

# ACADEMIC REGULATIONS

SCHOOL OF FORENSIC SCIENCES  
2024-2025



**Centurion**  
**UNIVERSITY**

*Shaping Lives...*  
*Empowering Communities...*

**CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT**  
**ODISHA**

# **CONTENTS**

1. About the School of Forensic Sciences	1
2. Vision and Mission of the School	2
3. Programs Offered	2
4. Regulations for UG Degree Programmes – B.Sc in Forensic Science	3
5. Regulations for PG Programme- M.Sc in Forensic Science	21
6. Regulations for PG Programme – M.Sc. Cyber Security and Digital Forensics	36

## **1. About the School of Forensic Sciences**

The School of Forensic Sciences was established in 2017 with Gujarat Forensic Sciences University (GFSU now known as NFSU) as its knowledge partner. In 2022, School got affiliation from National Forensic Sciences University (erstwhile GFSU), an Institution of National Importance under the Ministry of Home Affairs, Government of India.

School of Forensic Sciences is an academic institution specializing in the study and research of forensic sciences. Its primary objective is to provide comprehensive education and training in various disciplines of forensic science. Students at the school engage in classroom lectures, laboratory work, and practical training to develop the necessary knowledge and skills for analyzing evidence in criminal investigations. From crime scene investigation to forensic toxicology and biology, the school covers a wide range of topics essential for professionals in the field.

Through collaborations with forensic laboratories, and other institutions, the School of Forensic Sciences offers students valuable real-world experiences. These partnerships enable students to gain hands-on training, utilize cutting-edge equipment, and understand the practical applications of forensic science. By bridging the gap between theory and practice, the school prepares graduates for careers as forensic scientists, crime scene investigators, and forensic analysts, among others. By combining scientific expertise with investigative skills, graduates contribute to the pursuit of truth and justice in legal investigations.

Graduates of the School of Forensic Sciences can pursue careers as forensic scientists, crime scene investigators, forensic analysts, forensic toxicologists, and consultants in law enforcement agencies, government agencies, private forensic laboratories, research institutions, and legal firms. They play a crucial role in the criminal justice system by providing scientific evidence and expert testimony that aids in solving crimes and ensuring justice is served.

## **2. Vision and Mission of the School**

### **2.1. Vision**

To be an inclusive centre for education, training and research in Forensic Science and allied professions to create sustainable livelihoods.

### **2.2. Mission**

- To create much-required forensic experts in the field of investigative science.
- To develop a robust platform for students to interact with experts and develop problem-solving approaches.
- To sensitize students to harness their potential for application of various scientific technologies in investigative science.
- To be a potential support for strengthening the justice delivery system, leading to equality, integrity, and peace.

## **3. Programmes Offered**

### **● Diploma Programs:**

- Diploma in Forensic DNA Analysis (6 months)
- Diploma in Forensic Accounting and Fraud Investigation (6 months)

### **● Undergraduate Programs:**

- Bachelor of Science in Forensic Science (3 years)
- Bachelor of Science in Forensic Science- Honours with Research (4 years)
- Bachelor of Science in Forensic Science- Honours without Research (4 years)

### **● Postgraduate Programs:**

- Post Graduate Diploma in Forensic Science
- Master of Science in Forensic Science (2 years)
- Master of Science in Forensic Science (1 year)
- Post Graduate Diploma in Cyber Security and Digital Forensics
- Master of Science in Cyber Security and Digital Forensics (2 years)
- Master of Science in Cyber Security and Digital Forensics (1 year)

#### **4. Regulations for UG Degree Programmes -**

- **Bachelor of Science in Forensic Science (3 years),**
- **Bachelor of Science in Forensic Science- Honors with Research (4 years),**
- **Bachelor of Science in Forensic Science- Honors without Research (4 years)**

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 (3 yrs) & B.Sc. Forensic Science- Honours (with Research or without research - 4 yrs). It contains information on eligibility criteria, including Registration, Selection of Subjects, Grading System, Examination Policy, Attendance Policy and Academic Rules applicable at CUTM.

##### **4.1. Eligibility**

HSC Degree in Science, Physics/Chemistry/Biology/Mathematics with at least 55% for General/OBC/EWS category candidates and 50% or equivalent for SC/ST and PwD category candidates.

##### **4.2. Duration of the program**

The Programme for B.Sc. Forensic Science shall extend over 3 yrs i.e. 6 semesters and B.Sc. Forensic Science- Honours (with Research or without research) shall extend over 4 years i.e. 8 semesters.

##### **4.3. Medium of instruction and examination**

The medium of instruction and examination shall be in English.

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

#### **4.5. Attendance and Progress**

The minimum attendance requirement in each course shall not in any case be less than 75% of the scheduled classes/practical etc.

Not with standing anything contained above on account of bonafide illness or any other reason deemed sufficient by the Dean of the school concerned, 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.

#### **4.6. 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.

##### **○ University Registration Card**

A Student is issued a University Registration Card after the admission process. University Registration number continues to be his/her Registration Number for all examinations during his/her study tenure. 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 a recommendation by the Dean of the respective college on paying the prescribed fee.

##### **○ Subject-wise Registration**

All registered students of the University have to register for each of the subjects they are required to study before the 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 the registration procedure.

- The heads of the Departments will submit the titles of the subjects to be offered for all the Baskets to the Dean.
- The MIS section has to upload all these subjects in the MIS/ERP.
- One-week slots will be provided to the students for counselling & registration in every semester.
- Immediately after admission in the first year, each faculty mentor will be allotted 20 students for continuous guidance.
- It is the responsibility of the 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 the student's goal (i.e. employment/higher education/entrepreneurship). Colleges will prepare slots for students and their faculty mentors for this purpose.
- 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.
- 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.
- A Student is allowed to register for a subject only after clearing its prerequisites, if any.
- After the choice lock, the time table will be finalized. Care will be taken to accommodate the 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.
- 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.
- 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.
- MIS will show cumulative student credits under "My Credits". A report on student wise credits can be obtained from MIS for documentation.

- **Time Table for Instructions**

Department will provide a 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.

#### **4.7. 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.

- **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.

- **Academic work**

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

○ **Course Structure**

S. No.	Qualifications	Level	Credits
1	3-year U.G. Degree	5	124
2	4-year UG Degree (Honours) with Research	6	164
3	4-year UG Degree (Honours) without Research	5.5	164

*Credit distribution basket-wise*

SS

S. No.	Basket	Type of Course	Total Credit Requirements	
			4 years UG	3 years UG
1	I	Major [Discipline Core] Courses	80	60
2	II	Minor [Discipline Elective] Courses (DEC)	32	24
3	III	Multidisciplinary [General Elective] Courses	12	12
4	IV	Ability Enhancement Courses [AEC]	08	08
5	V	Skill Enhancement Courses (SEC) / Skill for Success (SFS)	08	08
6	VI	Value Added Courses (VAC)	4 (EVS) + 6	4 (EVS) + 6
7	VII	Internship (SI)	04	04
8	VIII	Research Project (RP) + Dissertation	12	0
		Total	166	126

***Credit distribution structure for two years / one-year PG Diploma with Multiple Entry and Exit Options***

Sem	Major (Core) Courses	Minor (Discipline Elective) Courses	Multi-Disciplinary (General Elective) Course	Skill Enhancement Courses (Skill for Success)	Ability Enhancement Courses	Value Added Courses	Internship	Research Project / Dissertation
	<b>80 / 60</b>	<b>32/24</b>	<b>12</b>	<b>8</b>	<b>8</b>	<b>10</b>	<b>4</b>	<b>12</b>
I	√	√	√	0	√	√	0	0
II	√	√	√	√	√	√	0	0
<b>EXIT: Undergraduate Certificate: 40 credits with one 4 credit Skill Enhancement Course</b>								
III	√	√	√	√	√	√	0	0
IV	√	√	0	0	√	0	0	0
<b>EXIT: Undergraduate Diploma: 80 credits with two 4 credit Skill Enhancement Course</b>								
V	√	√	0	√	0	0	0	0
VI	√	√	0	0	0	0	√	0
<b>EXIT: Bachelor Degree: 120 credits with Internship</b>								
VII	√	√	0	0	0	0	0	0
VIII	√	√	0	0	0	0	0	√
<b>EXIT:</b>								
<ul style="list-style-type: none"> <li><b>Bachelor Degree (Honours): 160 credits with minimum 80 (50%) credits from major/core discipline</b></li> <li><b>Bachelor Degree (Honours with Research): 75% marks in the first six semesters with 160 credits including 12 credits research project in major discipline</b></li> </ul>								
<b>Note: Honours students not undertaking research will take other courses worth 12 credits in lieu of a research project / dissertation</b>								

## TEACHING SCHEME

BASKET	COURSE NAME	TEACHING HRS WEEK	CREDITS				TOTAL CREDITS PER SEM
			T	P	Pr	PER	
	<b>SEMESTER I</b>						
<b>Major</b>	<i>Fundamentals of Forensic Science</i>	5	3	1	0	4	22
<b>Major</b>	<i>Introduction to Criminology and Criminal Profiling</i>	5	3	1	0	4	
<b>Minor</b>	<i>Human Anatomy and Physiology</i>	5	3	1	0	4	
<b>Multidisciplinary</b>	<i>Multidisciplinary I</i>	5	3	1	0	4	
<b>AEC</b>	<i>English</i>	4	0	2	0	2	
<b>VAC</b>	<i>Environmental Science</i>	5	3	0	1	4	
	<b>SEMESTER II</b>						
<b>Major</b>	<i>Crime Scene Management</i>	5	3	1	0	4	25
<b>Major</b>	<i>Criminal and Evidence Law</i>	5	3	1	0	4	
<b>Minor</b>	<i>Forensic Photography</i>	5	3	1	0	4	
<b>Multidisciplinary</b>	<i>Multidisciplinary II</i>	5	3	1	0	4	
<b>AEC</b>	<i>Communicative English</i>	4	0	2	0	2	
<b>SEC</b>	<i>Skill for Success I</i>	6	0	2	2	4	
<b>VAC</b>	<i>Value added course II</i>	4	2	1	0	3	
	<b>SEMESTER III</b>						
<b>Major</b>	<i>Fingerprint and Impression Evidences</i>	5	3	1	0	4	25
<b>Major</b>	<i>Questioned Document</i>	5	3	1	0	4	
<b>Major</b>	<i>Forensic Ballistics</i>	5	3	1	0	4	
<b>Minor</b>	<i>Basics of Computer and Biometrics</i>	5	3	1	0	4	
<b>Multidisciplinary</b>	<i>Multidisciplinary III</i>	5	3	1	0	4	
<b>AEC</b>	<i>Personality Development</i>	4	0	2	0	2	

<b>VAC</b>	<i>Value added course III</i>	4	2	1	0	3	
	<b>SEMESTER IV</b>						
<b>Major</b>	<i>Forensic Chemistry</i>	5	3	1	0	4	22
<b>Major</b>	<i>Forensic Physics</i>	5	3	1	0	4	
<b>Major</b>	<i>Forensic Biology, Serology and DNA</i>	5	3	1	0	4	
<b>Minor</b>	<i>Multimedia Forensics</i>	5	3	1	0	4	
<b>AEC</b>	<i>Technical Writing</i>	4	0	0	2	2	
<b>SEC</b>	<i>Skill for Success II</i>	6	0	2	2	4	
	<b>SEMESTER V</b>						
<b>Major</b>	<i>Forensic Medicine</i>	5	3	1	0	4	24
<b>Major</b>	<i>Fundamentals of Forensic Toxicology</i>	5	3	1	0	4	
<b>Major</b>	<i>Basics of Forensic Psychology</i>	5	3	1	0	4	
<b>Major</b>	<i>Forensic Anthropology, Odontology and Archaeology</i>	5	3	1	0	4	
<b>Minor</b>	<i>Food Forensics</i>	5	3	1	0	4	
<b>Major</b>	<i>Digital and Cyber Forensics</i>	5	3	1	0	4	
	<b>SEMESTER VI</b>						
<b>Major</b>	<i>Information Security Audit and Compliance or Instrumental Techniques (Only for 4-year UG candidate)</i>	5	3	1	0	4	8 for 3 yr. UG 12 for 4 yr. UG
<b>Minor</b>	<i>Digital Fraud Investigation</i>	4	4	0	0	4	
<b>Internship</b>	<i>@Private or Government organizations</i>		0	0	4	4	
	<b>SEMESTER VII</b>						
<b>Major</b>	<i>Instrumental Techniques</i>	5	3	1	0	4	16
<b>Major</b>	<i>Ethics in Science Education and Research</i>	4	4	0	0	4	
<b>Major</b>	<i>Advances in Forensic Science</i>	4	4	0	0	4	

<b>Minor</b>	<i>Explosive Analysis and Post Blast Investigations</i>	5	3	1	0	4	
	<b>SEMESTER VIII</b>						
<b>Major</b>	<i>Research Methodology</i>	5	3	1	0	4	20
<b>Minor</b>	<i>Innovation and Entrepreneurship</i>	6	3	0	1	4	
<b>Research</b>	<i>Research Project / Dissertation</i>	24	0	0	12	12	

**T: Theory; P: Practice; Pj: Project [1 Credit= 1-hour Theory; 1 credit = 2 Hours Practice / Project]**

**BASKET****BASKET I: MAJOR (DISCIPLINE-SPECIFIC CORE) COURSES**

<b>Sl. No.</b>	<b>COURSE CODE</b>	<b>NAME OF THE CORE COURSES</b>	<b>CREDITS</b>	<b>TEACHING HOURS/WEEK</b>
1	CUFS1001	Fundamentals of Forensic Science	4+0+0	4
2	CUFS1002	Introduction to Criminology and Criminal Profiling	3+0+1	5
3	CUFS1003	Crime Scene Management	3+1+0	5
4	CUFS1004	Criminal and Evidence Law	3+0+1	5
5	CUFS1005	Fingerprint and Impression Evidences	3+1+0	5
6	CUFS1006	Questioned Document	3+1+0	5
7	CUFS1007	Basics of Forensic Psychology	3+1+0	5
8	CUFS1008	Forensic Chemistry	3+1+0	5
9	CUFS1009	Forensic Physics	3+1+0	5
10	CUFS1010	Fundamentals of Forensic Toxicology	3+1+0	5
11	CUFS1011	Forensic Medicine	3+1+0	5
12	CUFS1012	Forensic Biology, Serology and DNA	3+1+0	5
13	CUFS1013	Forensic Ballistics	3+1+0	5
14	CUFS1014	Forensic Anthropology, Odontology and Archaeology	3+1+0	5
15	CUFS1015	Digital and Cyber Forensics	3+1+0	5
16	CUFS1016	Information Security Audit and Compliance	3+1+0	5
17	CUFS1017	Instrumental Techniques	3+1+0	5
18	CUFS1018	Ethics in Science Education and Research	3+0+1	5
19	CUFS1019	Advances in Forensic Science	3+0+1	5
20	CUFS1020	Research Methodology	3+0+1	5

**BASKET II: MINOR (DISCIPLINE-SPECIFIC ELECTIVE) COURSES**

<b>Sl. No.</b>	<b>COURSE CODE</b>	<b>NAME OF THE ELECTIVE COURSES</b>	<b>CREDITS</b>	<b>TEACHING HOURS / WEEK</b>
1	CUFS1021	Multimedia Forensics	3+1+0	5
2	CUFS1022	Antidope Forensics	3+1+0	5
3	CUFS1023	Food Adulteration Analysis	3+0+1	5
4	CUFS1024	Arson Investigation	3+1+0	5
5	CUFS1025	Forensic Linguistics	3+1+0	5
6	CUFS1026	Explosive Analysis and Post-Blast Investigations	3+1+0	5
7	CUFS1027	Introduction to Artificial Intelligence and Machine Learning	3+1+0	5
8	CUFS1028	Digital Fraud Investigations	3+1+0	5
9	CUFS1029	Forensic Photography	3+1+0	5
10	CUFS1030	Accident Investigation	3+1+0	5
11	CUFS1031	Quality Control and Quality Assurance	3+1+0	5
12	CUFS1032	Human Anatomy and Physiology	3+1+0	5
13	CUFS1033	Basics of Computer and Biometrics	3+1+0	5
14	CUFS1034	Innovation and Entrepreneurship	3+0+1	5

**BASKET III: MULTIDISCIPLINARY SUBJECTS**

<b>Sl. No.</b>	<b>COURSE CODE</b>	<b>NAME OF THE COURSES</b>	<b>CREDITS</b>	<b>TEACHING HOURS / WEEK</b>
1	CUFS1035	General Chemistry	3+1+0	5
2	CUFS1036	General Physics	3+1+0	5
3	CUFS1037	General Biology	3+1+0	5

**BASKET IV: ABILITY ENHANCEMENT COURSES (AEC)**

SI. No.	COURSE CODE	NAME OF THE COURSES	CREDITS	TEACHING HOURS / WEEK
1	CUFS1038	English	0+2+0	4
2	CUFS1039	Communication Skill	0+2+0	4
3	CUFS1040	Personality Development	0+2+0	4
4	CUFS1041	Technical Writing	0+2+0	4
5	CUFS1042	Job Readiness	0+2+0	4

**BASKET V: SKILL FOR SUCCESS (PREFERRED FROM CUTM BASKET OF 120+ COURSES)**

**BASKET VI: VALUE-ADDED COURSES (VAC)**

SI. No.	COURSE CODE	NAME OF THE ELECTIVE COURSES	CREDITS	TEACHING HOURS / WEEK
1	CUTM1674	Environmental Science	3+0+1	5
2	CUVA4055	Ayurvedic Nutrition and Herbal Remedies	2+1+0	4
3	CUVA4056	Climate Change and sustainability	2+0+1	4
4	CUVA4057	Constitution of India	2+0+1	4
5	CUVA4058	Disaster Management	2+1+0	4
6	CUVA4059	Essential Teaching of Bhagwad Gita	2+1+0	4
7	CUVA4060	Gender, Human Rights and Ethics	2+0+1	4
9	CUVA4061	Indian Society and Culture	2+0+1	4
10	CUVA4062	Introduction to Indian Traditional Medicine	2+1+0	4
11	CUVA4063	Introduction to Indian Knowledge System	2+0+1	4
12	CUVA4064	Universal Human Values	2+1+0	4
13	CUVA4065	Vasudhaiva kutumbakam: Philosophy and Practices for Global Harmony	2+0+1	4

**BASKET VII: INTERNSHIP (4 CREDITS):** *Students can also opt for the MOOCs offered by SWAYAM and avail transfer of credit upon successful completion*

**BASKET VIII: RESEARCH PROJECT / DISSERTATION (12 CREDITS)**

#### **4.8. 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 are as follows:

- Minimum attendance requirement for appearing for examinations in all program is 75%. However, minimum eligibility will be calculated for each subject and NOT as aggregate. Students will be allowed to appear in final examinations subject-wise depending on the fulfillment of the minimum attendance criteria. Attendance will include class work, practice work, and project work (including internships) in both online/ physical modes. The same attendance rules will be applicable for appearing internal examinations.
- Condoning of the minimum attendance, either due to medical or student activity participation as allowed by the Deans, remains limited to a maximum of 10% and should be exceptional.

##### **Attendance requirement to appear Examination on Demand/Backlog Examination:**

- Students who are debarred from attending the main semester examinations due to shortage of attendance will be allowed to appear for Examination on Demand provided they have 50% or more attendance in the subject. Students having below 50% attendance will be either allowed to drop the course (if it is not core) or will be asked to re-register for the course again and attend classes. The attendance rule will apply in case of re-registration and as such will be treated as a new registration.
- 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. If the student has lost the admit card, the same may be obtained from the campus examination cell after paying the prescribed fee.
- Students who have been found to indulge in malpractice at examination will be awarded an 'M' grade in that subject. The university may take any additional disciplinary action at its discretion. Such candidates will be allowed to appear only in subsequent examinations based on the decision of the University.

- 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 EODs.

According to the attendance policy, the following are the categories of the students:

1. Students having 75% and more attendance and allowed for the exam.
2. Students having 65% - 75% attendance and recommended by the respective Dean to be allowed for exams based on Medical / CSR: Student Activity ground (Exceptional cases only) and rest all will be debarred from the End Sem Exam (will be allowed for back paper exam).
3. Students having 50% - 64.99% attendance and debarred from the exam (will be allowed for back paper exam).
4. Students having 49.99% and less attendance, who will be blocked from attending the back paper exam and need to re-register the subject.

The attendance policy is for all subjects irrespective of its type.

Credit Shortfall / Re-registration of Subjects: -

- Students having attendance or credit shortfall in a semester shall be allowed to re-register for the courses and shall repeat the courses when the course is offered in the subsequent semester(s) along with the regular students by paying the prescribed fee.
- Similarly, in case of the passing out batch students, students having credit shortfall for the award of degree would be required to reregister subjects, attend the course work and undergo all assessment procedures in the subsequent semester for gaining the required credits by paying the prescribed fee. However, University discourages such practices and students are advised to complete their credit requirements within the course duration itself.
- The students shall contact the respective department / school for the alternative option to compensate for the credit loss due to the subject deregistration by paying the subject registration fee. The re-registration (to be done only during a regular semester) fee for the continuing batch students is INR 2,000 per subject. For passed out batches (if the final semester is completed) the registration fee is INR 5,500 per subject along with a onetime studentship validity fee of INR 2,200.

## **Evaluation System**

### **Pass criteria**

- A. Theory papers: students must secure a minimum of 30% in individual components (both continuous assessment & end-semester theory) along with 40% in aggregate
- B. Theory & practice papers:
  - Theory component: minimum of 30% in individual components (both continuous assessment & end-semester theory) along with 40% in aggregate
  - Practice component: minimum of 50% marks both in internal & external
- C. Theory & project type papers:
  - Theory component: minimum of 30% in individual components (both continuous assessment & end-semester theory) along with 40% in aggregate
  - Project component: minimum of 50% marks both in internal & external
- D. Theory, practice & project type papers:
  - Theory component: minimum of 30% in individual components (both continuous assessment & end-semester theory) along with 40% in aggregate
  - Practice component: minimum of 50% marks both in internal & external
  - Project component: minimum of 50% marks both in internal & external
- E. Practice & project type papers:
  - Practice component: minimum of 50% marks both in internal & external
  - Project component: minimum of 50% marks both in internal & external
- F. Workshop or Internship type papers: 50% in aggregate

### **Evaluation Criteria**

- a. Evaluation for Theory papers (T, TP & TPP)
  - i. End semester theory examinations (50% weightage):
    - a. Duration – 3 hrs
    - b. Full Mark – 100. During result processing, it will be proportionately added.
    - c. Distribution of marks (should cover all COs)
      - 10 short questions x 2 marks = 20 marks
      - 5 long questions x 12 marks = 60 marks
      - 4 short notes x 5 marks = 20 marks
  - ii. Continuous assessments: Details are as indicated in the table below:

SL No	Continuous Assessment	Score
1	Individual / Group Presentation <i>Rubric is as under:</i> <ul style="list-style-type: none"> <li>• Content &amp; creativity – 05</li> <li>• Presentation &amp; Discussion – 05</li> </ul>	10
2	Mid-semester (Written Examination) <i>Mark Distribution:</i> <ul style="list-style-type: none"> <li>• 5 short questions x 1 marks = 5 marks</li> <li>• 2 long questions x 5 marks = 10 marks</li> <li>• 2 short notes x 2.5 marks = 5 marks</li> </ul>	20
3	Assignment (2 assignments x 5 marks each)	10
4	Learning Record ( <i>Based on the parameters indicated in the learning record format, course faculty to evaluate and award score</i> )	10
<b>Total</b>		<b>50</b>

b. Evaluation of Practice/ Laboratory Components:

The evaluation of the practice component will be carried out 50% by concerned faculty and 50% by the external examiner and will be conducted as per the present policy. Details are as under:

**Internal**

A	Concept	10
B	Planning & Execution/ Practical/ Simulation/ Programming	10
C	Result and Interpretation	10
D	Record/ Report	10
E	Viva	10
<b>Total</b>		<b>50</b>

**External**

A	Execution & Result	20
B	Record of Applied and Action Learning	10
C	Viva	20
<b>Total</b>		<b>50</b>

c. Evaluation of Project Component:

The evaluation of the project component will be completed 50% by concerned faculty and 50% by the external examiner and will be conducted as per the present policy. Following guideline may be referred during evaluation of internal and external components:

**Internal**

A	Understanding the relevance, scope and dimension of the project	10
B	Methodology	10
C	Quality of Analysis and Results	10
D	Interpretations and Conclusions	10
E	Report	10
	<b>Total</b>	<b>50</b>

**External**

A	Understanding the relevance, scope, and dimension of the project	10
B	Report	20
C	Viva	20
	<b>Total</b>	<b>50</b>

d. Evaluation of Internship:

The evaluation of the internship will be completed 50% by concerned faculty and 50% by the industry guide. Following guideline may be referred during evaluation of internal and external components:

**Internal**

A	Daily Diary & Log Report	20
B	Periodical (Weekly/Monthly) Report	10
C	Presentation & Viva	20
	<b>Total</b>	<b>50</b>

**External**

A	Completion of the task / project assigned	30
B	Feedback of the industry supervisor	20

**4.9. Award of degree**

A candidate will be eligible for the award of degree, if he/she satisfies the following conditions:

- Passed all subjects.
- Passed in CSR activities (i.e., NCC/NSS/Games /Sports etc.) during the study period.
- Earned a satisfactory performance report in RFWEP/FELP and internship programmes.

- Has no due to the University, Library, Hostels, Transportation, etc.
- Has no disciplinary action pending against him/ her.

#### **4.10. General**

- The academic regulations should be read as a whole for the purpose of interpretation.
- In case of doubt or ambiguity in the interpretation of the above regulations, the decision of the Vice-Chancellor is final.
- 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.

## **5. Regulations for PG Programme:**

- **Post Graduate Diploma in Forensic Science,**
- **Master of Science in Forensic Science (1 years),**
- **Master of Science in Forensic Science (2 year)**

This section gives an overview of the different Academic Rules and Regulations to be followed in the Centurion University of Technology and Management (CUTM) for **Post Graduate Diploma in Forensic Science, Master of Science in Forensic Science (1 years), Master of Science in Forensic Science (2 year)**, It contains information on eligibility criteria, including Registration, Selection of Subjects, Grading System, Examination Policy, Attendance Policy, and Academic Rules applicable at CUTM.

### **5.1. Eligibility**

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

### **5.2. Duration of the program**

- For students who have completed 3 yr B.Sc. Program, the Programme for M.Sc. Forensic Science shall extend over a period of 2 years i.e. 4 semesters.
- For students who have completed 4 yr B.Sc. Hons. Program, the Programme for M.Sc. Forensic Science shall extend over a period of 1 years i.e. 2 semesters.

### **5.3. Medium of instruction and examination**

Medium of instruction and examination shall be in English.

### **5.4. 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.

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

#### **5.5. Attendance and Progress**

- The minimum attendance requirement in each course shall be at least 75% 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 concerned, such Dean of the School can condone up to 10% in the course or courses. For beyond 10% in genuine cases, the decision to condone the attendance will be taken by the concerned Campus Director on merits.

#### **5.6. Registration, Selection of Subjects & Time Table**

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

##### **○ 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.

##### **○ 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.

- Head of the Departments to submit the titles of the subjects to be offered, for all the Baskets, to the Dean.
- The MIS section has to upload all these subjects in the MIS/ERP.
- One-week slot will be provided to the students for counselling & registration in every semester.
- Immediately after admission in the first year, each faculty mentor will be allotted 20 students for continuous guidance.
- 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.
- 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.
- 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.
- A Student is allowed to register for a subject only after clearing its pre requisites, if any.
- 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.
- 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.
- 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.

- MIS will show cumulative student credits under “My Credits”. A report on student wise credits can be obtained from MIS for documentation.
- **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.

### 5.7. 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.

- **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.  
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 course schedule in the syllabus.
- **Academic work**  
The teaching staff of respective courses shall maintain a regular record of attendance, both in theory and in practical.

○ **Course Structure**

S. No.	Qualifications	Level	Credits	Credit Points
1	P.G. Diploma	6	46 (32 DSC + 8 DEC +4 SFS +2 MiP)	
2	1-Year PG after a 4-year UG	6.5	44 (12 DSC + 4 DEC + 4 SFS + 4 SI + 4 RM +16 RP)	
3	2-Year PG after a 3-year UG	7	90 (46 + 44)	

*Credit distribution basket-wise*

S. No.	Basket	Course	Credits	Total Credit per basket
1	I	Discipline Specific Core Courses (DSC)	20+16+12	48
2	II	Discipline Specific Elective Courses (DEC)	04+04	08
3	III	Summer Internship (SI) + Minor Project	04 + 02	06
4	IV	Research Project (RP) + Research Methodology	04 + 16	20
5	V	Skill for Success (SFS)	04 + 04	08
		Total		90

**Credit distribution structure for two years / one-year PG Diploma with Multiple Entry and Exit Options**

Year/ Level	Semester	Major Subject Discipline-Specific		Research Methodology	Skill for Success	Minor Proj / Internshi	Research Project	Credits	Degree
		Core Courses	Elective Courses						
1 <sup>st</sup> Yr 6.0	I	4*5 =20	0	-	4		-	24	PG Diplom a After 3 years UG
	II	4*4 =16	4	-	-	2	-	22	
Cumulative Cr. 1 <sup>st</sup> year		36	4	-	4	2	-	46	
<p><b>EXIT: Post Graduate Diploma: 40 credits with one 4 credit Skill Enhancement Course and/ or 2 credit Minor Project</b></p>									
2 <sup>nd</sup> Yr 6.5 /7	III	4*3= 12	4	4	4	-	-	24	1/ 2 yr PG After 3 / 4 years UG Degree
	IV	-	-	-	-	4	16	20	
Cumulative Cr.		12	4	4	4	4	16	44	
Cumulative Cr.		48	08	4	8	6	16	90	
<p><b>EXIT: Postgraduate Degree: 80 credits with two 4-credit Skill Enhancement Courses and/ or Internship</b>  <b>2 years i.e. 4 Semester (88 credits) after three years UG or 1 year i.e. 2 Semesters (44 credits) after four years UG Degree</b></p>									

## TEACHING SCHEME

CODE	COURSE NAME	TEACHING HRS/WEEK	CREDITS				CREDIT / SEM
			T	P	Pr	PER	
<b>SEMESTER I</b>							
CUFS1080	Introduction to Forensics, Psychology, Law and Statistics	5	3	0	1	4	24
CUFS1081	Instrumental Techniques	5	3	1	0	4	
CUFS1082	Crime Scene Management and Forensic Evidence	5	3	1	0	4	
CUFS1083	Fingerprints and Questioned Documents	5	3	1	0	4	
CUFS1084	Forensic Biology and Anthropology	5	3	1	0	4	
	Elective I	5	3	0	1	4	
<b>SEMESTER II</b>							
CUFS1085	Quality Management, Narcotic Drugs, Explosives and Forensic Chemistry	5	3	1	0	4	22
CUFS1086	Forensic Serology and DNA Profiling	5	3	1	0	4	
CUFS1087	Forensic Medicine and Toxicology	5	3	1	0	4	
CUFS1088	Forensic Ballistics	5	3	1	0	4	
--	Skill for Success I	6	0	2	2	4	
CUFS1090	Minor Project	4	0	0	2	2	
<b>SEMESTER III</b>							
	Specialization Paper I	5	3	1	0	4	24
	Specialization Paper II	5	4	0	0	4	
	Specialization Paper III	5	3	1	0	4	
	Elective II	5	3	1	0	4	
CUFS1110	Research Methodology	5	3	0	1	4	
	Skill for Success II	4	0	2	2	4	
<b>SEMESTER IV</b>							
CUFS1113	Capstone Project and Thesis	32	0	0	16	16	20
CUxxxxxx/ CUFS1112	MOOC Courses/ Internship	8	0	0	4	4	
							90

T: Theory; P: Practice; Pj: Project [1 Credit= 1 hr Theory; 1 credit= 2 Hours Practice/ Project]

**BASKET****BASKET 1: DISCIPLINE-SPECIFIC CORE COURSES**

SI. No.	COURSE CODE	NAME OF THE CORE COURSES	CREDITS	TEACHING HRS / WEEK
1	CUFS1080	Introduction to Forensics, Psychology, Law and Statistics	3+0+1	5
2	CUFS1081	Instrumental Techniques	3+1+0	5
3	CUFS1082	Crime Scene Management and Forensic Evidences	3+1+0	5
4	CUFS1083	Fingerprints and Questioned Documents	3+1+0	5
5	CUFS1084	Forensic Biology and Anthropology	3+1+0	5
6	CUFS1085	Quality Management, Narcotic Drugs, Explosives and Forensic Chemistry	3+1+0	5
7	CUFS1086	Forensic Serology and DNA Profiling	3+1+0	5
8	CUFS1087	Forensic Medicine and Toxicology	3+1+0	5
9	CUFS1088	Forensic Ballistics	3+1+0	5
<b><i>Specialization: Forensic Chemistry and Toxicology</i></b>				
10	CUFS1091	Forensic pharmacology and pharmaceutical drug analysis	3+1+0	5
11	CUFS1092	Advanced Forensic Toxicology	3+1+0	5
12	CUFS1093	Modern and Applied Analytical Forensic Chemistry	3+1+0	5
<b><i>Specialization: Forensic Biology and Biotechnology</i></b>				
13	CUFS1094	Forensic Genomics and Biocomputing	3+1+0	5
14	CUFS1095	Molecular Biology and r-DNA Technology	3+1+0	5

15	CUFS1096	Immunological techniques and Forensic Proteomics	3+1+0	5
<b><i>Specialization: Forensic Physics and Ballistics</i></b>				
16	CUFS1097	Advance in Physical Techniques	3+1+0	5
17	CUFS1098	Advances in Forensic Ballistics & Armour Materials	3+1+0	5
18	CUFS1099	Audio Recognition and Video Analysis	3+1+0	5
<b><i>Specialization: Fingerprints and Questioned Documents</i></b>				
19	CUFS1100	Modern Trends in Fingerprint Sciences	3+1+0	5
20	CUFS1101	Questioned Documents and Forensic Accounting	3+1+0	5
21	CUFS1102	Forensic Photography & Biometrics	3+1+0	5
<b><i>Specialization: Cyber Forensic</i></b>				
23	CUFS1103	Cyber Law, Risk and Compliance	3+1+0	5
24	CUFS1104	Incident Response and Digital Forensics	3+1+0	5
25	CUFS1105	Vulnerability Assessment & Penetration Testing	3+1+0	5
<b><i>Specialization: Crime Scene Management</i></b>				
26	CUFS1106	Basics of Crime, Evidence and Law	3+1+0	5
27	CUFS1107	Concepts of Crime Scene Management	3+1+0	5
28	CUFS1108	Advance techniques in Crime Scene Management	3+1+0	5

Note: A specialization will be offered only if a minimum of 60% of the students or at least 8 students, whichever is fewer, opt for that specific specialization.

**BASKET 2: DISCIPLINE-SPECIFIC ELECTIVE COURSES**

SI. No.	COURSE CODE	NAME OF THE ELECTIVE COURSES	CREDITS	TEACHING HRS / WEEK
1	CUFS1114	Forensic Engineering	3+0+1	5
2	CUFS1115	Scientific Protocols of Fire Investigation	3+0+1	5
3	CUFS1116	CCTV Forensics	3+0+1	5
4	CUFS1117	Anti-Dope Forensics	3+0+1	5
5	CUFS1118	Nano-Biotechnology	3+0+1	5
6	CUFS1119	Cryptography & Steganography	3+0+1	5
7	CUFS1120	Disaster Victim Management	3+0+1	5
8	CUFS1121	Machine Learning for Data Science	3+0+1	5
9	CUFS1122	Forensic Journalism	3+0+1	5
10	CUFS1123	Basic Concepts of Digital Forensics	3+0+1	5

**BASKET 3: MINOR PROJECT AND INTERNSHIP**

SI. No	COURSE CODE	NAME OF THE COURSES	CREDITS	TEACHING HRS / WEEK
1	CUFS1089	Summer Internship	0+0+2	4
2	CUTM1090	Minor Project	0+0+2	4
3	CUFS1111	Internship	0+0+4	8
4	CUFS1112	MOOC Course	4+0+0	8

**BASKET 4: RESEARCH**

SI. No	COURSE CODE	NAME OF THE COURSES	CREDITS	TEACHING HRS / WEEK
1	CUFS1110	Research Methodology	3+0+1	5
2	CUFS1113	Capstone Project and Thesis	0+0+16	32

**BASKET 5: SKILL FOR SUCCESS (PREFERRED FROM CUTM BASKET OF 120+ COURSES)**

## 5.8. 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 are as follows:

- Minimum attendance requirement for appearing for examinations in all program is 75%. However, minimum eligibility will be calculated for each subject and NOT as aggregate. Students will be allowed to appear in final examinations subject-wise depending on the fulfilment of the minimum attendance criteria. Attendance will include class work, practice work, and project work (including internships) in both online/ physical modes. The same attendance rules will be applicable for appearing internal examinations.
- Condoning of the minimum attendance, either due to medical or student activity participation as allowed by the Deans, remains limited to a maximum of 10% and should be exceptional.

Attendance requirement to appear Examination on Demand/Backlog Examination:

- Students who are debarred from attending the main semester examinations due to shortage of attendance will be allowed to appear for Examination on Demand provided they have 50% or more attendance in the subject. Students having below 50% attendance will be either allowed to drop the course (if it is not core) or will be asked to re-register for the course again and attend classes. The attendance rule will apply in case of re-registration and as such will be treated as a new registration.
- 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. If the student has lost the admit card, the same may be obtained from the campus examination cell after paying the prescribed fee.
- Students who have been found to indulge in malpractice at examination will be awarded an 'M' grade in that subject. The university may take any additional disciplinary action at its discretion. Such candidates will be allowed to appear only in subsequent examinations based on the decision of the University.

- 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 EODs.

According to the attendance policy, the following are the categories of the students:

- Students having 75% and more attendance and allowed for the exam.
- Students having 65% - 75% attendance and recommended by the respective Dean to be allowed for exams based on Medical / CSR: Student Activity ground (Exceptional cases only) and rest all will be debarred from the End Sem Exam (will be allowed for back paper exam).
- Students having 50% - 64.99% attendance and debarred from the exam (will be allowed for back paper exam).
- Students having 49.99% and less attendance, who will be blocked from attending the back paper exam and need to re-register the subject.

The attendance policy is for all subjects irrespective of its type.

Credit Shortfall / Re-registration of Subjects: -

- Students having attendance or credit shortfall in a semester shall be allowed to re-register for the courses and shall repeat the courses when the course is offered in the subsequent semester(s) along with the regular students by paying the prescribed fee.
- Similarly, in case of the passing out batch students, students having credit shortfall for the award of degree would be required to reregister subjects, attend the course work and undergo all assessment procedures in the subsequent semester for gaining the required credits by paying the prescribed fee. However, University discourages such practices and students are advised to complete their credit requirements within the course duration itself.
- The students shall contact the respective department / school for the alternative option to compensate for the credit loss due to the subject deregistration by paying the subject registration fee. The re-registration (to be done only during a regular semester) fee for the continuing batch students is INR 2,000 per subject. For passed out batches (if the final semester is completed) the registration fee is INR 5,500 per subject along with a onetime studentship validity fee of INR 2,200.

- 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.
- 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.
- After declaration of result, student can also apply for rechecking/re-evaluation or verification of marks by paying Rs. 1250 or Rs. 500 respectively, through NFSU ERP portal.

- **Evaluation System**

- **Pass criteria**

- A. Theory papers: students must secure a minimum of 30% in individual components (both continuous assessment & end-semester theory) along with 40% in aggregate
- B. Theory & practice papers:
  - Theory component: minimum of 30% in individual components (both continuous assessment & end-semester theory) along with 40% in aggregate
  - Practice component: minimum of 50% marks both in internal & external
- C. Theory & project type papers:
  - Theory component: minimum of 30% in individual components (both continuous assessment & end-semester theory) along with 40% in aggregate
  - Project component: minimum of 50% marks both in internal & external
- D. Theory, practice & project type papers:
  - Theory component: minimum of 30% in individual components (both continuous assessment & end-semester theory) along with 40% in aggregate
  - Practice component: minimum of 50% marks both in internal & external
  - Project component: minimum of 50% marks both in internal & external
- E. Practice & project type papers:

- Practice component: minimum of 50% marks both in internal & external
- Project component: minimum of 50% marks both in internal & external

F. Workshop or Internship type papers: 50% in aggregate

### Evaluation criteria

- A. Evaluation for Theory papers (T, TP & TPP)
- i. End semester theory examinations (50% weightage):
- a. Duration – 3 hrs
  - b. Full Mark – 100. During result processing, it will be proportionately added.
  - c. Distribution of marks (should cover all COs)
    - 10 short questions x 2 marks = 20 marks
    - 5 long questions x 12 marks = 60 marks
    - 4 short notes x 5 marks = 20 marks
- ii. Continuous assessments: Details are as indicated in the table below:

SL No	Continuous Assessment	Score
1	Individual / Group Presentation <i>Rubric is as under:</i> <ul style="list-style-type: none"> <li>• Content &amp; creativity – 05</li> <li>• Presentation &amp; Discussion – 05</li> </ul>	10
2	Mid-semester (Written Examination) <i>Mark Distribution:</i> <ul style="list-style-type: none"> <li>• 5 short questions x 1 marks = 5 marks</li> <li>• 2 long questions x 5 marks = 10 marks</li> <li>• 2 short notes x 2.5 marks = 5 marks</li> </ul>	20
3	Assignment (2 assignments x 5 marks each)	10
4	Learning Record ( <i>Based on the parameters indicated in the learning record format, course faculty to evaluate and award score</i> )	10
<b>Total</b>		50

**b. Evaluation of Practice/ Laboratory Components**

The evaluation of the practice component will be carried out 50% by concerned faculty and 50% by the external examiner and will be conducted as per the present policy. Details are as under:

**Internal**

A	Concept	10
B	Planning & Execution/ Practical/ Simulation/ Programming	10
C	Result and Interpretation	10
D	Record/ Report	10
E	Viva	10
	<b>Total</b>	<b>50</b>

**External**

A	Execution & Result	20
B	Record of Applied and Action Learning	10
C	Viva	20
	<b>Total</b>	<b>50</b>

**c. Evaluation of Project Component**

The evaluation of the project component will be completed 50% by concerned faculty and 50% by the external examiner and will be conducted as per the present policy. Following guideline may be referred during evaluation of internal and external components:

**Internal**

A	Understanding the relevance, scope and dimension of the project	10
B	Methodology	10
C	Quality of Analysis and Results	10
D	Interpretations and Conclusions	10
E	Report	10
	<b>Total</b>	<b>50</b>

**External**

A	Understanding the relevance, scope, and dimension of the project	10
B	Report	20
C	Viva	20
	<b>Total</b>	<b>50</b>

d. Evaluation of Internship

The evaluation of the internship will be completed 50% by concerned faculty and 50% by the industry guide. Following guideline may be referred during evaluation of internal and external components:

**Internal**

A	Daily Diary & Log Report	20
B	Periodical (Weekly/Monthly) Report	10
C	Presentation & Viva	20
	<b>Total</b>	<b>50</b>

**External**

A	Completion of the task / project assigned	30
B	Feedback of the industry supervisor	20

**5.9. Award of degree**

A candidate will be eligible for the award of degree, if he/she satisfies the following conditions:

- Passed all subjects.
- Passed in CSR activities (i.e., NCC/NSS/Games /Sports etc.) during the study period.
- Earned a satisfactory performance report in RFWEP/FELP and internship programmes.
- Has no due to the University, Library, Hostels, Transportation, etc.
- Has no disciplinary action pending against him/her.

**5.10. 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.

**6. Regulations for PG Programme – M.Sc. Cyber Security and Digital Forensics**

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 M.Sc. Cyber Security and Digital Forensics. It contains information on eligibility criteria, including Registration, Selection of Subjects, Grading System, Examination Policy, Attendance Policy and Academic Rules applicable at CUTM.

#### **6.1. Minimum qualification for admission**

The qualification for M.Sc. Cyber Security and Digital Forensics is B.E, B.tech in CE/IT/EC/CS or BCA or B.SC. IT/CS/Maths/Physics or equivalent with at least a minimum of 50% aggregate.

#### **6.2. Duration of the program**

The Programme for M.Sc. Cyber Security and Digital Forensics shall extend over a period of four semesters (two academic years).

#### **6.3. Medium of instruction and examinations**

Medium of instruction and examination shall be in English.

#### **6.4. 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.

Each year the University will draw out a calendar of academic and associated activities. Detailed curricula and syllabi will be as decided by the Academic Council with provision for required modification.

#### **6.5. Attendance and Progress**

The minimum attendance requirement in each course shall be at least 75% 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 concerned, such Dean of the School can condone up to 10% in the course or courses. For beyond 10% in genuine

cases, the decision to condone the attendance will be taken by the concerned Campus Director on merits.

#### **6.6. 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.

##### **○ 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.

##### **○ 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.

- Head of the Departments to submit the titles of the subjects to be offered, for all the Baskets, to the Dean.
- The MIS section has to upload all these subjects in the MIS/ERP.
- One week slot will be provided to the students for counselling & registration in every semester.
- Immediately after admission in the first year, each faculty mentor will be allotted 20 students for continuous guidance.

- 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.
- 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.
- 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.
- A Student is allowed to register for a subject only after clearing its pre requisites, if any.
- 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.
- 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.
- 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.
- MIS will show cumulative student credits under "My Credits". A report on student wise credits can be obtained from MIS for documentation.
- **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.

#### **6.7. 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.

○ **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.

○ **Academic work**

The teaching staff of respective courses shall maintain a regular record of attendance, both in theory and in practical.

○ **Course Structure**

S. No.	Qualifications	Level	Credits
1	P.G. Diploma	6	46 (32 DSC + 8 DEC + 4 SFS +2 MiP)
2	1-Year PG after a 4-year UG	6.5	44 (12 DSC + 4 DEC + 4 SFS + 4 SI + 4 RM +16 RP)
3	2-Year PG after a 3-year UG	7	90 (46 + 44)

**Credit distribution basket-wise**

S. No.	Basket	Course	Credits	Total Credit per basket
1	I	Discipline Specific Core Courses (DSC)	16+16+12	44
2	II	Discipline Specific Elective Courses (DEC)	04+04+04	12
3	III	Summer Internship (SI) + Minor Project	04 + 02	06
4	IV	Research Project (RP) + Research Methodology	04 + 16	20
5	V	Skill for Success (SFS)	04	08
		Total		90

**Credit distribution structure for two years / one-year PG Diploma with Multiple Entry and Exit Options**

Year/ Level	Semester	Major Subject Discipline-Specific		Research Methodology	Skill for Success	Minor Project / Internship	Research Project	Credits	Degree
		Core Course	Elective Course						
1 <sup>st</sup> Yr 6.0	I	4*4 = 16	4	-	4		-	24	PG Diploma After 3 years UG
	II	4*4 = 16	4	-	-	2	-	22	
Cumulative Cr. 1 <sup>st</sup> year		32	8	-	4	2	-	46	
<b>EXIT: Post Graduate Diploma: 40 credits with one 4 credit Skill Enhancement Course and/ or 2 credit Minor Project</b>									
2 <sup>nd</sup> Yr 6.5 /7	III	4*3= 12	4	4	4	-	-	24	1/ 2 yr PG After 3 / 4 years UG Degree
	IV	-	-	-	-	4	16	20	
Cumulative Cr.		12	4	4	4	4	16	44	
Cumulative Cr.		44	12	4	8	6	16	90	
<b>EXIT: Postgraduate Degree: 80 credits with two 4-credit Skill Enhancement Courses and/ or Internship</b> 2 years i.e. 4 Semester (88 credits) after three years UG or 1 year i.e. 2 Semesters (44 credits) after four years UG Degree									

## TEACHING SCHEME

COURSE CODE	COURSE NAME	HRS PER WEEK	CREDITS				CREDITS / SEMESTER
			T	P	Pj	PER	
<b>SEMESTER I</b>							
CUFS1056	Introduction to Cyber Security	4	4	0	0	4	24
CUFS1057	Network Security	5	3	1	0	4	
CUFS1058	Digital Forensics Fundamentals	5	3	1	0	4	
CUFS1059	Programming for Cyber-Security	5	3	1	0	4	
	Elective I	5	4	0	0	4	
	Skill for Success I	8	0	2	2	4	
<b>SEMESTER II</b>							
CUFS1060	Advanced Cryptography	5	3	1	0	4	22
CUFS1061	Incident Response and Management	5	3	1	0	4	
CUFS1062	Malware Analysis and Reverse Engineering	5	3	1	0	4	
CUFS1063	Ethical Hacking and Penetration Testing	5	3	1	0	4	
	Elective II	5	3	1	0	4	
CUFS1064	Minor Project / Summer Training	4	0	0	2	2	
<b>SEMESTER III</b>							
CUFS1066	Advanced Digital Forensics	5	3	1	0	4	24
CUFS1067	Cyber Security Policy and Management	4	4	0	0	4	
CUFS1068	Data Privacy and Protection	4	4	0	0	4	
CUFS1069	Research Methodology in Cyber Security	5	3	0	1	4	
	Elective III	5	3	1	0	4	
	Skill for Success I	8	0	2	2	4	
<b>SEMESTER IV</b>							
CUFS1070	Capstone Project and Thesis	32	0	0	16	16	20
CUFS1071	Internship	16	0	0	04	4	
							90

T: Theory; P: Practice; Pj: Project [1 Credit= 1 hr Theory; 1 credit= 2 Hours Practice/ Project]

**BASKET****BASKET 1: DISCIPLINE-SPECIFIC CORE COURSES**

<b>Sl. No.</b>	<b>COURSE CODE</b>	<b>NAME OF THE CORE COURSES</b>	<b>CREDITS</b>	<b>TEACHING HOURS / WEEK</b>
1	CUFS1056	Introduction to Cyber Security	4+0+0	4
2	CUFS1057	Network Security	3+1+0	5
3	CUFS1058	Digital Forensics Fundamentals	3+1+0	5
4	CUFS1059	Programming for Cyber-Security	3+1+0	5
5	CUFS1060	Advanced Cryptography	3+1+0	5
6	CUFS1061	Incident Response and Management	3+1+0	5
7	CUFS1062	Malware Analysis and Reverse Engineering	3+1+0	5
8	CUFS1063	Ethical Hacking and Penetration Testing	3+1+0	5
9	CUFS1066	Advanced Digital Forensics	3+1+0	5
10	CUFS1067	Cyber Security Policy and Management	3+1+0	5
11	CUFS1068	Data Privacy and Protection	4+0+0	4
12	CUFS1069	Research Methodology	3+0+1	5

**BASKET 2: DISCIPLINE-SPECIFIC ELECTIVE COURSES**

<b>Sl. No.</b>	<b>COURSE CODE</b>	<b>NAME OF THE ELECTIVE COURSES</b>	<b>CREDITS</b>	<b>TEACHING HOURS / WEEK</b>
1	CUFS1072	Cyber Law and Ethics	4+0+0	4
2	CUFS1073	Cyber Threat Intelligence	3+1+0	5
3	CUFS1074	Secure Software Development	3+1+0	5
4	CUFS1075	Mobile Device Forensics	3+1+0	5
5	CUFS1076	Cyber-Physical Systems Security	3+1+0	5
6	CUFS1077	Artificial Intelligence in Cyber Security	3+1+0	5
7	CUFS1078	Cloud Security	3+1+0	5
8	CUFS1079	Machine Learning for Cyber Security	3+1+0	5

### **BASKET 3: MINOR PROJECT AND INTERNSHIP**

<b>Sl. No.</b>	<b>COURSE CODE</b>	<b>NAME OF THE COURSES</b>	<b>CREDIT S</b>	<b>TEACHING HOURS / WEEK</b>
1	CUFS1064	Minor Project	0+0+2	4
2	CUFS1065	Summer Internship	0+0+2	4
3	CUFS1071	Internship	0+0+4	8

### **BASKET 4: RESEARCH**

<b>Sl. No.</b>	<b>COURSE CODE</b>	<b>NAME OF THE COURSES</b>	<b>CREDITS</b>	<b>TEACHING HOURS / WEEK</b>
1	CUFS1069	Research Methodology	3+0+1	5
2	CUFS1070	Capstone Project and Thesis	0+0+16	32

### **BASKET 5: SKILL FOR SUCCESS (PREFERRED FROM CUTM BASKET OF 120+ COURSES)**

#### **6.8. 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 are as follows:

- Minimum attendance requirement for appearing for examinations in all program is 75%. However, minimum eligibility will be calculated for each subject and NOT as aggregate. Students will be allowed to appear in final examinations subject-wise depending on the fulfillment of the minimum attendance criteria. Attendance will include class work, practice work, and project work (including internships) in both online/ physical modes. The same attendance rules will be applicable for appearing in internal examinations.
- Condoning of the minimum attendance, either due to medical or student activity participation as allowed by the Deans, remains limited to a maximum of 10% and should be exceptional.

Attendance requirement to appear Examination on Demand/Backlog Examination:

- Students who are debarred from attending the main semester examinations due to shortage of attendance will be allowed to appear for Examination on Demand provided they have 50% or more attendance in the subject. Students having below 50% attendance will be either allowed to drop the course (if it is not core) or will be asked to re-register for the course again and attend classes. The attendance rule will apply in case of re-registration and as such will be treated as a new registration.
- 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. If the student has lost the admit card, the same may be obtained from the campus examination cell after paying the prescribed fee.
- Students who have been found to indulge in malpractice at examination will be awarded an 'M' grade in that subject. The university may take any additional disciplinary action at its discretion. Such candidates will be allowed to appear only in subsequent examinations based on the decision of the University.
- 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 EODs.

According to the attendance policy, the following are the categories of the students:

- Students having 75% and more attendance and allowed for the exam.
- Students having 65% - 75% attendance and recommended by the respective Dean to be allowed for exams based on Medical / CSR: Student Activity ground (Exceptional cases only) and rest all will be debarred from the End Sem Exam (will be allowed for back paper exam).
- Students having 50% - 64.99% attendance and debarred from the exam (will be allowed for back paper exam).
- Students having 49.99% and less attendance, who will be blocked from attending the back paper exam and need to re-register the subject.

The attendance policy is for all subjects irrespective of its type.

Credit Shortfall / Re-registration of Subjects: -

- Students having attendance or credit shortfall in a semester shall be allowed to re-register for the courses and shall repeat the courses when the course is offered in the subsequent semester(s) along with the regular students by paying the prescribed fee.
- Similarly, in case of the passing out batch students, students having credit shortfall for the award of degree would be required to re-register subjects, attend the course work and undergo all assessment procedures in the subsequent semester for gaining the required credits by paying the prescribed fee. However, University discourages such practices and students are advised to complete their credit requirements within the course duration itself.
- The students shall contact the respective department / school for the alternative option to compensate for the credit loss due to the subject deregistration by paying the subject registration fee. The re-registration (to be done only during a regular semester) fee for the continuing batch students is INR 2,000 per subject. For passed out batches (if the final semester is completed) the registration fee is INR 5,500 per subject along with a one-time studentship validity fee of INR 2,200.
- 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.
- 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.
- After declaration of result, students can also apply for rechecking/re-evaluation or verification of marks by paying Rs. 1250 or Rs. 500 respectively, through NFSU ERP portal.

- **Evaluation System**

**Pass criteria**

- A. Theory papers: students must secure a minimum of 30% in individual components (both continuous assessment & end-semester theory) along with 40% in aggregate
- B. Theory & practice papers:
  - Theory component: minimum of 30% in individual components (both continuous assessment & end-semester theory) along with 40% in aggregate

- Practice component: minimum of 50% marks both in internal & external
- C. Theory & project type papers:
  - Theory component: minimum of 30% in individual components (both continuous assessment & end-semester theory) along with 40% in aggregate
  - Project component: minimum of 50% marks both in internal & external
- D. Theory, practice & project type papers:
  - Theory component: minimum of 30% in individual components (both continuous assessment & end-semester theory) along with 40% in aggregate
  - Practice component: minimum of 50% marks both in internal & external
  - Project component: minimum of 50% marks both in internal & external
- E. Practice & project type papers:
  - Practice component: minimum of 50% marks both in internal & external
  - Project component: minimum of 50% marks both in internal & external
- F. Workshop or Internship type papers: 50% in aggregate

### **Evaluation criteria**

- a. Evaluation for Theory papers (T, TP & TPP)
  - i. End semester theory examinations (50% weightage):
    - Duration – 3 hrs
    - Full Mark – 100. During result processing, it will be proportionately added.
    - Distribution of marks (should cover all COs)
      - 10 short questions x 2 marks = 20 marks
      - 5 long questions x 12 marks = 60 marks
      - 4 short notes x 5 marks = 20 marks
  - ii. Continuous assessments: Details are as indicated in the table below:

SL No	Continuous Assessment	Score
1	Individual / Group Presentation <i>Rubric is as under:</i> <ul style="list-style-type: none"> <li>• Content &amp; creativity – 05</li> <li>• Presentation &amp; Discussion – 05</li> </ul>	10
2	Mid-semester (Written Examination) <i>Mark Distribution:</i> <ul style="list-style-type: none"> <li>• 5 short questions x 1 marks = 5 marks</li> <li>• 2 long questions x 5 marks = 10 marks</li> <li>• 2 short notes x 2.5 marks = 5 marks</li> </ul>	20
3	Assignment (2 assignments x 5 marks each)	10
4	Learning Record ( <i>Based on the parameters indicated in the learning record format, course faculty to evaluate and award score</i> )	10
<b>Total</b>		<b>50</b>

### b. Evaluation of Practice/ Laboratory Components

The evaluation of the practice component will be carried out 50% by concerned faculty and 50% by the external examiner and will be conducted as per the present policy. Details are as under:

#### Internal

A	Concept	10
B	Planning & Execution/ Practical/ Simulation/ Programming	10
C	Result and Interpretation	10
D	Record/ Report	10
E	Viva	10
<b>Total</b>		<b>50</b>

#### External

A	Execution & Result	20
B	Record of Applied and Action Learning	10
C	Viva	20
<b>Total</b>		<b>50</b>

c. Evaluation of Project Component

The evaluation of the project component will be completed 50% by concerned faculty and 50% by the external examiner and will be conducted as per the present policy. Following guideline may be referred during evaluation of internal and external components:

**Internal**

A	Understanding the relevance, scope and dimension of the project	10
B	Methodology	10
C	Quality of Analysis and Results	10
D	Interpretations and Conclusions	10
E	Report	10
	<b>Total</b>	<b>50</b>

**External**

A	Understanding the relevance, scope, and dimension of the project	10
B	Report	20
C	Viva	20
	<b>Total</b>	<b>50</b>

d. Evaluation of Internship

The evaluation of the internship will be completed 50% by concerned faculty and 50% by the industry guide. Following guideline may be referred during evaluation of internal and external components:

**Internal**

A	Daily Diary & Log Report	20
B	Periodical (Weekly/Monthly) Report	10
C	Presentation & Viva	20
	<b>Total</b>	<b>50</b>

**External**

A	Completion of the task / project assigned	30
B	Feedback of the industry supervisor	20

### **6.9. Award of degree**

A candidate will be eligible for the award of degree, if he/she satisfies the following conditions:

- Passed all subjects.
- Passed in CSR activities (i.e., NCC/NSS/Games /Sports etc.) during the study period.
- Earned a satisfactory performance report in RFWEP/FELP and internship programmes.
- Has no due to the University, Library, Hostels, Transportation, etc.
- Has no disciplinary action pending against him/her.

### **6.10. General**

- The academic regulations should be read as a whole for the purpose of interpretation.
- In case of doubt or ambiguity in the interpretation of the above regulations, the decision of the Vice-Chancellor is final.
- 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.