

Proposed Draft of Examination Regulations for Undergraduate Engineering

Contents

Preamble

1. Examination Committee (EC)

- 1.1 The Constitution of EC
- 1.2 The Powers and Duties of EC
- 1.3 Functions of EC

2. Type of Examinations and Credit Structure

- 2.1 List of Examinations
- 2.2 Types of Courses
- 2.3 Credit Framework
- 2.4 Credit Distribution for Four Year UG Program

3. ABC, Multiple Entry Exit Path and Lateral Entry

- 3.1 Enrolment of Students on ABC
- 3.2 Multiple Exits
- 3.3 Re-entry or Lateral Entry
- 3.4 Eligibility for admission to the UG Bachelor's Degree with Double Minor/Honours/Research as per UGC guidelines

4. Details of Examinations

- 4.1 In-Semester Evaluation (ISE)
- 4.2 Mid-semester Examination (MSE)
- 4.3 End-semester Examination (ESE)
- 4.4 Special Examination
- 4.5 Re-Examination

5. Attendance Requirements

6. Examination Fees Structure

7. Course Evaluation

- 7.1 Passing Criteria
- 7.2 Grade compilation guidelines
- 7.3 Special-Examination and Grade Improvement Guidelines
- 7.4 Norms for Promotion

8. MOOC SWAYAM /NPTEL Courses

9. Liberal Learning Courses (LLC)

10. Rules and Regulations for Assessment

- 10.1 Academic and Examination Calendar
- 10.2 Question Paper setting
- 10.3 Conduct of Examination

- 10.3.1 Conduct of ISE
- 10.3.2 Conduct of Written MSE and ESE
- 10.3.3 Tutorial Evaluation
- 10.3.4 Practical Course and a Course with only ISE components
- 10.3.5 Assessment of Projects

11. Assessment of Written Examination

12. Procedure to show Theory MSE and ESE answer books to Students

13. Preservation of Question Papers and Answer Books

14. Tabulation and Declaration of Results

- 14.1 MSE and ESE Results
- 14.2 In-Semester Evaluation (ISE)
- 14.3 Internal Assessment of Lab Course
- 14.4 Results
- 14.5 Amendment of Results due to errors

15. Unfair Means /Malpractice at Examination

- 15.1 Competent Authority
- 15.2 Procedure for Dealing with Cases of Unfair Means at Examination Hall
- 15.3 Procedure for Dealing with Unfair Means observed during assessment
- 15.4 Procedure to be followed by Complaint Redressal Committee (CRC)
 - 15.4.1 For the Purpose of investigating unfair means resorted to by examinee/s at the written MSE OR ESE examination
 - 15.4.2 For Unfair Means in Conduct of Practical Examination
 - 15.4.3 For Paper Setter/Examiner/Faculty/Any Other Person Involved in Unfair Means with Conduct of Examination
 - 15.4.4 Guidelines for Imposing Punishment for Malpractices/Lapses by Paper Setter/Examiner/Faculty/Any Other Person

16. Learner's Report Card

- 16.1 Conversion of Marks to Grades and Calculations of GPI (Grade Performance Index)
- 16.2 Calculation of SGPI and CGPI
- 16.3 Submission of Examination Documents to Mumbai University
- 16.4 Eligibility for the award of Degree

Proposed Examination Regulations for Undergraduate Engineering

Preamble:

These regulations have been meticulously formulated to define the comprehensive framework governing the conduct of examinations for undergraduate engineering programs, including the Bachelor of Engineering (B.E.) and / or Bachelor of Technology (B.Tech) degrees, offered by autonomous colleges affiliated with the esteemed Mumbai University. These guidelines are designed to ensure a consistent, fair, and transparent assessment of student learning, aligned with the highest academic standards and best practices in engineering education.

Purpose and Scope:

The primary objective of these regulations is to establish a robust and reliable examination system that accurately reflects student learning outcomes, upholds academic integrity, and supports the seamless academic progression of engineering students. This framework encompasses all aspects of the examination process, including but not limited to, examination scheduling, paper setting, invigilation, evaluation, revaluation, and the declaration of results.

Legal and Regulatory Alignment:

These regulations are formulated in strict accordance with the statutory requirements of the Maharashtra Public Universities Act, 2016, which provides the foundational legal structure for higher education institutions within the state. In addition, these regulations adhere to the expert directives issued by the All-India Council for Technical Education (AICTE), which sets the quality benchmarks for technical education in India, and the normative guidelines established by the University Grants Commission (UGC), which provides a uniform framework for academic standards.

Furthermore, these regulations incorporate the progressive principles and pedagogical vision articulated within the National Education Policy (NEP) 2020. This policy emphasizes holistic and multidisciplinary education, flexible learning pathways, and the development of critical thinking and problem-solving skills, which are essential for producing competent engineering graduates prepared to meet the challenges of a rapidly evolving technological landscape.

1. General Principles:

- **Autonomy:** As autonomous institutions, colleges have the authority to conduct their examinations, evaluate student performance, and declare results, subject to the broad guidelines set by the University of Mumbai, UGC, and AICTE.
- **Fairness and Transparency:** All examinations and evaluation processes must be fair, transparent, and designed to assess students' learning outcomes effectively, reflecting the principles of academic integrity and ethical conduct.

- **Continuous Evaluation:** Assessment schemes shall integrate continuous internal assessment (IA) and end-semester examinations (ESE) to capture the full spectrum of student learning.
- **Alignment with CBCS:** The examination system shall align with the Choice Based Credit System (CBCS), providing flexibility and student-centricity.
- **NEP 2020:** The examination and assessment practices shall reflect the principles of NEP 2020, emphasizing higher-order thinking skills, application-based learning, and reduced emphasis on rote learning.

2. Nomenclature and Definitions:

- **University** - Refers to Mumbai University.
- **Autonomous College** - An institution with academic, administrative, and financial autonomy.
- **Examination** - Includes internal assessment (IA), mid-term, end-semester examination (ESE), practical, and supplementary assessments and project evaluations.
- **Academic Year** - The period from June to May, divided into two semesters.
- **IA:** Internal Assessment: Continuous, formative assessment conducted throughout the semester.
- **ESE:** End Semester Examination): Comprehensive assessment conducted at the end of each semester.
- **Course:** A unit of instruction (theory/practical/tutorial) carrying specific credit(s).
- **Credit:** A numerical value assigned to a course, reflecting the student's workload.
- **Examination Committee:** A college-level committee responsible for overseeing the conduct of examinations.
- **Controller of Examinations (CoE):** The head of the examination department, responsible for the planning, organization, and execution of examinations.
- **Grade Point Average (GPA) and Cumulative Grade Point Average (CGPA):** Measures of academic performance, calculated as per UGC guidelines.

1. Examination Committee (EC):

1.1 Constitution of the Examination Committee (EC)

An autonomous Institute shall establish a dedicated Examination Committee (EC) to ensure the effective governance and management of all examination-related activities. This committee plays a crucial role in upholding the standards of assessment and ensuring the integrity of the examination process. The constitution of the EC shall be as follows:

- **Chairperson:** A senior faculty member appointed to lead the committee.
- **Controller of Examinations (CoE):** Acts as the head of the committee, providing overall direction and oversight.
- **Principal:** Serves as an ex-officio member, ensuring alignment with the institution's academic goals.
- **Department Representatives:** Senior faculty members from various departments to provide subject-specific insights and support.
- **External Academic Experts:** Distinguished professionals from other academic institutions or industries to ensure impartiality and external oversight.
- **Academic Council Nominees:** Members nominated by the academic council to contribute to policy formulation and quality assurance.

1.2 Powers and Duties of the Examination Committee

The Examination Committee is vested with comprehensive powers and responsibilities to manage the entire lifecycle of the examination process. Its primary duties include:

- **Formulating Comprehensive Examination Policies:** Developing detailed examination rules and regulations, consistent with institutional guidelines and academic council approvals. This includes defining assessment components, grading systems, and criteria for passing and promotion.
- **Examination Scheduling and Planning:** Planning and preparing examination schedules, including In-Semester Evaluations, Mid-Semester, End-Semester, Special, and Re-Examinations, ensuring smooth execution.
- **Paper Setting and Examiner Appointment:** Appointing qualified paper setters and examiners, ensuring academic rigor and fairness in assessments.
- **Question Paper Management:** Overseeing the secure creation, storage, and distribution of question papers to prevent unauthorized access.
- **Conduct of Examinations:** Coordinating the administration of Internal Assessment (IA) and End-Semester Examinations (ESE), ensuring strict adherence to established protocols.

- **Integrity and Security Assurance:** Implementing measures to prevent malpractice and ensure a fair assessment environment, including secure printing, storage, and strict invigilation procedures.
- **Evaluation and Result Declaration:** Arranging for the timely evaluation of answer scripts and ensuring prompt, accurate result declaration through transparent processes.
- **Grievance Redressal:** Addressing student grievances related to examinations swiftly and effectively to maintain trust in the assessment system.
- **Continuous Improvement and Reform:** Recommending and implementing reforms to enhance the examination system's transparency, efficiency, and effectiveness.

1.2.1 Rules of Procedure for EC

- For any meeting of EC, two-third members shall constitute a quorum. However, the same meeting shall be held after 30 minutes of the scheduled time, for which, no quorum shall be applicable.
- The members of EC shall meet at least twice during the academic year and at other times as and when necessary.
- The various formats shall be prepared by EC for record keeping and monitoring all examination related activities.
- The EC shall perform such duties and responsibilities that are assigned by Academic Council of the institute from time to time.
- COE shall be assisted by the department exam coordinators (DEC) for carrying out the following activities during examinations.
 - i. Paper Setting and Printing
 - ii. Examinations (Theory)
 - iii. Examinations (Practical, Project, Online examinations)
 - iv. Assessment of answer books
 - v. Preparation and declaration of provisional grades
 - vi. Preparation and declaration of final results
- Any other examination related work

1.3 Functions of EC:

1. Notifying the schedule and dates of various stages connected with the examinations. (Examination calendar of the year)
2. Fixing the timetable for conduct of examinations.

3. Conducting internal examinations.
4. Question paper setting as per the syllabi, model question papers approved in Board of Studies.
5. Printing of question papers.
6. Supply of Examination applications to the students.
7. Processing of examination applications and printing of Hall tickets.
8. Preparation of Nominal rolls and D- Forms.
9. Printing of Answer booklets with Barcode.
10. Preparation of answer scripts by coding for valuation.
11. Undertaking valuation of answer scripts and scrutiny of answer script.
12. Decoding of scripts and verification of marks already entered.
13. Processing of marks and prepare the list of candidates for Moderation by Grafting.
14. Announcement of results in-time through college website.
15. Notification for Re-valuation.
16. Printing and distribution of marks memoranda.
17. Preparation of consolidated marks memo cum provisional pass certificates.
18. Submission of all data and marks to the University for the award of original degrees by the University.
19. Maintenance of tabulated marks register and degree registers.
20. Preparation of Degree register for submitting to affiliated University for printing and signature of issuing authority of affiliated University.
21. Prepare the list of students for awarding endowment prizes constituted by the philanthropists.
22. Maintenance of cash book, Resolution book, Accounts book and etc of the examination cell.

III. Official procedure:

The Examination Cell, in all its functions, is guided and regulated by the UGC rules of Autonomy, resolutions of the Executive Committee and the Academic Council of the college. As the college is affiliated to Mumbai University, its rules are also followed in some cases.

Every department ensures that all the norms published by university/college are followed completely.

2. Diverse Types of Examinations and the Structured Credit Framework:

2.1 Exhaustive List of Examinations

To comprehensively evaluate student learning and academic progress, autonomous colleges employ a diverse array of assessment instruments. These assessments are designed to provide a holistic understanding of a student's knowledge, skills, and overall development throughout the academic journey. The primary categories of examinations include:

1. In-Semester Evaluation (ISE): This continuous assessment component aims to foster consistent engagement and progressive understanding by integrating various pedagogical tools throughout the semester. Key elements include:

- **Quizzes:** Short, focused assessments that test immediate comprehension of recently covered topics, encouraging regular revision and active participation.
- **Assignments:** Structured, often open-ended tasks that challenge students to explore topics in depth, reinforcing theoretical concepts and promoting critical thinking.
- **Laboratory Work:** Practical evaluations in laboratory settings, assessing hands-on skills, technical proficiency, and the ability to apply theoretical knowledge to real-world scenarios.
- **Presentations:** Opportunities for students to articulate their understanding, develop communication skills, and demonstrate analytical abilities in a collaborative environment.
- **Group Discussions and Peer Reviews:** Interactive sessions that encourage active learning, exchange of ideas, and collaborative problem-solving.

2. Mid-Semester Examination (MSE): Typically conducted at the midpoint of each academic semester, the MSE acts as a formative assessment, providing insights into a student's grasp of core concepts and foundational knowledge covered in the first half of the course. These examinations help both students and instructors identify strengths and areas requiring further focus, guiding subsequent instruction and study strategies.

3. End-Semester Examination (ESE): Conducted at the conclusion of each semester, the ESE serves as a comprehensive summative assessment. It evaluates the student's mastery of the complete course curriculum, including the ability to synthesize, integrate, and apply acquired knowledge. The ESE often includes both theoretical and practical components, ensuring a balanced assessment of conceptual understanding and practical skills.

4. Special Examinations: Special examinations are offered to students who, due to legitimate and verifiable reasons, were unable to attend the regular MSE or ESE. Common grounds for eligibility include medical emergencies, participation in officially sanctioned events, or other extenuating circumstances as recognized by institutional policies. These examinations require prior approval and adequate supporting documentation to ensure fairness and transparency.

5. Re-Examinations: Designed to provide students with additional opportunities for academic improvement, re-examinations allow for grade enhancement or the clearance of academic backlogs. These assessments are governed by institutional regulations regarding eligibility, frequency, and grading policies, ensuring that students have a fair chance to demonstrate their competencies and achieve academic success.

2.2 Comprehensive Types of Courses:

The undergraduate engineering curriculum will be thoughtfully structured to provide a holistic learning experience, encompassing:

Core Courses: These foundational courses form the bedrock of the specific engineering discipline, providing essential theoretical knowledge and fundamental principles.

Elective Courses: Offering students the flexibility to pursue their specific interests and career aspirations, elective courses will allow for specialization within the broader engineering field or exploration of interdisciplinary areas.

Laboratory Courses: Integral to engineering education, these hands-on courses provide students with practical experience, enabling them to apply theoretical concepts, develop experimental skills, and work with relevant equipment and software.

Project Work: Ranging from individual assignments to collaborative team projects, this component fosters critical thinking, problem-solving abilities, innovation, and the application of engineering principles to real-world scenarios.

Skill Development Modules: These modules are designed to enhance practical skills relevant to the engineering profession and may include workshops, seminars, and hands-on training.

2.3 Structured Credit Framework:

The allocation of academic credits for each course will be meticulously determined, adhering strictly to the norms and guidelines established by both the UGC / AICTE and as per the NEP guidelines / national credit framework concurrent with University of Mumbai. The assignment of credits will be a direct reflection of the anticipated learning effort required of students, taking into account factors such as the number of contact hours (lectures, tutorials, practical sessions), the complexity of the course content, and the expected workload for assignments and independent study.

Credit Specification:

Ø Theory: For each theory 1 credit is assigned

Ø Lab and workshop- based work: For each lab 0.5 to 1 credit is assigned depending on the subject and for each workshop 1 credit

Ø Tutorial: For each tutorial 1 credit is assigned

Ø Community services: 2 credits assigned for community services

The National Education Policy 2020 highlights the importance of formative and competency-based assessments to foster higher-order thinking abilities, including creativity, critical thinking, and analytical skills, education in addition to a focus on the chosen major and minors as per their choices. The credit structure for four-year Bachelors UG programme are given in below credit frame work table.

Credit Framework

Levels	Qualification Title	Credit Requirements		Semester	Year
		Minimum	Maximum		
4.5	One Year UG Certificate in Engg./Tech.	40	44	2	1
5.0	Two Years UG Diploma in Engg./Tech.	80	88	4	2
5.5	Three Years Bachelor's Degree in Vocation (B. Voc.) or B. Sc. (Engg./ Tech.)	120	132	6	3
6.0	4-Years Bachelor's degree (B.E./ B.Tech. or Equivalent) in Engg./ Tech. with Multidisciplinary Minor	160	176	8	4
	4-Years Bachelor's degree (B.E./ B.Tech. or				

6.0	Equivalent) in Engg./Tech.- Honors and Multidisciplinary Minor	180	194	8	4
6.0	4-Years Bachelor's degree (B.E./ B.Tech. or Equivalent) in Engg./Tech.- Honors with Research and Multidisciplinary Minor	180	194	8	4
6.0	4-Years Bachelor's degree (B.E./ B.Tech. or Equivalent) in Engg./ Tech.- Major Engg. Discipline with Double Minors (Multidisciplinary and Specialization Minors)	180	194	8	4

1. Credits offered per Semester will be a Minimum 20 and a Maximum 22. While minimum credits are mandatory as per National Credit Framework, and can evolve the mechanism for providing Semester/Level wise credit attainment flexibility within the broad framework.
2. The Fourth Year of Bachelor's Engg./ Tech. Degree (Level 6.0) with various options- Bachelor's Engg./ Tech. Degree in chosen Major Engg./ Tech. Discipline with Multidisciplinary Minor (160-176 credits), OR Bachelor's Engg./ Tech. Honours Degree in chosen Major Engg./ Tech. Discipline with Multidisciplinary Minor (180-194 credits) OR Bachelor's Engg./ Tech. Honours with Research Degree in chosen Major Engg./ Tech. Discipline with Multidisciplinary Minor (180-194 credits) OR Bachelor's Engg./ Tech. Degree in chosen Major Engg./ Tech.

2.4 Strategic Credit Distribution for the Four-Year UG Program:

The total credit requirement for the four-year undergraduate engineering program will be strategically and equitably distributed across all eight academic semesters. This careful distribution will aim to ensure a balanced and manageable academic workload for students in each semester, preventing undue academic pressure and promoting a more effective learning experience. The distribution should align with AICTE's model curriculum and **NEP policy guidelines**.

- One credit is equivalent to 1 hour of lecture or 2 hours of practical/tutorial work per week.
- Multidisciplinary learning, industry-oriented modules, and MOOC-based learning (Swayam/NPTEL) are encouraged.

3. Facilitating Academic Mobility and Flexibility: ABC, Multiple Entry Exit Path, and Lateral Entry

3.1 Mandatory Enrolment of Students on the ABC Platform:

To ensure seamless academic mobility and effective credit recognition, all students enrolling in undergraduate engineering programs will be mandatorily registered on the Academic Bank of Credits (ABC) platform. This digital platform, established as part of the National Education Policy (NEP) 2020, serves as a centralized repository for securely storing and managing students' earned academic credits. It empowers students to transfer their credits across accredited institutions, facilitating flexible learning pathways and promoting lifelong learning. This approach aims to break institutional silos, reduce academic rigidity, and enhance the overall student learning experience by acknowledging prior learning and diverse academic achievements.

3.2 Empowering Students with Multiple Exit Options:

In alignment with the NEP 2020 framework, institutions will adopt a multi-tiered approach to academic progression, allowing students to exit their programs at various stages based on the credits they have accumulated. This flexibility provides students with meaningful certification options at each exit point, including:

- Certificate upon successful completion of the first year (minimum of 40 credits),
- Diploma upon successful completion of the second year (minimum of 80 credits),
- Advanced Diploma or Associate Degree upon successful completion of the third year (minimum of 120 credits), and
- Bachelor's Degree upon successful completion of the entire program (minimum of 160 credits).

This structure acknowledges diverse learning paces and career aspirations, ensuring that students can gain recognition for their achievements at different stages while also promoting employability and skill development.

3.3 Flexible Pathways for Re-entry and Lateral Entry:

Students who choose to exit their program prematurely may re-enter at a later stage, provided they meet the necessary eligibility criteria. Institutions will facilitate this process by maintaining comprehensive academic records on the ABC platform, allowing students to seamlessly resume their education without loss of previously earned credits. Additionally, lateral entry pathways will be available for candidates with relevant prior qualifications, enabling them to join the program at an appropriate level, subject to institutional policies and program-specific prerequisites. This approach supports diverse educational journeys and acknowledges prior learning experiences, enhancing overall academic inclusivity.

3.4 Eligibility for Admission to UG Bachelor's Degree with Double Minor/Honours/Research:

Students aspiring to pursue an undergraduate Bachelor's degree with specializations such as **Double Minor, Honours, or Research** must meet the following eligibility criteria, as outlined by the latest **University Grants Commission (UGC)** guidelines:

a. Academic Excellence and Specialization:

- These advanced academic tracks are intended for high-achieving students seeking deeper specialization in their chosen fields.
- Students must demonstrate strong academic performance, typically measured through cumulative grade point averages (CGPA) or percentage thresholds set by their institution.
- In some cases, additional entrance examinations, project work, or research proposals may be required to qualify for these tracks.

b. Credit and Course Requirements:

- Students must complete a specified minimum number of credits in their primary discipline, along with additional credits in their chosen minor or honours specialization.
- For the Research track, students may be required to undertake original research, publish papers, or participate in faculty-led research projects to fulfill the requirements.

c. Institutional and National Alignment:

- Institutions offering these specialized tracks are responsible for clearly communicating the specific eligibility criteria, including course prerequisites, performance standards, and research expectations.
- These pathways are designed to align with national educational quality standards, ensuring students gain competitive and comprehensive academic experiences.

d. Support and Mentoring:

- Students pursuing these advanced tracks will often receive dedicated mentoring and support, including guidance on academic planning, research methodologies, and career pathways.
- Institutions may also provide access to specialized labs, libraries, and collaborative research opportunities to enhance learning outcomes.

4. Comprehensive Details of Examination Components:

4.1 Rigorous In-Semester Evaluation (ISE):

Rigorous In-Semester Evaluation (ISE) is a continuous and multifaceted process designed to monitor and assess student learning throughout the semester (maximum 20 marks). It emphasizes critical thinking, practical application, and comprehensive understanding, moving beyond simple recall to capture a holistic view of student progress. It will be conducted throughout the semester and may include a variety of assessment methods, such as:

Based on the course, ISE includes one or more following components.

1. **ISE Test-1, ISE Test-2**
2. **Class Tests (Written)** - Periodic written tests to assess understanding of course concepts.
3. **Assignments** - Regular coursework or homework assignments to gauge comprehension and application.
4. **Quizzes** - Short, focused assessments aimed at reinforcing key concepts and quick recall.
5. **Presentations** - Student-led presentations to evaluate communication skills, subject mastery, and critical thinking.
6. **Projects** - Individual or group projects designed to assess practical application, research skills, and creativity.
7. **Laboratory Work Evaluation** - For practical courses, assessment of hands-on skills, experimental techniques, and safety practices.
8. **Viva Voce** - Oral examinations to assess conceptual clarity, articulation, and depth of understanding.
9. **Attendance** - A component of assessment that encourages regular participation and engagement.
10. **Case Studies** - In-depth analyses of real-world scenarios to develop analytical and problem-solving skills.
11. **Group Discussions** - Evaluation based on participation, collaboration, and critical thinking in group settings.
12. **Online Assessments and Interactive Activities** - Use of digital platforms for interactive learning assessments.

The specific components and their respective weightages for each course shall be determined by the course instructor, with the approval of the Head of the Department and the Controller of Examinations (CoE). A minimum number of IA components shall be prescribed to ensure comprehensive assessment coverage.

4.2 Formative Mid-Semester Examination (MSE):

The Mid-Semester Examination (MSE) is a crucial component of the academic assessment process, conducted approximately halfway through each semester. It is designed to provide a comprehensive evaluation of students' understanding and progress in the coursework covered up to that point (Maximum 20 Marks).

Key Features of the MSE:

- MSE will be normally conducted in the mid of the semester. MSE question paper will be based on 40-50% of the syllabus and it will be conducted by the respective department.
- Department should conduct MSE according to the schedule published by the Examination Center of the college.
- Typically question paper will be of 30 Marks for 60/90 Minutes duration.
- Those students whose name is appeared in the defaulter list received from the department will not be allowed to attempt MSE.

Purpose and Objectives:

The MSE serves as a formative assessment tool, aimed at identifying students' strengths and areas for improvement. It offers students an opportunity to reflect on their learning, gauge their grasp of the course material, and receive constructive feedback to guide their ongoing studies.

Timing and Schedule:

The MSE is typically scheduled around the middle of the semester, aligning with the academic calendar. The exact dates and timings will be communicated well in advance to allow students adequate preparation time. Examination duration will be 60 min.

Syllabus and Format:

The examination will cover the topics taught up to the mid-point of the semester. The scope of the syllabus and the format (e.g., multiple-choice questions, short answers, essays, or problem-solving exercises) will be clearly outlined by the course instructor prior to the examination.

Evaluation and Feedback:

Performance in the MSE is intended to offer both students and instructors valuable insights into academic progress. Detailed feedback will be provided to help students address any knowledge gaps and refine their understanding before the final assessments.

Contribution to Final Grade:

While primarily formative, the MSE may also contribute a percentage of the overall course grade, depending on the specific course structure. This proportion will be clearly specified in the course outline.

4.3 Summative End-Semester Examination (ESE):

The End-Semester Examination (ESE) is a comprehensive evaluation conducted at the conclusion of each academic semester. It aims to assess the overall understanding of course material, integrating various concepts learned throughout the term. Key features include:

1. **Purpose and Scope** - Primarily designed to evaluate higher-order thinking skills, including analysis, application, and problem-solving, rather than mere recall.
2. **Question Paper Design** - The ESE papers will be structured to minimize rote learning, promoting critical thinking and deep comprehension.
3. **Typical Duration** - ESE exams generally last between 2 to 3 hours, as determined by the institution.
4. **Coverage** - Includes the entire syllabus of the course, ensuring a thorough evaluation of student learning.

Practical and Laboratory Examinations

In addition to theoretical evaluations, practical and laboratory examinations are integral for courses involving hands-on work. These assessments aim to evaluate practical skills, experimental techniques, and real-world problem-solving abilities. Key considerations include:

1. **Hands-On Skill Assessment** - Testing the ability to apply theoretical knowledge in practical contexts.
2. **Separate Passing Criteria** - Practical components often have distinct passing criteria, reflecting the unique demands of hands-on learning.
3. **Real-World Application** - Focus on experimental accuracy, data analysis, and the correct use of laboratory equipment.

4.4 Accommodative Special Examination:

A Special Examination may be offered to students who were genuinely unable to appear for either the regular Mid-Semester Examination or the End-Semester Examination due to unforeseen and compelling reasons. The decision to grant a Special Examination will rest with the institution, based on its established policies and a careful review of the submitted evidence.

4.5 Opportunity for Academic Improvement: Re-Examination:

Autonomous institutions will provide students with an opportunity to reappear for examinations in courses where they wish to improve their previously obtained grades or to clear any courses in which they may have not achieved the required passing grade. The regulations governing re-examinations will specify the number of attempts permitted, the courses eligible for re-examination, any associated fees, and the process for applying for a re-examination.

5. Mandatory Attendance Requirements for Examination Eligibility:

Recognizing the importance of consistent engagement with the learning process, students will be required to maintain a minimum 75%percentage of attendance in all lectures (25% relaxation considered for medical ground), and for tutorials, and practical sessions it should be 100% for each course to be eligible to appear for the corresponding Mid-Semester and End-Semester Examinations. The specific minimum attendance percentage will be determined by the respective autonomous institution and will be clearly communicated to the students at the beginning of each semester.

6. Transparent Examination Fees Structure:

The autonomous institutions will establish a clear and transparent fee structure for various examinations, including the Mid-Semester Examination, End-Semester Examination, Special Examinations, and Re-Examinations. The details of these fees will be duly notified to the students well in advance through official channels.

- Regular examination fee --- 3000
- Special examination fee (for failed students) --- 5000
- Grade Improvement examination fees ---- 3000
- Re-examination fees (for failed students) --- 3000

In addition to regular fees, late and super late fees will be applicable if any student fails to apply for examination form within the prescribed time period declared through the notice.

Examination fees for the academic year 2024-2025 are as follows:

For Undergraduate Course

First Year (BE/B.Tech) : Rs.3000/-

Second Year (BE/B.Tech) : Rs.3000/-

Third Year (BE/B.Tech) : Rs.3000/-

Fourth Year (BE/B.Tech) : Rs.3000/-

Revaluation: Rs 1500/- per course

Additional fee Rs (Re-Examination /Previous Semester Examination) examination fees Rs.1520 per semester

Other fees

Provisional Passing Certificate : Rs.250/-

Duplicate Grade sheet : Rs.250/- per grade sheet

Duplicate Hall Ticket : Rs.250/-

Re-Examination & Previous Examinations Fees (Odd & Even): Rs.1520 with form fees per semester

Transcript Charges: Rs.1500/- (for first 3 copies) plus Rs.400/- (For next every single copy)

Other letters : Rs.250/-

Percentage Conversion / Marks Obtained Certificate: Rs.400/-

Document Verification Charges: Rs.1000/- to Rs.3000/- per semester as per passing year as per below.

1 to 3 Years: Rs.1000/- per semester

4 to 10 years: Rs. 1500/- per semester

10 to 20 years: Rs. 2000/- per semester

More than 20 years: Rs. 3000/- per semester

7. Comprehensive Course Evaluation and Progression:

7.1 Clearly Defined Passing Criteria:

To ensure academic rigor and a minimum level of competency, students must secure a minimum passing grade in individual course, encompassing both the internal assessments (ISE and MSE)

and the external assessment (ESE) components. The specific passing marks or grades for each course will be clearly defined by the institution.

To successfully complete a course and progress academically, students must meet specific passing criteria that reflect both their understanding of the course material and their performance in assessments. These criteria are designed to ensure a consistent standard of academic excellence and competency across all courses.

Absolute Grading with a **minimum 40% marks for UG** should be obtained by a student to pass a course considering addition of ISE1, MSE, ISE2 and ESE marks.

There is no separate passing head for ISE1, MSE, ISE2 or ESE. Even though there is not a separate head of passing, it is expected that learner should satisfactorily complete all the continuous assessment components in all the courses.

Sample table indicating marks for evaluation for a course.

Theory Course								
Lectures per week	Credits	ISE1 Marks	ISE2 Marks	MSE Marks	MSE Duration	ESE Marks	ESE Duration	Total Marks
2	2	20	20	30	90 Minutes	100(30% weightage)	180 Minutes	100
1	1	10	10	15	60 Minutes	50(30%weightage)	120 Minutes	50

7.1.1 Minimum Requirements:

To pass a course, a student must achieve the following minimum thresholds:

- **End Semester Examination (ESE) Performance:**

- Students must secure at least **40%** of the maximum marks in the **ESE** to pass the course.
- The ESE typically evaluates comprehensive knowledge and understanding of the entire course syllabus, including both theoretical concepts and practical applications.

- **Internal Assessment (IA) Performance (ISE):**

- A minimum of **40%** of the total possible marks in the **Internal Assessment (IA)** is required.
- The IA comprises ISE & MSE may include various components, such as class tests, quizzes, assignments, practical work, projects, presentations, and attendance, depending on the course structure.

- **Overall Grade Requirement:**

- In addition to meeting the minimum individual requirements for ESE and IA, students must secure an overall grade of **C** (or its equivalent) when combining the scores from both IA and ESE components.
- The overall grade reflects a student's comprehensive performance and understanding of the course content, and is typically determined using a grading scale that may vary by institution.

7.2 Detailed Grade Compilation Guidelines:

The final grade for each course will be meticulously determined by considering the student's performance in all components of evaluation, including the In-Semester Evaluation (ISE), the Mid-Semester Examination (MSE), and the End-Semester Examination (ESE). The institution will establish a pre-defined weightage distribution for each of these components, which will be clearly articulated in the course syllabus.

The guidelines for the absolute grade compilation are as follows

- There will be no individual passing head for any course. Pass or fail will be based on total marks obtained.
- The total marks i.e. addition of ISE1, ISE2, MSE and ESE for a course are used for grade compilation process.
- The Grade Compilation Process shall involve the following steps:

7.2.1 Absolute grading system is applicable for all courses

1. Student securing 40% or more marks should be awarded the Passing grade 'P' or higher grades based on the overall performance in the course.

2. Student unable to secure at least 40% marks considering all the components of exam like ISE1, ISE2, MSE & ESE combined shall be graded with 'F' grade considered to be failed in the examination of the said course.

3. There shall be different grades with their numerical equivalence as specified in detail below, as grades specified from 'F' to 'O'. However, for a student to get a grade D or above in any course, he/she would have to appear in the MSE and ESE.

4. Considering the specific constraints, Principal may constitute a committee chaired by Dean Quality Assurance to examine the grades awarded in a course.

5. In case of Re-examination only absolute grading should be awarded with an upper cap of 'A' grade.

7.2.2 Additional Requirements:

- **Practical and Laboratory Courses:**

- Courses with practical or laboratory components may have additional passing criteria, reflecting the hands-on skills and technical competencies required for those subjects.
- In such cases, students may need to achieve separate passing marks in the practical components, independent of the theoretical portions.
- The specific criteria, including minimum marks and required practical competencies, will be clearly communicated by the respective departments.

- **Institution-Specific Standards:**

- In certain cases, the institution may prescribe higher passing thresholds or additional criteria beyond the minimum university requirements to ensure academic rigor.
- These criteria may include higher overall percentage requirements, additional project submissions, or mandatory attendance standards, subject to the approval of the **University of Mumbai**.
- Such enhancements are intended to promote a deeper understanding of the course material and better prepare students for professional and academic challenges.

7.2.3 Transparency and Communication:

- The specific passing marks, grading scales, and evaluation criteria for each course will be clearly outlined in the course syllabus and communicated to students at the beginning of the semester.

- This transparency ensures that students have a clear understanding of the performance expectations and can plan their studies accordingly.
- Regular feedback from instructors, along with periodic performance reviews, will further support students in meeting these criteria.

Absolute System of Grading:

UG Program			
Percentage of Marks Obtained	Letter Grade	Numerical Equivalent Grade Points	Performance
85.00 and above	O	10	Outstanding
80.00 – 84.9	A	9	Excellent
70.00 – 79.99	B	8	Very Good
60.00 – 69.99	C	7	Good
50.00 – 59.99	D	6	Fair
45.00 – 49.99	E	5	Average
40.00 – 44.99	P	4	Pass
Less than 40.00	F	0	Fail
	AB	0	Absent

- NO grace marks will be given for any examination.
- Specially-abled student shall be given Five (5%) of total marks of the semester appeared by the student across all courses in the semester. For such candidates this rule is also applicable for Special and Re-exam.
- CGPA to Marks Conversion: CGPA shall be converted into percentage marks, if required using the following formula:

$$\text{Percentage} = (\text{CGPA} - 0.75) \times 10$$

7.3 Specific Guidelines for Special Examinations and Grade Improvement:

The institution will provide comprehensive and detailed guidelines outlining the specific procedures and eligibility criteria for students appearing in Special Examinations. Similarly, detailed guidelines will be provided for students seeking to improve their grades through re-examination, including the number of attempts allowed, the courses eligible, and the impact of the re-examination grade on the student's academic record.

- There shall be a Special examination for all theory courses in each semester. Special examination shall be conducted after declaration of ESE result and before the commencement of

next semester. Re-examination shall be conducted during the schedule of Special examination. CoE in consultation with HoD and DEC shall prepare Special and re-exam timetable.

- Also, the students who have secured C to F grade in a course in a semester during 4-year graduation period, can appear for such special examination in the same semester of the same academic year, for improving grade. Grade penalty of one grade is applicable in such cases.
- Students who improve his/her CGPA will be issued fresh mark lists by the institute. These mark lists will have star against the subjects for which he/she has appeared for grade improvement and will state “*Grade Improvement*”.
- **ISE1 and ISE2 marks shall be carried forward in all cases including grade up-graduation till the student passes the course.**
- The special examination shall be of 100 marks and shall be based on all modules in the syllabus. The question paper of special examination shall have one question based on all modules and remaining questions will have only internal options.
- For re-examination absolute grading shall be used and following grade tables shall be applied for deciding grades.

7.4 Well-Defined Norms for Promotion to Subsequent Semesters/Years:

Students will be promoted to the next academic year or semester based on their cumulative academic performance across all courses in the current semester or year. The norms for promotion will be clearly defined by the institution and will typically involve a combination of factors, such as the number of courses passed, the overall grade point average achieved, and the number of credits earned.

1. ODD to EVEN Semester: There are no restrictions for promotion from odd semester to even semester in an academic year.

2. From I Year to II Year: For promotion to the Second Year (IIIrd semester), a student should have completed at least 50% credits at the end of first year.

3. From II Year to III Year: For promotion to Third year, a student should have completed at least 50% credits in IInd year and must obtain 70% credits of the first year.

4. From III Year to IV Year: For promotion to Fourth year, a student should have at least 50% credits in the IIIrd Year and must obtain 70% credits of 1st year and IInd Year.

Withholding of Grades: The Grades of a student in a semester shall be withheld and not declared if the student fails to pay the dues to the Institute or has disciplinary action pending against him/her.

8. MOOC/SWAYAM/NPTEL Courses:

The autonomous institutions may offer or recognize Massive Open Online Courses (MOOCs) offered through platforms like SWAYAM and NPTEL. The credit transfer policy for these courses will be defined by the institution, adhering to UGC guidelines. The policy will address:

- The types of MOOCs eligible for credit transfer.
- The maximum credits that can be earned through MOOCs.
- The procedure for applying for credit transfer.
- The equivalence between MOOC grades/certificates and the institution's grading system.
- The credit equivalence for SWAYAM-NPTEL Courses:
 - 12 weeks:3 credits;
 - 8 weeks:2 credits;
 - 4 weeks:1 credit.
- SWAYAM-NPTEL Courses are considered for transfer of credits only if the concerned student has successfully completed and obtained the SWAYAM-NPTEL Certificate to this effect. The passing criteria applicable is as declared by NPTEL.

9. Liberal Learning Courses (LLC):

The autonomous institutions may offer Liberal Learning Courses (LLCs) to provide students with the opportunity to broaden their education beyond their core discipline. These courses aim to foster interdisciplinary learning and may cover subjects in the humanities, social sciences, and other fields. The institutions will define the following for LLCs:

- The objectives and scope of LLCs.
- The list of LLCs offered.
- The credit structure and workload for LLCs.
- The methods of assessment for LLCs.
- The integration of LLCs into the overall curriculum.

10. Rules and Regulations for Assessment:

The following rules and regulations will govern the assessment of student performance:

10.1 Academic and Examination Calendar:

The institution will publish an academic and examination calendar at the beginning of each academic year. This calendar will include:

- The dates for all major examinations (MSE and ESE).
- The schedule for In-Semester Evaluations.
- The dates for submission of assignments and project reports.
- The duration of each semester.
- Holidays and breaks.
- Result declaration dates.
- Any other relevant academic deadlines.

The academic activities of the institute are governed by academic calendar prepared by time table committee and approved by Dean Academics in consultation with Principal. It shall be notified at the beginning of each academic year. Academic calendar refers to schedule of commencement of instruction for the semester, course delivery period, examinations/evaluation, other academic activities, holidays and student major activities schedule.

As per *UGC regulation on minimum qualifications for appointment of teachers and other academic staff in Universities and Colleges and measures for the maintenance of standards in higher education 2018* should be followed while preparing academic calendar for scheduling 180 days of teaching.

Approximately teaching days are 80-90 in a semester. The academic calendar is strictly adhered to and all other activities including co-curricular and extra-curricular activities should be scheduled so as not to interface with the curricular activities as stipulated in the academic calendar.

The non-conduct of academic activities on any particular teaching day for whatever reason shall be compensated by having the academic sessions conducted on suitable Saturdays or any other holiday by following the particular class time table of the lost teaching day.

Examination calendar shall be prepared by examination committee and approved by academic council. All the examination related activities like conduction of examination, assessment and declaration of results should be strictly adhering to the examination calendar.

10.2 Question Paper Setting:

The process of setting question papers will be robust and secure, ensuring fairness and validity. This will involve:

- Guidelines for question paper setters, including the syllabus coverage, cognitive levels of questions, and the distribution of marks.
- A system for moderating question papers to ensure quality and consistency.
- Procedures for maintaining the confidentiality of question papers before, during, and after the examination.
- Use of technology and software for paper setting.

10.3 Conduct of Examination:

The institution will conduct all examinations in a fair and transparent manner, adhering to the following guidelines:

10.3.1 Conduct of ISE:

- The course instructor will be responsible for conducting ISE, following the overall guidelines set by the institution.
- The methods of assessment, schedule, and weightage for each ISE component will be communicated to the students at the beginning of the semester.
- All ISE components will be evaluated and the marks will be promptly recorded.

10.3.2 Conduct of Written MSE and ESE:

- Written MSE and ESE will be conducted in a designated examination hall under strict invigilation.
- Students will be required to adhere to the rules of the examination hall, including rules regarding prohibited items and conduct.
- The institution will ensure adequate seating arrangements, lighting, and ventilation in the examination hall.

10.3.3 Tutorial Evaluation:

- If a course includes tutorials, the evaluation of student performance in tutorials will be based on their participation, problem-solving skills, and assignments.

- The specific methods of evaluation and their weightage will be defined by the course instructor.

10.3.4 Practical Courses and Courses with only ISE components:

- Practical courses will be evaluated based on continuous assessment of laboratory work, experiments, and viva voce examinations.
- Courses with only ISE components will be evaluated based on the various assessment methods employed throughout the semester, as defined in the course syllabus.

10.3.5 Assessment of Projects:

- Projects will be assessed based on the project proposal, progress reports, the final project report, and oral presentations/demonstrations.
- A panel of examiners, including internal and external experts, may be involved in the evaluation process.
- Clear criteria for project evaluation will be established and communicated to the students.

11. Assessment of Written Examination:

The assessment of written examination answer scripts will be conducted by qualified examiners, following a standardized marking scheme. The process will include:

- Providing examiners with a detailed marking scheme.
- Conducting moderation sessions to ensure consistency in marking.
- Implementing a system for the re-evaluation of answer scripts, if necessary.
- Maintaining the confidentiality of the evaluation process.

12. Procedure to Show Theory MSE and ESE Answer Books to Students:

To ensure transparency, students will be allowed to view their evaluated answer scripts for the MSE and ESE theory examinations. The procedure will include:

- A designated time and place for students to view their answer scripts.
- Guidelines for students during the viewing process (e.g., they may not be allowed to take photographs or make copies).
- A mechanism for students to raise any concerns about the evaluation.

13. Preservation of Question Papers and Answer Books:

The institution will establish a policy for the preservation of question papers and answer books, including:

- The duration for which these documents will be preserved.
- The conditions under which they will be stored.
- The procedure for their disposal after the preservation period.

14. Tabulation and Declaration of Results:

The process of tabulating and declaring results will be accurate, efficient, and timely.

14.1 MSE and ESE Results:

- The marks obtained by students in the MSE and ESE will be carefully tabulated.
- The results will be verified by the Controller of Examinations or a designated authority.
- The results will be declared on the official website of the institution and/or through other appropriate channels.

14.2 In-Semester Evaluation (ISE):

- The marks obtained in ISE components will be compiled by the course instructor and submitted to the examination department.
- These marks will be included in the final result tabulation.

14.3 Internal Assessment of Lab Courses:

- The marks obtained in the internal assessment of laboratory courses will be recorded and submitted to the examination department.

14.4 Results:

- The final results, including the marks obtained in all components (ISE, MSE, and ESE), will be compiled and declared.
- The results will be presented in a clear and understandable format, including grades, SGPI, and CGPI.

14.5 Amendment of Results due to errors:

- A procedure will be in place to address any errors in the declared results.

- This procedure will involve verification and approval by the appropriate authorities.
- Any amendments to the results will be officially notified.

15. Unfair Means / Malpractice at Examination:

The institution will take a strict stance against any form of unfair means or malpractice during examinations.

15.1 Competent Authority:

The institution will designate a Competent Authority (e.g., the Examination Committee or a sub-committee) to investigate and take action against cases of unfair means.

15.2 Procedure for Dealing With Cases of Unfair Means at Examination Hall:

If a student is caught using unfair means in the examination hall, the following procedure will be followed:

- The invigilator will confiscate any incriminating material.
- The invigilator will record the incident in detail and obtain the student's statement.
- The matter will be reported to the Competent Authority.
- The student may be allowed to complete the examination, but the result will be subject to the decision of the Competent Authority.

15.3 Procedure for Dealing with Unfair Means observed during assessment:

If unfair means are detected during the assessment of answer scripts, the following procedure will be followed:

- The examiner will report the matter to the head of the department and the Competent Authority.
- The Competent Authority will investigate the case.
- The examiner may be asked to provide evidence.

15.4 Procedure to be followed by Complaint Redressal Committee (CRC):

The institution will establish a Complaint Redressal Committee (CRC) to handle complaints related to unfair means. The CRC will follow these procedures:

15.4.1 For the Purpose of investigating unfair means resorted to by examinee/s at the written MSE OR ESE examination:

- The CRC will conduct a thorough investigation, including gathering evidence and taking statements from the student and invigilator.
- The CRC will provide the student with an opportunity to present their case.
- The CRC will submit a report with its findings and recommendations to the Competent Authority.

15.4.2 For Unfair Means in Conduct of Practical Examination:

- The CRC will investigate any allegations of unfair means during practical examinations, including interviewing the examiners and the students involved.

15.4.3 For Paper Setter/Examiner/Faculty/Any Other Person Involved in Unfair Means with Conduct of Examination:

- The CRC will investigate any allegations of misconduct by paper setters, examiners, faculty, or any other person involved in the examination process.

15.4.4 Guidelines for Imposing Punishment for Malpractices/Lapses by Paper Setter/Examiner/Faculty/Any Other Person:

The institution will have clear guidelines for imposing penalties for malpractices or lapses by any person involved in the examination process. These guidelines will specify the range of punishments, depending on the severity of the offense.

16. Learner's Report Card:

The Learner's Report Card will provide a comprehensive summary of the student's academic performance.

16.1 Conversion of Marks to Grades and Calculations of GPI (Grade Performance Index):

- The institution will define a grading system that converts numerical marks into letter grades.
- Each letter grade will be assigned a specific grade point.
- The Grade Point Index (GPI) for each course will be calculated by multiplying the grade point by the number of credits for that course.

16.2 Calculation of SGPI and CGPI:

- The Semester Grade Point Average (SGPI) will be calculated by dividing the sum of the GPIs for all courses in a semester by the total number of credits taken in that semester.

- The Cumulative Grade Point Average (CGPI) will be calculated by dividing the sum of the GPIs for all courses taken up to a given point by the total number of credits earned up to that point.

16.3 Submission of Examination Documents to Mumbai University:

The institution will submit all required examination-related documents and data to Mumbai University as per the University's guidelines and schedule.

16.4 Eligibility for the award of Degree:

To be eligible for the award of the Bachelor's degree, students must:

- Complete all the prescribed courses.
- Earn the required number of credits.
- Achieve the minimum CGPI specified by the University.
- Fulfill any other requirements as specified by the University and the institution.