SCHOOL OF FORENSIC SCIENCES

ACADEMIC REGULATIONS

M.Sc. Forensic Science Programme (2022)



Empowering Communities!

CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

SCHOOL OF FORENSIC SCIENCES

M.Sc. Forensic Science

REGULATIONS

School of Forensic Sciences is affiliated with National Forensic Sciences University, Gandhinagar, Gujarat. This section gives an overview of the different Academic Rules and Regulation to be followed in the Centurion University of Technology and Management (CUTM) for B.Sc. Forensic Science. It contains information on eligibility criteria, including Registration, Selection of Subjects, Grading System, Examination Policy, Attendance Policy and Academic Rules applicable at CUTM.

1. Minimum qualification for admission:

Bachelor's degree in Science / Forensic Science/ Medicine / Engineering / Pharmacy/ Dentistry/A yush with at least 55% for General/OB C/EWS category candidates and 50% or equivalent for SC/ST and PwD category candidates.

2. Duration of the program

The Programme for M.Sc. Forensic Science shall extend over a period of 3 years i.e. 10 semesters.

3. Medium of instruction and examinations

Medium of instruction and examination shall be in English.

4. Working days in each semester

Each year shall be divided into two Semesters – Autumn Semester (July to December) and Spring Semester (January to June). Students normally join in Autumn Semester. The number of teaching weeks in each semester will be 15 to 18 with a minimum of 90 teaching days, excluding the period of examination.

School of Forensic Sciences will follow academic calendar circulated by National Forensic Sciences University for it's affiliated institutes. Detailed curricula and syllabi will be as decided by the National Forensic Sciences University.

For students, who have taken late admission, remedial classes can be done.

5. Attendance and Progress

The minimum attendance requirement in each course shall not in any case be less than 80% of the scheduled classes/practical etc.

Notwithstanding anything contained above on account of bonafide illness or any other reason deemed sufficient by the Dean of the school concern, such Dean of the School can condone upto 10% in the course or courses. For beyond 10% in any genuine cases, the decision to condone the attendance will be taken by the concerned Campus Director on merits.

6. Registration, Selection of Subjects & Time Table

This section gives the details of the University Registration Card, Registration to different Subjects and Time Table for Course work. Immediately after admission, the students' particulars are to be stored in ERP/MIS of the University. Any information related to the students required by any Department/Entity will be collected from the ERP/MIS only.

6.1. University Registration Card

A Student is issued University Registration Card after admission process. University Registration number continues to be his/her Registration Number for all examinations during his/her tenure of study. This card is also essential for attending classes in a college and appearing in examinations. This is an IMPORTANT document and the student must take care of it. Duplicate University Registration Card will be issued only after recommendation by the Dean of respective college on paying the prescribed fee.

6.2. Subject-wise Registration

All registered students of the University have to register for each of the subjects they are required to study before commencement of a semester. A student has to apply in a specified format for subject wise registration for each semester with prescribed fees to his/her college Dean. The same will be scrutinized and registration confirmation will be displayed on the notice board and in MIS. The following methodology is adopted for registration procedure.

a) Head of the Departments to submit the titles of the subjects to be offered, for all the Baskets, to the Dean.

b) The MIS section has to upload all these subjects in the MIS/ERP.

c) One week slot will be provided to the students for counselling & registration in every semester.

d) Immediately after admission in the first year, each faculty mentor will be allotted 20 students for continuous guidance.

e) It is the responsibility of faculty mentor and concerned HOD to counsel and make the students understand the CBCS and select the subjects of their choice (aligned to their goal). Student-wise tracker will be developed at the beginning of the first semester. It will consist of a portfolio of subjects keeping in mind student's goal (i.e. employment/higher education/entrepreneurship). Colleges will prepare slots for students and their faculty mentors for this purpose.

f) The Mentor concerned can make note of the subjects selected by his/her students from the tracker and then the students are guided to freeze these in MIS.

g) A student can register for more than normal credits in a semester. He/she can judiciously credit Subjects in advanced topics, interdisciplinary areas and undertake skill Subjects and project works.

h) A Student is allowed to register for a subject only after clearing its pre requisites, if any.

i) After the choice lock, the time table will be finalized. Care will be taken to accommodate maximum number of students for the subject choices locked. Wherever it is not feasible, concerned student(s) will be guided to defer the subject chosen to future semesters and register another feasible subject.

j) If any student does not register during the given slot or joins the college later, then he/she will have to exercise choice based on the time table.

k) Any student falling short of credits for graduation after the final semester examination, has the chance to complete the required shortfall by appearing the examination organized before the convocation of his/her batch.

1) MIS will show cumulative student credits under "My Credits". A report on student wise credits can be obtained from MIS for documentation.

6.3. Time Table for Instructions

Department will provide Time Table for the subjects being offered in a semester after the subject registration for that semester. The time table will indicate the name of the Subject facilitators.

7. Program/Course credit structure

As per the Credit Based Semester System, certain quantum of academic work viz. theory classes, tutorial hours, practical classes, etc. are measured in terms of credits. On satisfactory completion of the courses, a candidate earns credits. The amount of credit associated with a course is dependent upon the number of hours of instruction per week in that course. Similarly, the credit associated with any of the other academic, co/extra-curricular activities is dependent upon the quantum of work expected to be put in for each of these activities per week.

7.1. Credit Assignment

Courses are broadly classified as Theory and Practical. Theory courses consist of lecture (L) and /or tutorial (T) hours, and Practical (P) courses consist of hours spent in the laboratory. Credits (C) for a course is dependent on the number of hours of instruction per week in that course, and is obtained by using a multiplier of one (1) for lecture and tutorial hours, and a multiplier of half (1/2) for practical (laboratory) hours. Thus, for example, a theory course having three lectures and one tutorial per week throughout the semester carries a credit of 4. Similarly, a practical having four laboratory hours per week throughout semester carries a credit of 2.

Minimum credit points required for award of B.Sc. – M.Sc. Forensic Science degree is 222. These credits are divided into Theory classes, tutorial, practical and projects over the duration of 10 semesters.

Courses generally progress in sequences, building competencies and their positioning indicates certain academic maturity on the part of the learners. Learners are expected to follow the semester-wise schedule of courses given in the syllabus.

8. Academic work

A regular record of attendance both in Theory and Practical shall be maintained by the teaching staff of respective courses.

9. Course Structure and Examination Scheme

| | 1 | | Teaching Scheme | | | | Examination Scheme | | | | | |
|---------|---|-------|-----------------|---|----|----------|--------------------|----------|---------------------|----------|-----|-----|
| Sr. | Courses Title | | | | | Hours | | | Component Weightage | | | |
| No. | CourseTitle | Hours | | | | | | | ernal | | | |
| - | | L | Т | Р | С | MSE | SEE | PRE | MSE | TA | LPW | SEE |
| Semeste | | 1. | - | | 1. | | | - | | | | ~ - |
| 1 | Introduction to Forensics, Psychology, Law and Statistics | 4 | - | - | 4 | 1.5 | 3 | - | 0.2 | 0.1 | - | 0.7 |
| 2 | Instrumental Techniques (P) | 4 | - | 1 | 5 | 1.5 | 3 | 6 | 0.2 | 0.1 | 0.2 | 0.5 |
| 3 | Forensic Physics and Crime Scene Management (P) | 4 | - | 1 | 5 | 1.5 | 3 | 6 | 0.2 | 0.1 | 0.2 | 0.5 |
| 4 | Finger Prints and Questioned Documents (P) | 4 | - | 1 | 5 | 1.5 | 3 | 6 | 0.2 | 0.1 | 0.2 | 0.5 |
| 5 | Forensic Biology & Biochemistry (P) | 4 | - | 1 | 5 | 1.5 | 3 | 6 | 0.2 | 0.1 | 0.2 | 0.5 |
| | Total | 20 | - | 4 | 24 | | | | | | | |
| Semeste | r-II | | | | | | | | | | | |
| 1 | Quality Management, Narcotic Drugs, Explosives and | 4 | _ | 1 | 5 | 1.5 | 3 | 6 | 0.2 | 0.1 | 0.2 | 0.5 |
| Ŧ | Forensic Chemistry (P) | | - - | T | 5 | | 5 | 0 | | | | |
| 2 | Forensic Medicine & Anthropology (P) | 4 | - | 1 | 5 | 1.5 | 3 | 6 | 0.2 | 0.1 | 0.2 | 0.5 |
| 3 | Forensic Serology & DNA Profiling (P) | 4 | - | 1 | 5 | 1.5 | 3 | 6 | 0.2 | 0.1 | 0.2 | 0.5 |
| 4 | Forensic Toxicology and Pharmacology (P) | 4 | - | 1 | 5 | 1.5 | 3 | 6 | 0.2 | 0.1 | 0.2 | 0.5 |
| 5 | Forensic Ballistics and Computer Forensics (P) | 4 | - | 1 | 5 | 1.5 | 3 | 6 | 0.2 | 0.1 | 0.2 | 0.5 |
| | Total | 20 | - | 5 | 25 | | | | | | | |
| Semeste | | | | | | | | | | | | |
| | Specialization - 1 (Forensic Chemistry & Toxicology) | | | | | - | | - | | - | | |
| 1 | Pharmacology and Pharmaceutical Drug Analysis (P) | 4 | - | 3 | 7 | 1.5 | 3 | 6 | 0.2 | 0.1 | 0.2 | 0.5 |
| 2 | Concepts of Toxicology (P) | 4 | - | 3 | 7 | 1.5 | 3 | 6 | 0.2 | 0.1 | 0.2 | 0.5 |
| 3 | Modern and Applied Analytical Forensic Chemistry (P) | 4 | - | 3 | 7 | 1.5 | 3 | 6 | 0.2 | 0.1 | 0.2 | 0.5 |
| | Elective: Forensic Engineering/Scientific Protocols of | | | | | | | | | | | |
| | Fire Investigation/ Explosives Analysis & Post Blast Investigation/ Nanobiotechnology/ Forensic Voice, | | | | | | | | | | | |
| 4 | Multimedia Comparison And Evidence Evaluation/ | 4 | - | - | 4 | 1.5 | 3 | - | 0.2 | 0.1 | - | 0.7 |
| | Modern Cryptography and Steganography/ Research | | | | | | | | | | | |
| | Methodology | | | | | | | | | | | |
| | Total | 16 | - | 9 | 25 | 1 | | | | | | |
| | Specialization – 2 (Forensic Biotechnology) | | | | | | | | | | | |
| 1 | Molecular Biology & Genetics (P) | 4 | - | 3 | 7 | 1.5 | 3 | C | 0.2 | 0.1 | 0.2 | 0.5 |
| 1 | Biotechnology in Pharmaceutical Sciences (P) | 4 | - | 3 | 7 | 1.5 | 3 2 | 6 6 | 0.2 | 0.1 | 0.2 | 0.5 |
| 2 | Environmental Biotechnology (P) | 4 | - | 3 | 7 | 1.5 | 3 | 6 | 0.2 | 0.1 | 0.2 | 0.5 |
| 5 | Elective: Forensic Engineering/Scientific Protocols of | т | | 5 | ľ | 1.5 | 5 | 0 | 0.2 | 0.1 | 0.2 | 0.5 |
| | Fire Investigation/ Explosives Analysis & Post Blast | | | | | | | | | | | |
| | Investigation/ Nanobiotechnology/ Forensic Voice, | | | | | 4 5 | 2 | | 0.0 | 0.1 | | 0 7 |
| 4 | Multimedia Comparison And Evidence Evaluation/ | 4 | - | - | 4 | 1.5 | 3 | - | 0.2 | 0.1 | - | 0.7 |
| | Modern Cryptography and Steganography/ Research | | | | | | | | | | | |
| | Methodology | | | | | | | | | | | |
| | Total | 16 | <u> </u> | 9 | 25 | <u> </u> | <u> </u> | <u> </u> | ļ | <u> </u> | | |
| | Specialization – 3 (Forensic Physics and Ballistics) | | | | | 1 | | 1 | | | | |
| 1 | | 4 | | 2 | 7 | 1 - | 2 | 6 | 0.2 | 0.1 | 0.2 | 05 |
| 1 | Advances in Physical Techniques (P) | 4 | - | 3 | 7 | 1.5 | 3 | 6 | 0.2 | 0.1 | 0.2 | 0.5 |
| 2 | Concepts of Conventional & Modern Ballistics (P) | 4 | <u>-</u> | 3 | 7 | 1.5 | 3 | 6 | 0.2 | 0.1 | 0.2 | 0.5 |
| ა | Audio Recognition & Video Analysis (P) Elective: Forensic Engineering/Scientific Protocols of | 4 | <u>-</u> | 3 | / | 1.5 | 3 | 6 | 0.2 | 0.1 | 0.2 | 0.5 |
| | Fire Investigation/ Explosives Analysis & Post Blast | | | | | 1 | | 1 | | | | |
| | Investigation/ Nanobiotechnology/ Forensic Voice, | | 1 | | | | | | | | | |
| 4 | Multimedia Comparison And Evidence Evaluation/ | 4 | - | - | 4 | 1.5 | 3 | - | 0.2 | 0.1 | - | 0.7 |
| | Modern Cryptography and Steganography/ Research | | 1 | | | | | | | | | |
| | Methodology | | 1 | | | | | | | | | |
| | Total | 16 | - | 9 | 25 | | | | | | | |
| | Specialization – 4 (Finger Prints & Questoned | | | | T | | | | | | | |
| | Documents) | 1 | 1 | | | | | | | | | |

| 1 | Modern Trends in Fingerprint Science (P) | 4 | - | 3 | 7 | 1.5 | 53 | 6 | 0.2 | 0.1 | 0.2 | 0.5 |
|-------|---|----|---|---|----|-----|-----|---|-----|-----|-----|-----|
| 2 | Questioned Documents & Forensic Accounting (P) | 4 | - | 3 | 7 | 1.5 | 5 3 | 6 | 0.2 | 0.1 | 0.2 | 0.5 |
| 3 | Forensic Photography & Biometric Traits(P) | 4 | - | 3 | 7 | 1.5 | 53 | 6 | 0.2 | 0.1 | 0.2 | 0.5 |
| 4 | Elective: Forensic Engineering/Scientific Protocols of Fire Investigation/ Explosives Analysis & Post Blast Investigation/ Nanobiotechnology/ Forensic Voice, Multimedia Comparison And Evidence Evaluation/ Modern Cryptography and Steganography/ Research Methodology | 4 | - | - | 4 | 1.5 | 3 | - | 0.2 | 0.1 | - | 0.7 |
| | Total | 16 | - | 9 | 25 | | | | | | | |
| | Specialization – 5 (Cyber Forensics) | | | | | | | | | | | |
| 1 | Cyber Law and IRM (P) | 4 | - | 3 | 7 | 1.5 | 3 | - | 0.2 | 0.1 | 0.2 | 0.5 |
| 2 | Digital Forensics (P) | 4 | - | 3 | 7 | 1.5 | 3 | 6 | 0.2 | 0.1 | 0.2 | 0.5 |
| 3 | Vulnerability Assessment and Penetration Testing (P) | 4 | - | 3 | 7 | 1.5 | 3 | 6 | 0.2 | 0.1 | 0.2 | 0.5 |
| 4 | Elective: Forensic Engineering/Scientific Protocols of Fire Investigation/ Explosives Analysis & Post Blast Investigation/ Nanobiotechnology/ Forensic Voice, Multimedia Comparison And Evidence Evaluation/ Modern Cryptography and Steganography/ Research Methodology | 4 | - | - | 4 | 1.5 | 3 | - | 0.2 | 0.1 | - | 0.7 |
| | Total | 16 | - | 9 | 25 | | | | | | | |
| Seme. | ster-IV | | | | | | | | | | | |
| | Major Project | - | - | - | 24 | - | - | - | 0.2 | 0.1 | 0.7 | - |
| | Total | | | | 24 | 1 | | | 1 | | | |

10. Examination Policy

The section on Examination Policy gives specific guidelines, rules of the Examination and expected Examination Code of Conduct.

Eligibility for Examinations

The eligibility criteria for appearing in the examinations of CUTM are as follows:

a) A student has to maintain overall 80% attendance to be able to write all papers at endsemester examinations in a semester. The attendance is considered from the date of commencement of classes as per academic calendar of the university and is calculated based on the total number of working days available in a semester.

b) The schedule of classes shall be notified through a time table before the beginning of the classes in the Semester. Attendance record will be compiled at the time of each class test and the students with poor attendance will be informed through notification. The guardian may be informed through a letter/SMS. Letters will be issued to the student and the guardian before he/she is debarred for appearing at University examination due to shortage of attendance. Examination Section shall be informed about the list of eligible/ineligible students for the Examination. Dean will monitor students' attendance.

c) Concessions: A student who has been absent for short periods on health ground or due to participation in cultural, sports and other academic/official assignments in the interest of students, with prior written permission of the Dean/Head of the Department shall be permitted a concession of 10% in attendance (i.e. will be eligible for appearing in examination with a minimum of 70% attendance).

d) A student will be allowed to appear in the Semester Examination in those theory subjects where his/her attendance is not less than 75% in case he/she does not have 75% overall attendance.

e) A candidate shall be allowed in a Semester Examination only after he/she is issued an Admit Card for the relevant examination by the University through the Examination Section of the College.

f) Students who have been found to indulge in malpractice during examination will be awarded 'M' grade in that subject. The University will take appropriate disciplinary action, as per rule.

g) A student who is absent in any subject(s) for which he/she has registered will be awarded 'S' grade. He/she is permitted to appear in those Subjects in subsequent semester examinations after compensating for the course work missed and obtaining due permission from the respective College and University.

h) A student may register to appear in a semester examination which she/he has not passed, with appropriate fee.

Evaluation System

The University has a continuous evaluation system for each type of Subjects (Theory, Practice, Project, Theory & Practice, Theory & Project, Practice & Project, Theory, Practice& Project). For this purpose the university holds the following examinations.

a) End Semester Examinations at the end of the Odd and Even Semester course work

b) All Internal marks will be recorded in ERP and uploaded to EMS. All external marks to be sent to QA cell in a sealed cover as per the direction of QA.

c) Grading pattern to be followed as specified in the Subject Depository.

d) Pass marks for Theory, Practice and Project will be as follows:

| Theory | Practice | Project |
|--------|----------|---------|
| 50% | 50% | 50% |

Student has to get pass percentage in individual components

e) In case, a student gets" F" grade in theory course, he/ she will only appear for External component as the internal marks are locked. But, in case of combination courses, the student will have to appear for all the external components (theory + practice + project), even if the student has cleared in some/ failed in some of the components.

f) Registration of a paper having pre-requisite condition indicates that, a student will only be allowed to register provided he/she has cleared the pre-requisite paper at the time of registration.

g) A student may apply for rechecking and photocopy as per the norms.

Evaluation Systems:

1. Theory:

| | Component | Component Weightage | Method of Assessment |
|-------------|-----------------------------|------------------------|-------------------------------------|
| Internal | Term Assesment I & II | 0.10 | TA I- Written examination |
| Examination | | | TA II – Assignement/Presentation |
| | Mid semester Examination | | Written examination |
| External | Semester End | 0.7 | Written examination |
| Examination | Examination | | |
| Total | | 100 | |

2. Theory + Practice:

| Internal | Component | % of Marks | Method of Assessment |
|-------------------------|----------------------------------|------------|-------------------------------|
| Examination | Term Assessment I & II | 0.1 | Lab work + Learning Record |
| | Mid semester examination | 0.2 | Written exam |
| External Examination | LPW (Laboratory project Work) | 0.2 | Lab work |
| | Semester End Examination | 0.5 | Written Exam |
| Total | | 100 | |

Assessments of Projects:

There will be Process and Output of the Project. Process will be dealt and marks will be given by Internal Faculty/ Guide. Output will be evaluated by External Examiner (External Examiner + Faculty committee of the Dept.). Internal Evaluation is 50% and External Evaluation is 50%.

Examination& evaluation systems for Back Papers

Back paper (Theory)

a. Option 1: Students can re-register back paper subject during a semester (if it is offered in that semester), attend all class appear internal examination and end semester examination by paying requisite registration fee per subject. The previous internal/external marks will be invalid. The student will be evaluated and grades will be awarded as per the marks scored in the current session.

b. Option 2: Student can appear EOD for external component only. This external mark along with previous internal marks scored by student will be considered for final grade. No scope for change in internal marks.

Back Paper (Lab/Practice/Workshop)

a. Option 1: Student can re-register back paper during a semester (if it is offered in that semester) by paying requisite registration fee per subject. The previous internal/external marks will be invalid. The student will be evaluated and grades will be awarded as per the marks scored in the current session.

b. Option 2: Student can re-register for summer course, conduct all Lab experiments and appear internal & external examination by paying requisite registration fee per subject. The previous internal/external marks will be invalid. The student will be evaluated and grades will

be awarded as per the marks scored in the current session. Student has to pay exam fee as applicable.

Improvement of internal assessment (Mid Semester Examination)

A student shall have the opportunity to improve his/her performance (If student has secured less than 50% masrks in MSE) only once in the Sessional exam component of the internal assessment. The re-conduct of the Sessional exam shall be completed before the commencement of End semester theory examinations.

11. Award of degree

Candidates who fulfill the requirements mentioned above shall be eligible for award of degree during the ensuing convocation.

12. General

a. The academic regulations should be read as a whole for the purpose of interpretation.

b. In case of doubt or ambiguity in the interpretation of the above regulations, the decision of the Vice-Chancellor is final.

c. The University may change or amend the academic regulations at any time and the changes or amendments made shall be applicable to all the students with effect from the dates notified by the University.