.	Environmental Studies	Employability	2
27.	Job Readiness	Employability	3
28.	Proficiency in English	Employability	2
MSc Optometry			
1.	Research Methodology	Employability	3
2.	Business and Clinical Aspects of Optometry	Employability	3
3.	Recent Advancement in Optometry	Employability	4
4.	Applied Optometric Optics	Employability	4
5.	Advanced Ophthalmic Diagnostic Procedures & Instrumentation	Entrepreneurship	4



6.	Epidemiology and Community Optometry	Employability	3
7.	Introduction to LASER Technology	Employability	3
8.	LASER in Refractive Surgery	Employability	3
9.	Orthoptics and Vision Therapy	Entrepreneurship	4
10.	Advanced contact lens practice - I	Employability	4
11.	LASER in Anterior segment disorders & Glaucoma	Employability	4
12.	Paediatric Optometry and binocular Vision I	Employability	3
13.	LASER in Posterior segment disorders	Employability	3
14.	Paediatric Optometry and Binocular Vision II	Employability	3
15.	Advance contact lens practice II	Entrepreneurship	4
16.	Ocular diseases & Therapeutics	Employability	3
17.	Neuro Optometry	Employability	3
18.	Specialty Clinic	Employability	10
19.	Dissertation	Employability	12
20.	Environmental Studies	Employability	2
21.	Job Readiness	Employability	3
22.	Proficiency in English	Employability	2
	Bachelor of Physiotherapy		
1.	General Anatomy	Employability	5
2.	General Physiology	Employability	5
3.	Biochemistry	Employability	4
4.	Cell Biology	Employability	4
5.	Electrotherapy-I	Entrepreneurship	6
6.	Exercise Therapy	Entrepreneurship	5
7.	Psychology and Sociology	Employability	7
8.	Electrotherapy-II	Entrepreneurship	6
9.	Clinical Pathology	Entrepreneurship	4
10.	Microbiology	Employability	5
11.	Pharmacology	Entrepreneurship	4
12.	Basic Computer and Information Science	Employability	2
13.	Biomechanics and Kinesiology	Entrepreneurship	6
14.	Community Medicine	Entrepreneurship	3
15.	Physiotherapy in Cardio pulmonary condition	Employability	5
16.	Principle of Rehabilitation	Entrepreneurship	6
17.	Pediatrics and Geriatrics	Employability	5
18.	Surgery I	Employability	5
19.	Medicine I (General Medicine)	Employability	5
20.	Medicine II (Cardiology and Work Physiology)	Employability	4
21.	Medicine III (Neurology)	Employability	6



22.	General Orthopedics	Employability	7
23.	Surgery II	Employability	5
24.	Medicine IV (Psychiatry)	Employability	5
25.	Research Methodology	Employability	3
26.	Medical Law and Ethics	Employability	3
27.	Physical Diagnosis and Physical Fitness	Employability	5
28.	Yoga and Naturopathy	Entrepreneurship	4
29.	Physiotherapy in Medical Condition	Entrepreneurship	5
30.	Physiotherapy in Surgical Condition	Entrepreneurship	5
31.	Physiotherapy in Orthopedics	Entrepreneurship	5
32.	Physiotherapy in Neurological Conditions	Entrepreneurship	5
33.	Internship	Employability	12
34.	Project	Employability	12
35.	Environmental Studies	Employability	2
36.	Job Readiness	Employability	3
37.	Proficiency in English	Employability	2

List of Domain courses approved

Sl. No	Domain Course Title	Credit	(T+P+P)
1.	Health Care Assistancy	25	(8+7+10)

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
10.	Medical Diagnostic Techniques (CUTM3124)	4	0+3+1
11.	Ophthalmic Lens and Spectacles Manufacturing (CUTM3123)	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



CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Paramedics and Allied Health Sciences

Time: 11.00 AM


Date: 09.07.2021

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

Board of Studies Meeting

Attendance Sheet

Sl. No.	Name	Organization	Signature
1	Dr. Debasis Sahoo	MD, Professor of Microbiology, S'O'A University, Bhubaneswar	Attended online
2	Dr. Harihar Praharaj	MD, Professor of Medicine, Gerontology, Ex-Join Director, Dept. of Family Welfare	Attended online
3	Dr. Ajay Kumar Singh	MD, Professor of Ophthalmology, DHC Khordha	Attended online
4	Dr Manas R Baisakh	M.D Pathologist; PDCC (Oncopathologist)	Attended online
5	Dr. Ardhendu Praharaj	Ph.D, Microbiology, District Microbiologist, Nabrangpur	Attended online
6	Dr. Debi Prasad Rath	MD, Professor of Pathology, CARE Hospital, Bhubaneswar	Attended online
7	Dr. Bhargavram	MD, Professor of Ophthalmology, Sandhya Eye Hospital, Andhra Pradesh	Attended online
8	Dr. Shweta Kumari	RMRC, Bhubaneswar, Odisha	Attended online
9	Prof B N R Subudhi	Retd. Prof and Ex HOD, Dept of Ophthalmology, MKCG Medical College	Attended online
10	Dr.LS.Sunil Avagaada	Consultant Radiologist, Q1 Hospitals, Health City, Arilova,	Attended online
11	Dr. Swarna Manjari Mohanty	Ex Registrar DMET, Odisha	Attended online


Prof. Sunil Kumar Jha
Dean, SoPAHS

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


HOD, SoPAHS
Dr. Soumya Jal

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



CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Paramedics and Allied Health Sciences

Date: 09/07/2021

MINUTES OF BOARD OF STUDIES MEETING held on 09/07/2021

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 09/07/2021 at 11 AM in hybrid mode.

The following members were present:

Dr. Bhargavram (MD, Professor of Ophthalmology, Sandhya Eye Hospital, Andhra Pradesh)
Dr. Ajay Kumar Singh (MD, Professor of Ophthalmology)
Dr. L. S. Sunil Avagaada (Consultant Radiologist, Q1 Hospital, Health City, Arilova)
Dr. Debasish Sahoo (MD, Professor in Microbiology, SOA University)
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Dr. Shweta Kumari (RMRC, Bhubaneswar)
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Dr. Swarna Manjari Mohanty (Ex- Registrar, DMET, Odisha)
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:

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MSc Applied and Clinical Microbiology (MSc CMB)
MSc Optometry (MSc Optom)
BSc Medical Laboratory Technology (BSc MLT)
BSc Clinical Microbiology (BSc CMB)
BSc Medical Radiation Technology (BSc MRT)
BSc Optometry (BSc Optom)
BSc Anaesthesia Technology (BSc AT)
BSc Operation Theatre Technology (BSc OTT)
BSc Emergency Medicine Technology (BSc EMT)



Bachelor of Physiotherapy (BPT)

Agenda of the meeting:

Agenda 1: The minutes of the last meeting of the BoS held on 11.07.2020 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 2021-22.

- The following programmes were introduced in SoPAHS for the AY 2021: BSc Anaesthesia Technology; BSc Operation Theatre Technology; BSc Emergency Medicine Technology, Bachelor of Physiotherapy, MSc Optometry. All the programmes implemented the CBCS pattern into their curriculum.
- Syllabus for BSc Medical Radiation Technology; BSc Optometry, BSc Clinical Microbiology were approved without any revision.
- **Diploma in Community Health Practice:** Students can register for this course through the means of Lateral Entry after completion of Certificate Ward Technician Course (6 months). After completion of the Certificate Course, the student will be eligible to complete 1 and ½ years in Diploma in Community Health Practice. On successful completion of the course, the student will be eligible for receiving Registration number from DMET for Certificate Ward Technician and will receive Diploma Completion Certificate from CUTM.
- 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.

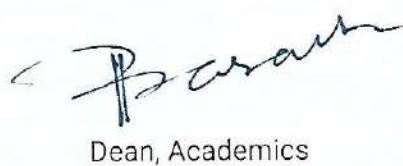
The Dean, SoPAHS extended sincere thanks to all the members of the Board.

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



Prof. Sunil Kumar Jha
Dean, SoPAHS

School of Paramedics & Allied Health Sciences
Centurion University of Technology & Management
Bhubaneswar, Odisha-752050



Dean, Academics

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



Annexure A

List of new courses added

Sl. No	Course Title	Type (Skill/ Employability/ Entrepreneurship)	Credit
	BSc Anaesthesia Technology		
1.	General Anatomy	Employability	5
2.	General Physiology	Employability	5
3.	Biochemistry	Employability	4
4.	Cell Biology	Employability	4
5.	Basic Computer and Information Science	Employability	2
6.	Medical Law and Ethics	Employability	3
7.	Basics of Nursing	Employability	5
8.	Basics in Medical Physics and Electronics	Employability	4
9.	Microbiology	Employability	5
10.	Introduction to anaesthesia and OT Technology	Employability	4
11.	Pharmacology	Entrepreneurship	4
12.	Pharmacology related to Anaesthesia Technology	Employability	4
13.	Clinical Hospital Practice for AT-I	Employability	4
14.	Concepts of Diseases and Techniques in Regional & General Anaesthesia including Complications medical	Employability	4
15.	Clinical Hospital Practice for AT-II	Employability	4
16.	Anaesthesia for Specialty Surgeries	Employability	4
17.	Anaesthesia for Patients with Medical disorders	Employability	4
18.	Clinical Hospital Practice for AT-III	Employability	4
19.	Post Anaesthesia care Unit	Employability	4
20.	Health Care Management	Entrepreneurship	4
21.	Anaesthesia Techniques Including Complication	Employability	4
22.	Anaesthesia for Specialties (Including Critical Care Assistance and Ventilation)- Paper II	Employability	4
23.	Clinical Hospital Practice for AT-1V	Employability	4



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 Emergency Medicine Technology		
1.	General Anatomy	Employability	5
2.	General Physiology	Employability	5
3.	Biochemistry	Employability	4
4.	Cell Biology	Employability	4
5.	Microbiology	Employability	5
6.	Medical Terminology & Record keeping	Employability	3
7.	Basic principles of Hospital management	Entrepreneurship	4
8.	Hospital and clinical Pharmacy	Employability	5
9.	Introduction to emergency services- Part I	Employability	4
10.	Emergency Department Equipment Part - I	Entrepreneurship	4
11.	Emergency Department Pharmacology Part-I	Entrepreneurship	4
12.	Basic Computer and Information Science	Employability	2
13.	Pharmacology	Entrepreneurship	4
14.	Introduction to emergency services - Part II	Employability	4
15.	Emergency department equipment -Part II	Entrepreneurship	4
16.	Emergency Department Pharmacology-Part II	Entrepreneurship	4
17.	Medical Psychology	Employability	3
18.	Psychiatric, Geriatric & Obstetric Emergencies	Employability	2
19.	Medical emergencies - Part I	Employability	4
20.	Medical emergencies- Part II	Employability	4
21.	Medical Laboratory Management	Entrepreneurship	5
22.	Introduction to Quality and Patient Safety	Employability	5
23.	Medical Law and Ethics	Employability	3
24.	Clinical Pathology	Entrepreneurship	4
25.	Project	Employability	12
26.	Internship	Employability	12
27.	Environmental Studies	Employability	2
28.	Job Readiness	Employability	3
29.	Proficiency in English	Employability	2
	BSc Operation Theatre Technology		



1.	General Anatomy	Employability	3
2.	General Physiology	Employability	4
3.	Biochemistry	Employability	4
4.	Cell Biology	Employability	4
5.	Medical Terminology and Record keeping	Employability	3
6.	Basic computer and Information Science	Employability	2
7.	Medical Law and Ethics	Employability	3
8.	Introduction to Quality and Patient safety	Employability	5
9.	Practical orientation on Community and Health care sector industry	Employability	3
10.	Pharmacology	Entrepreneurship	4
11.	Microbiology	Employability	5
12.	Basic principles of Hospital Management	Entrepreneurship	4
13.	Clinical practices in hospital for OTT- I	Entrepreneurship	4
14.	Hospital & Clinical Pharmacy	Entrepreneurship	5
15.	Introduction to Anesthesia and OT Technology	Employability	4
16.	Clinical practices in hospital for OTT- II	Entrepreneurship	4
17.	Basics of Surgical procedures	Employability	3
18.	Basics in Medical Physics & Electronics	Employability	4
19.	CSSD Procedures	Employability	3
20.	Clinical practices in hospital for OTT- III	Entrepreneurship	4
21.	Advance surgical techniques	Employability	3
22.	Basic Intensive care	Employability	3
23.	Clinical practices in hospital for OTT- IV	Employability	4
24.	OTT Project	Employability	12
25.	OTT Internship	Employability	12
26.	Environmental Studies	Employability	2
27.	Job Readiness	Employability	3
28.	Proficiency in English	Employability	2
MSc Optometry			
1.	Research Methodology	Employability	3
2.	Business and Clinical Aspects of Optometry	Employability	3
3.	Recent Advancement in Optometry	Employability	4
4.	Applied Optometric Optics	Employability	4
5.	Advanced Ophthalmic Diagnostic Procedures & Instrumentation	Entrepreneurship	4



6.	Epidemiology and Community Optometry	Employability	3
7.	Introduction to LASER Technology	Employability	3
8.	LASER in Refractive Surgery	Employability	3
9.	Orthoptics and Vision Therapy	Entrepreneurship	4
10.	Advanced contact lens practice - I	Employability	4
11.	LASER in Anterior segment disorders & Glaucoma	Employability	4
12.	Paediatric Optometry and binocular Vision I	Employability	3
13.	LASER in Posterior segment disorders	Employability	3
14.	Paediatric Optometry and Binocular Vision II	Employability	3
15.	Advance contact lens practice II	Entrepreneurship	4
16.	Ocular diseases & Therapeutics	Employability	3
17.	Neuro Optometry	Employability	3
18.	Specialty Clinic	Employability	10
19.	Dissertation	Employability	12
20.	Environmental Studies	Employability	2
21.	Job Readiness	Employability	3
22.	Proficiency in English	Employability	2
	Bachelor of Physiotherapy		
1.	General Anatomy	Employability	5
2.	General Physiology	Employability	5
3.	Biochemistry	Employability	4
4.	Cell Biology	Employability	4
5.	Electrotherapy-I	Entrepreneurship	6
6.	Exercise Therapy	Entrepreneurship	5
7.	Psychology and Sociology	Employability	7
8.	Electrotherapy-II	Entrepreneurship	6
9.	Clinical Pathology	Entrepreneurship	4
10.	Microbiology	Employability	5
11.	Pharmacology	Entrepreneurship	4
12.	Basic Computer and Information Science	Employability	2
13.	Biomechanics and Kinesiology	Entrepreneurship	6
14.	Community Medicine	Entrepreneurship	3
15.	Physiotherapy in Cardio pulmonary condition	Employability	5
16.	Principle of Rehabilitation	Entrepreneurship	6
17.	Pediatrics and Geriatrics	Employability	5
18.	Surgery I	Employability	5
19.	Medicine I (General Medicine)	Employability	5
20.	Medicine II (Cardiology and Work Physiology)	Employability	4
21.	Medicine III (Neurology)	Employability	6



22.	General Orthopedics	Employability	7
23.	Surgery II	Employability	5
24.	Medicine IV (Psychiatry)	Employability	5
25.	Research Methodology	Employability	3
26.	Medical Law and Ethics	Employability	3
27.	Physical Diagnosis and Physical Fitness	Employability	5
28.	Yoga and Naturopathy	Entrepreneurship	4
29.	Physiotherapy in Medical Condition	Entrepreneurship	5
30.	Physiotherapy in Surgical Condition	Entrepreneurship	5
31.	Physiotherapy in Orthopedics	Entrepreneurship	5
32.	Physiotherapy in Neurological Conditions	Entrepreneurship	5
33.	Internship	Employability	12
34.	Project	Employability	12
35.	Environmental Studies	Employability	2
36.	Job Readiness	Employability	3
37.	Proficiency in English	Employability	2

List of Domain courses approved

Sl. No	Domain Course Title	Credit	(T+P+P)
1.	Health Care Assistancy	25	(8+7+10)

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
10.	Medical Diagnostic Techniques (CUTM3124)	4	0+3+1
11.	Ophthalmic Lens and Spectacles Manufacturing (CUTM3123)	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



CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Paramedics and Allied Health Sciences

Time: 11.00 AM

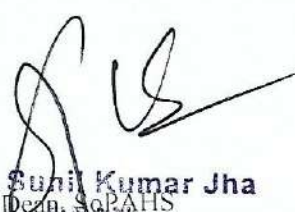
Date: 09.07.2021

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

Board of Studies Meeting

Attendance Sheet

Sl. No.	Name	Organization	Signature
1	Dr. Debasis Sahoo	MD, Professor of Microbiology, S'O'A University, Bhubaneswar	Attended online
2	Dr. Harihar Praharaj	MD, Professor of Medicine, Gerontology, Ex-Join Director, Dept. of Family Welfare	Attended online
3	Dr. Ajay Kumar Singh	MD, Professor of Ophthalmology, DHC Khordha	Attended online
4	Dr Manas R Baisakh	M.D Pathologist; PDCC (Oncopathologist)	Attended online
5	Dr. Ardhendu Praharaj	Ph.D, Microbiology, District Microbiologist, Nabrangpur	Attended online
6	Dr. Debi Prasad Rath	MD, Professor of Pathology, CARE Hospital, Bhubaneswar	Attended online
7	Dr. Bhargavram	MD, Professor of Ophthalmology, Sandhya Eye Hospital, Andhra Pradesh	Attended online
8	Dr. Shweta Kumari	RMRC, Bhubaneswar, Odisha	Attended online
9	Prof B N R Subudhi	Retd. Prof and Ex HOD, Dept of Ophthalmology, MKCG Medical College	Attended online
10	Dr.LS.Sunil Avagaada	Consultant Radiologist, Q1 Hospitals, Health City, Arilova,	Attended online
11	Dr. Swarna Manjari Mohanty	Ex Registrar DMET, Odisha	Attended online


Prof. Sunil Kumar Jha
Dean, SoPAHS

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


HOD, SoPAHS
Dr. Soumya Jal

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



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)



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- 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 introduced 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

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

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



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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 Mahmood	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



CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Engineering & Technology

Department of Computer Science and Engineering

Date: 09.07.2021

MINUTES OF BOARD OF STUDIES MEETING held on 09.07.2021

Venue: Online

Time: 10.00 a.m.

The Board of Studies (BoS) meeting of Department of Computer Science and Engineering was held on 09.07.2021 at 10 a.m. in online mode. The following members were present:

1. Prof. (Dr.) Radhakant Padhi, Honorary Provost, Centurion University of Technology and Management
2. Dr. Sujata Chakravarty, Associate. Prof., HOD, CSE
3. Prof. Jagannath Padhi, Director, Centurion University of Technology and Management
4. Prof. (Dr.) Ashish Ranjan Dash, Associate Dean, SoET, Centurion University of Technology and Management
5. Mr. Pramod Saini, Co-founder of Icalibrator
6. Ms. Aruna Saini, Co-founder of Icalibrator
7. Mr. Suvendu Kumar Nayak, Assistant Professor, CUTM, BBSR
8. Anshit Ransingh, Alumni(Working as project executive in CUTM)
9. Rhythm Paul, Student, CUTM, BBSR

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 11/07/2020 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 2021-22.



- With reference to the suggestions of the members present it was decided no major changes required in the syllabus only the skill related to different subjects need to be mentioned.
- Two changes were suggested
 1. Replacing "OOPs with C++ programming " by "Programming in C"
 2. Renaming the subject "Data structures using C++" by "Data Structures "and all the implementation will be done by C programming language.(Annexure 1)

Agenda 3: Inclusion of MCA curriculum

A new curriculum for MCA program is introduced and approved by the Board members.

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

Various courses offered by University in the areas of life skills and value addition for the students overall improvement and well being are approved by board members. (Annex 2 and Annex 3)

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 1

List of new courses added

Sl. No	Course Title	Type(Skill/Employability/Entrepreneurship)	Credit
1	Programming in C	Skill And Employability	4
2	Data Structures	Skill And Employability	4



Annexure 2

List of Skill courses approved in the Year 2021-22

S No	Course Name	Course Code	Credit
1	3D Game Art	CUTM3121	4
2	Drug Design using Biovia Discovery Studio	CUTM3122	4
3	Ophthalmic Lens and spectacle manufacturing Techniques	CUTM3123	4
4	Medical Diagnostic Techniques_	CUTM3124	4
5	Introduction to Aquaponics	CUTM3125	4
6	Polyhouse Automation	CUTM3126	4
7	Development of Processor (Shakti)	CUTM3127	4
8	Spectroscopy	CUTM3128	4
9	Extraction Technologies	CUTM3129	4
10	Gamified DIY kits using Lasers	CUTM3130	4
11	VR Assets Development	CUTM3131	4
12	GIS and Remote Sensing: Applications in Participatory Natural Resource Management	CUTM3133	4
13	GIS and Remote Sensing: Application Development	CUTM3134	4
14	3D Modelling and Printing	CUTM3135	4
15	Brew Master	CUTM3142	4



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Annexure 3

- List of Value Added Courses offered in the Year 2021-22

S No	Name of the value added courses (with 30 or more contact hours) offered	Course Code	Duration of course
1	Ethical Hacking	CUVA4013	30 Hours
2	Clinical Practice	CUVA4002	30 Hours
3	Financial Literacy	CUVA4038	30 Hours
4	MATLAB	CUVA4035	30 Hours
5	MS Excel Basics	CUVA4010	30 Hours
6	Pharmaceutical Dry-Lab Techniques	CUVA4043	30 Hours
7	Research Methodology and IPR	CUVA4009	30 Hours
8	Steps for Career Plan	CUVA4018	30 Hours
9	TABLEAU	CUVA4014	30 Hours
10	Technical Writing	CUVA4023	30 Hours
11	Waste to Wealth	CUVA4029	30 Hours
12	Web Development	CUVA4012	30 Hours
13	Yoga and Meditation	CUVA4021	30 Hours
14	Health and Lifestyle	CUVA4020	30 Hours
15	Life Skills and Moral Value Education	CUVA4030	30 Hours
16	Ansys	CUVA4044	30 Hours
17	Video Making for Youtubers	CUVA4016	30 Hours



CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Engineering & Technology

Department of Computer Science and Engineering

Time: 10.00 a.m.

Date: 09.07.2021

Venue: Online

Board of Studies Meeting

Attendance Sheet

List of Members present

Sl. No.	Name	Organization	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.) Sujata Chakravarty	HOD, CSE, Centurion University of Technology and Management	Attended online
7.	Mr. Pramod Saini	Co-founder of Icalibrator	Attended online
8.	Ms. Aruna Saini	Co-founder of Icalibrator	Attended online
9.	Prof. Uma Valluri	Ex- Prof., IIIT SriCity	Attended online
10.	Mr. Suwendu Kumar Nayak	Assistant Professor, CUTM, BBSR	Attended online
11.	Anshit Ransingh	Alumni(Working as project executive in CUTM)	Attended online
12.	Rhythm Paul	Student, CUTM, BBSR	Attended online

**Dean, Academics
Dean Academics**

**Centurion University of Technology & Management
Odisha**



CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Pharmacy and Life Sciences

Date: 09-07-2021

MINUTES OF BOARD OF STUDIES MEETING held on 09-07-2021

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 09-07-2021 at 11 a.m. in the Board Room, CUTM Bhubaneswar. The following members were present:

1. Dr. Gurudutta Pattnaik, Dean SoPLS
2. Dr. Amulyaratna Behera, Professor SoPLS
3. 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 Head 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 11-07-2020 were confirmed.

Agenda 2: In take capacity of M. Pharm in Industrial Pharmacy intake capacity from 03 to 15 & opening of new Programme in Pharmaceutical Analysis branch (15 Intake)

- The committee decided to apply Pharmacy council of India for increase in intake for M. Pharm in Industrial Pharmacy intake capacity from 03 to 15 & opening of new Programme in Pharmaceutical analysis branch (15 Intake)

Agenda 3: Discussion and Resolutions taken (Syllabus/Evaluation systems etc.)

- Feedback received from different stakeholders such as, expert from academics, pharmaceutical industry & students for designing and review of syllabus.
- As per Pharmacy council of India, the statutory council which regulate the Education system in the country have restructured their syllabus in 2017. The new syllabus framed and implemented in 2018 is as per the current need pharmaceutical sector. Hence the current syllabus is being imparted from 2018 to till date.
- School of Pharmacy and Life Sciences progress and performance in academic is reviewed and found satisfactory in syllabus, class performance and results, hence BOS after due deliberation accepted the points raised by the Dean of School of Pharmacy and Life Sciences.
- It is also resolved to follow the prescribed syllabus, credit system of PCI guide lines with an incorporation of university course code.
- Project work: The Board approved the revision of the syllabus in keeping with the latest requirements of the industry.



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.

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.

Dean, SoPLS

DEAN

**SCHOOL OF PHARMACY AND LIFE SCIENCES
CUTM.BHUBANESWAR**

Dean, Academics

Dean - Academic
Centurion University of Technology & Management
Bhubaneswar, Khurda, Odisha-762050



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Shimoga City
Empowering Education

Additional Documents

Appendix I

• List of new courses:

M.Pharm PHARMACEUTICS			
Sl. No	Course Title	Type(Skill/Employability/Entrepreneurship)	Credit
1	Modern Pharmaceutical Analytical Technique	Skill-Employability	4
2	Drug Delivery System	Skill-Employability	4
3	Modern Pharmaceutics	Skill-Employability	4
4	Regulatory Affairs	Skill-Employability	4
5	Pharmaceutics Practical I	Skill-Employability	6
6	Seminar/Assignment	Skill-Employability	4
7	Molecular Pharmaceutics (Nano Tech and Targeted DDS)	Skill-Employability	4
8	Advanced Biopharmaceutics & Pharmacokinetics	Skill-Employability	4
9	Computer Aided Drug Delivery System	Skill -Employability- Entrepreneurship	4
10	Cosmetic and Cosmeceuticals	Skill-Employability	4
11	Pharmaceutics Practical II	Skill-Employability	6
12	Seminar/Assignment	Skill-Employability	4
13	Research Methodology Biostatistics*	Skill-Employability	4
14	Journal Club	Skill-Employability	1
15	Discussion / Presentation(Proposal Presentation)	Skill-Employability	2
16	Research Work	Skill -Employability- Entrepreneurship	14
17	Journal Club	Skill-Employability	1
18	Research Work	Skill -Employability- Entrepreneurship	16
19	Discussion / Final Presentation	Skill	3

M.Pharm INDUSTRIAL PHARMACY			
Sl. No	Course Title	Type(Skill/Employability/Entrepreneurship)	Credit
1	Modern Pharmaceutical Analytical Technique	Skill-Employability	4
2	Pharmaceutical Formulation Development	Skill-Employability	4
3	Novel drug delivery systems	Skill-Employability	4
4	Intellectual Property Rights	Skill-Employability	4
5	Industrial Pharmacy Practical I	Skill-Employability	6
6	Seminar/Assignment	Skill-Employability	4
7	Advanced Biopharmaceutics and Pharmacokinetics	Skill-Employability	4
8	Scale up and Technology Transfer	Skill-Employability	4
9	Pharmaceutical Production Technology	Skill -Employability- Entrepreneurship	4
10	Entrepreneurship Management	Skill-Entrepreneurship	4



11	Industrial Pharmacy Practical II	Skill-Employability	6
12	Seminar/Assignment	Skill-Employability	4
13	Research Methodology Biostatistics*	Skill-Employability	4
14	Journal Club	Skill-Employability	1
15	Discussion / Presentation(Proposal Presentation)	Skill-Employability	2
16	Research Work	Skill -Employability- Entrepreneurship	14
17	Journal Club	Skill-Employability	1
18	Research Work	Skill -Employability- Entrepreneurship	16
19	Discussion / Final Presentation	Skill	3

- Skill Courses approved by university in 2021-22.

Sl. No	Course Title	Credit
1	3D Game Art	4
2	Drug Design using Biovia Discovery Studio	4
3	Ophthalmic 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



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Quality Education
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Appendix 2

Value Added courses offered by university in 2021-22.

Sl. No	Course Title	Hrs. of input
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



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*Shaping Lives
Empowering Communities*

CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Pharmacy and Life Sciences

Time: 11.00 a.m.

Date: 09-07-2021

Venue: Board Room, CUTM, Bhubaneswar

Board of Studies Meeting

Attendance Sheet

Dr. S.K. Sahu
Reader & Head, UDPS
Utkal Univ.

GAP

A. Subram

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 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.

- 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

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 biomimetic 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

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

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
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17	Steps for Career Plan	30 Hours
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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, Ravenshaw 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	Bapuram Venkateswar 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

A handwritten signature in black ink, appearing to read 'P. Prasad'.

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 Physics

Date: 11.07.2020

MINUTES OF BOARD OF STUDIES MEETING held on 11.07.2020

Venue: Conducted in online mode

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5. Prof. Mohammed Siddique, Associate Dean- SoAS
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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.

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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

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 biomimetic 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

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
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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
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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

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
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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, Ravenshaw 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	Bapuram Venkateswar 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

A handwritten signature in black ink, appearing to read 'P. Prasad'.

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.

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	Pharmacognosy 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	04
Basket II (Domain Courses)				32
Total				96

Annexure II

Domain Courses offered by the University in 2020-21

Sl. No.	Name of the Domain	Credit	Category	Year of introduction
	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			
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	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 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.

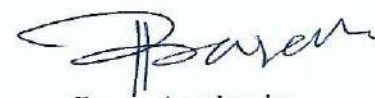
Date: 11.07.2020

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 Botany

Date: 11.07.2020

MINUTES OF BOARD OF STUDIES MEETING held on 11.07.2020

Time: 2.30 p.m.

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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

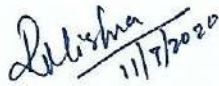
- New 22 domain course are finalized by the University based on the industry and academic requirements and approved by Board. These courses to be implemented from the academic year 2020-2021. Group A-C category is for Botany students. **(Annexure II)**

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
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6.	CUTM1460	Economic Botany	Theory + Practice	4-2-0	6
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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	Pharmacognosy 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	04
Basket II (Domain Courses)				32
Total				96

Annexure II

Domain Courses offered by the University in 2020-21

Sl. No.	Name of the Domain	Credit	Category	Year of introduction
	Group A: Agriculture/ Agri Engineering/Phyto pharma/ Dairy tech/ fisheries/ biological sciences			
	Group B: All other engineering/physical and mathematical science/vocational or skills			
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	Group D: Management & media and communication			
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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
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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
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6	Dairy Farming	4
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9	Electrical Installation	4
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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
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CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Applied Sciences

Department of Botany

Time: 2.30 p.m.

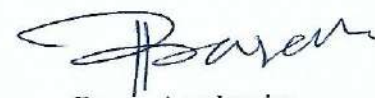
Date: 11.07.2020

Virtual Mode

Board of Studies Meeting

Attendance Sheet

Sl. No.	Name of the BoS Member (Internal Faculty and External Resource)	Designation	Signature
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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

Sl. No.	Name of the Domain	Credit	Category	Year of introduction
	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			
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.

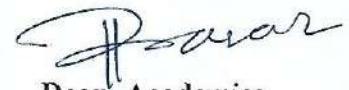
Date: 11.07.2020

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 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

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

Sl. No.	Name of the Domain	Credit	Category	Year of introduction
	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			
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.

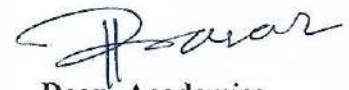
Date: 11.07.2020

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 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 Mahmood, 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)



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- 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 introduced 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

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

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



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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 Mahmood	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



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)



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

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

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

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

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



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



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



Centurion
University of Technology and Management

CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Engineering & Technology

Department of Electronics and Communication Engineering

Date: 11.07.2020

MINUTES OF BOARD OF STUDIES MEETING held on 11.07.2020

Venue: Online mode

Time: 12.00 p.m.

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

1. Mr. Mangovinda Mishra, NEMHANS Solutions Pvt. Ltd. Bhubaneswar, Odisha
2. Mr. Umesh Mohanty, MARQUEESEMI INDIA PVT LTD
3. Dr. Vamshi Krishana, Dept. of ECE, SoET, CUTM
4. Mrs. Swarna Prabha Jena, HOD, ECE, SoET, CUTM
5. Dr. Prasant Kumar Mohanty, Convenor of BoS & Dean, SoET
6. Dr Anita Patra, Registrar, CUTM & Chairperson

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 22/06/2019 were confirmed.

Agenda 2: Revision required in the syllabus of B.Tech, Electronics and Communication Engg.

- The HoD, Electronics and Communication 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, Electronics and Communication Engg. was considered and approved by the Board with some new addition to Digital Communication Technique syllabus. (Annexure I)



Value Education
Empowering Communities

Agenda 3: Life skills and value addition courses approval

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. (Annexures 2,3 and 4)

The HoD, Department of Electronics and Communication 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.



Ministry
Engineering Curriculum

Annexure I

List of existing courses where syllabus was revised

Basket/ Semester	Name of Course	No. of Modules/Topics revised
III	Digital Communication Systems	1
		Average percentage of changes in syllabus



Sciences
Engineering & Technology

Annexure 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
15	Gaming and Immersive Learning (AR & VR)	20	A/B/D



Ministry of Education
Government of Karnataka

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

Annexure 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

Annexure 4

- List of Value Added Courses added in 2020-21



Strong Foundations
Empowering the Future

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
19	Quality Analysis	CUVA4001	30 Hours



Shaping India's
Engineering Tomorrow

17	Steps for Career Plan	CUVA4018	30 Hours
18	MS Excel Basics	CUVA4010	30 Hours
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



Centurion
University of Technology and Management

CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

School of Engineering & Technology

Department of Electronics and Communication 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. Mangovinda Mishra	NEMHANS Solutions Pvt. Ltd. Bhubaneswar, Odisha	Attended online
2	Mr. Umesh Mohanty	MARQUEESEMI INDIA PVT LTD	Attended online
3	Dr. Vamshi Krishan	Asst. Professor, ECE, SoET, CUTM, BBSR	Attended online
4	Mrs. Swarna Prabha Jena	HOD, ECE, SoET, CUTM, BBSR	Attended online
5	Dr. Prasant Kumar Mohanty	Dean, SoET	Attended online

Dean, Academics

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



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)*



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

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



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

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 <ul style="list-style-type: none"> • 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: <ol style="list-style-type: none"> 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: <ol style="list-style-type: none"> 1. Layout Design of 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 Lightning Arrestor & Circuit Breaker of substation as per manufacturers Hand book 5. Maintenance tests of transformer as per

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



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

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



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

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

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



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



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.



- 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



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

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.

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

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



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



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



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

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

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

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



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



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

HoD, Dairy Technology

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



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

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

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

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



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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



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 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. Pragyana 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, Phytopharmaceutical



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



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

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



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



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, Associate 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 achievements 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 Courses.
- 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.

GP
14/08/20

Principal, SoPLS & SoFS

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



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



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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
<u>GENERIC ELECTIVE (GE)</u> <u>Subjects From other Disciplines (One each in Semester I, II, III, IV)</u>			

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			



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	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



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

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



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.

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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 achievements and improvements of the department in the areas of academics and infrastructure.

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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.

GP
14/08/20

Principal, SoPLS & SoFS

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



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



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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
<u>GENERIC ELECTIVE (GE)</u> <u>Subjects From other Disciplines (One each in Semester I, II, III, IV)</u>			

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			



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	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



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

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



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.



- 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 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



22-06-19

HOD

Dept. of Civil Engineering

HoD, Civil Engineering
Centurion University of
Technology & Management, BBSR

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

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

List of existing M.Tech courses where syllabus was revised

M Tech Structural Engineering			
Sl no	Name of Course	No. of Modules/T opics 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

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

Domain - 5

→ Geo Technical investigation.

Module - 6: Necessity of Water Table Study in
Geo Tech. Engrs.

→ Title of the course project amongst project
study management. shd be chng.

1. Dr. (Prof). Vazeer mahammood 22.06.2019

2. Prof. Prafulla Kumar Panda 22.06.19

3. Prof. Sagarika Panda 22/6/2019

4. Prof. Kamal Ku. Barick 22-06-19

5. Prof. Ranish Kumar Jena 22.06.19

6. Prof. Rashant Nayak 22-06-19

**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*)



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



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



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

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

Proceedings of BOS Meeting held on 22-06-19

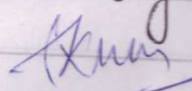
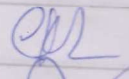

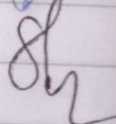
Minutes of the Meeting

Agenda - 1. Revision of Btech CSE syllabus, Basket 3, 4 & 5
2. Btech. CTS

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 suggestions 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/Organisation	Sig.
1.	Santosh Kumar	Mind Tree	
2.	Chandan Kumar Giri	CSE, CUTM, PKD	
3.	K. Santosh Ch. Rao	CSE, CUTM, PKD (HOD)	
4.	Surendra Nayak	CSE, CUTM, BBSR	



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.



- 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*.

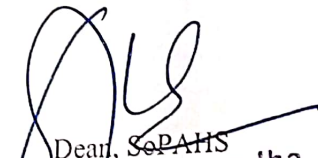
Agenda 3: Inclusion of courses on Domain, life skills and value addition

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.


Details 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.

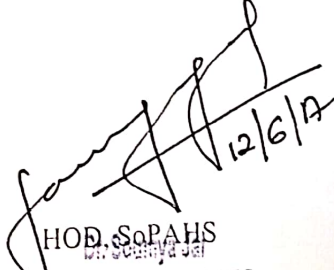
The meeting ended with a vote of thanks to the Chair.



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



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



HOD, SoPAHS
Associate Professor & HOD
School of Paramedics & Allied Health Sciences
Centurion University of Technology & Management
Bhubaneswar, Odisha-752050
12/6/17

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

Annexure C

List of Domain courses approved

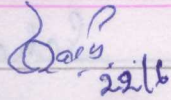
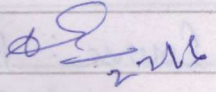
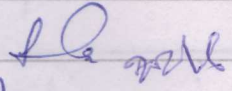
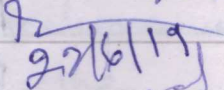
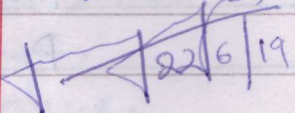
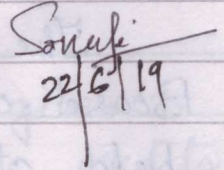
Sl. No	Domain Course Title	Credit	(T+P+P)
1.	Microbiology	28	(14+8+6)
2.	Medical Lab Technician	28	(12+10+6)
3.	Radiology and Imaging Technology	30	(14+10+6)

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

SLNO	NAME	PLACE	SIGNATURE
1	Dr. Debi Prasad Rath	M-81, Kapil Prasad Phareji Bhimsinghi BBSR	 22/6
2	Dr. Debasish Saha	AP/Dr B. Lakshy BBSR-3	 22/6
3	Dr. Anshu Choudhary	Hitech Medical College	 22/6/19
4	Dr. K. Sha	Dean SPAHS	 22/6/19
5	Dr. Soumya Tal	HOI, SPAHS	 22/6/19
6	Sonali Dash	Visiting faculty SPAHS	 22/6/19

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, Associate 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 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



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

List of existing courses where syllabus was revised

Basket/ Semester	Name of Course	No. of Modules/To pics 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



			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

Proceedings of Board of Studies in Civil
Engg held on 30/06/2018 at Jalni 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.

Recommendation - 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, RCCI, Functional planning & DPR.

1. Prof. C.H.V. Sanyalreddy

2. Prof. Manoj Kumar Raut

3. Genaraj, Prof. R.C. Pathy

4. Mr. Siba Mishra

5. Prof. D. S. Fulla

Prof. Sanyalreddy
Prof. Pathy

Prof. Raut



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.



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



Annexure-1

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 Gaming & Simulation	Skill And Employability	3
20	Introduction to Cyber Security	Skill And Employability	3
21	AI & ML. using Python	Skill And Employability	3



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 Gaming & 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	<p>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.</p> <p>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.</p>

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

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

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

courses offered in the Basket III as the new technologies like cloud computing, Data Analytics, Agile Software Development etc. were introduced.

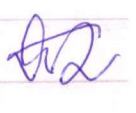
- Students were facilitated with more scope for doing minor projects.


* No of new skill course are added with credit.


* No. of course partly modified:

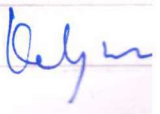
Sl.No	Course Title	Type	Credit	Detail of modification
1	operating system programming	skill	3	30% content mod


* No. of value added course introduced.

1. Dr. Debi Prasad Dogra, Asst. Prof, IIT Bhubaneswar, 

2. RAJESH FRANCIS, V.P. Exuber Software solutions, 

3. Dr. ANURAG, PVC, CUTM 

4. K-V. Kalpan ~~Asst~~ Professor CUTMAP 

5. K. Santoshchandra RAO HOD, CSE, CUTM Paralakhemundi 



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 curriculum thoroughly 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*).





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 - Orissa-752050



(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

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

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

SIGNATURES OF MEMBERS

FINAL MEMBERS

- R. P.K. DAS
- R. P.K. MISHRA
- R. A.K. MOHANTY


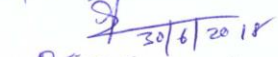

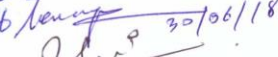





SIGNATURES

INTERNAL MEMBERS

- Prof. ANITA PATRA (REGISTRAR)
(Professor SOM)
- Prof. K.V.D. PRAKASH (DEAN-IEEE RD)
- Prof. BIJAY BHUTARAL
- Prof. P.K. MOHANTY
- Prof. UMAKANT NAYAK
- Prof. SHIVSANKAR DAS
- Prof. BIBHUNANDIN DAS
- Prof. PRAMOD PATI JOSHI
- Prof. RASHMI RANJAN PARIDA

SIGNATURES

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.



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

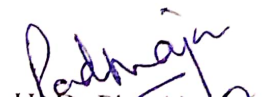
12.6.2017



Dean, Academics

Dean - Academic

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


HoD, Physics
12/6/17

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

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

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

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 Palraik, Asst prof, CUTM, Jatri
3. Dr. J. K. Meher, Prof, CUTM, Bolangir
4. Gyanendra Kumar Mishra, Lecturer, CUTM, Bolangir

Agenda of the meeting :-

1. For BSC programme → BSc CBCS courses are designed for 3rd, 4th, 5th & 6th semesters.
All core papers, elective papers are designed.

2. For MSc programme → ~~Plan~~ 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. M.Sc. Syllabus finalised for 2017 admitted batch finalised and approved.
3. M.Sc. syllabus for 2016 batch is slightly modified by ~~replacing~~ few papers.
4. Some changes has been suggested by the expert, which will be made in the detailed syllabus.
4. M.Phil in Physics is introduced from this year. Syllabus is finalized.

Padmaja
12/6/17

G. Tripathy
12/6/17

J. K. Meher
12/6/17

Gyanendra Kumar Mishra
12/06/2017



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.





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



List of new courses added

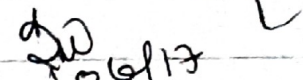
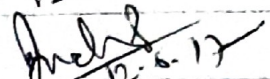
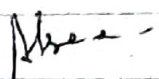
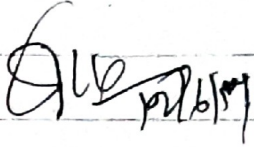


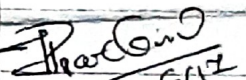
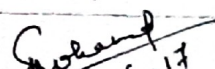
Sl. No	Course Title	Type (Skill/ Employability/ Entrepreneurship)	Credit
	BSc RIT		
1	Applied Radiation Physics & Radiation Protection	Employability	4
2	Advanced Radiographic Techniques	Employability	4
3	Special Radiographic Technique & Procedures	Employability	4
4	Basic Equipments In Radiodiagnosis	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

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	Entrepreneurship	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



5	<i>Research Methodology</i>	<i>Skill</i>	4
6	<i>Communicative Practice Laboratory-II</i>	<i>Skill</i>	2
7	<i>Immunology, Histopathology & Biochemistry Lab</i>	<i>Entrepreneurship</i>	4
8	<i>Project</i>	<i>Skill</i>	12
9	<i>Internship</i>	<i>Skill</i>	12
	BSc CMB		
1	<i>Introductory Cell Biology</i>	<i>Employability</i>	4
2	<i>Human Anatomy & Physiology</i>	<i>Employability</i>	4
3	<i>Basic Haematology</i>	<i>Entrepreneurship</i>	4
4	<i>Instrumentation & Techniques</i>	<i>Entrepreneurship</i>	4
5	<i>Human Anatomy, Physiology & Haematology Practical</i>	<i>Entrepreneurship</i>	4
6	<i>Environmental Science</i>	<i>Skill</i>	4
7	<i>Foundations of English Communication</i>	<i>Skill</i>	2
8	<i>General Microbiology</i>	<i>Employability</i>	4
9	<i>Clinical Biochemistry</i>	<i>Entrepreneurship</i>	4
10	<i>Clinical Pathology & Diagnosis</i>	<i>Entrepreneurship</i>	4
11	<i>Clinical Pathology, Biochemistry & Microbiology Practical</i>	<i>Entrepreneurship</i>	4
12	<i>Immunology</i>	<i>Employability</i>	4
13	<i>Systemic Bacteriology</i>	<i>Employability</i>	4
14	<i>Molecular Biology</i>	<i>Employability</i>	4
15	<i>Systemic Virology & Mycology</i>	<i>Employability</i>	4
16	<i>Communicative Practice Laboratory- II</i>	<i>Skill</i>	2
17	<i>Bacteriology, Virology & Mycology Practical</i>	<i>Skill</i>	4
18	<i>Public Health Microbiology</i>	<i>Employability</i>	4

19	<i>Pharmaceutical Microbiology</i>	<i>Employability</i>	4
20	<i>Industrial Microbiology</i>	<i>Entrepreneurship</i>	4
21	<i>Biochemistry</i>	<i>Employability</i>	4
22	<i>Basic Computer & Information technique</i>	<i>Employability</i>	4
23	<i>Industrial, Public Health Microbiology & Biochemistry Lab.</i>	<i>Skill</i>	4
24	<i>Epidemiology</i>	<i>Employability</i>	4
25	<i>Diagnostic Bacteriology</i>	<i>Employability</i>	4
26	<i>Diagnostic Virology</i>	<i>Employability</i>	4
27	<i>Diagnostic Mycology</i>	<i>Employability</i>	4
28	<i>Diagnostic Parasitology</i>	<i>Employability</i>	4
29	<i>Research Methodology</i>	<i>Skill</i>	4
30	<i>Epidemiology & Diagnosis microbiology lab</i>	<i>Skill</i>	4
31	<i>Project</i>	<i>Skill</i>	12
32	<i>Internship</i>	<i>Skill</i>	12

Slno.	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 K. Sen	CUTM, BBSR	
4.	Sunil K. Jha	CUTM, BBSR	
5.	Dr. Debashish Sahoo	CUTM, BBSR	
6.	Vivek K. Sinha	CUTM, BBSR	 12/6/17
7.	Prियान्का Parbati	CUTM, BBSR	 12/06/17
8.	Sanskita Mohapatra	CUTM, BBSR	 12.6.17