

BCREC ACADEMIC REGULATIONS



Edition: 1.0

(Effective from Academic Year 2024-25)

Dr. B. C. ROY ENGINEERING COLLEGE

(An Autonomous Institute)

NAAC ACCREDITED

Approved by: All India Council for Technical Education (AICTE)

Affiliated to: Maulana Abul Kalam Azad University of Technology (MAKAUT), West Bengal

Jemua Road, Durgapur, West Bengal, India, 713206

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1. VISION, MISSION, QUALITY POLICY

1.1 Vision

To transform the institution into a global centre of learning through synergic application of creativity, innovation and discipline

1.2 Mission

- Create ideal ambience for learning and growth
- Help students inherit value-systems, be creative and agile thinkers.
Establish discipline, Value-added education and Training & Placement as three core values.
- Building capabilities among students to lead from the front as also be a team player.
- Develop a symbiotic relationship between the institution, society and the community, for mutual betterment.
- Expand the Vistas of higher learning in Technology and Management Fields, including Post-Graduate Studies and Research.
- Encourage global vision and integration with International Best Practices for Local, Regional and National Development

1.3 Quality Policy

The Institute is committed to impart quality "Education and Training" that satisfy the requirements of its students in the fields of "Engineering, Pharmacy and Management" and its aim is to be an Institute of Excellence in global terms in the field of quality technical education through continual improvement. The Institutes facilitate its faculty and support staff to update their knowledge and skill to match the dynamics of industrial and technological development.

“We have the ability... and if, with our faith in our future, we exert ourselves with determination, nothing, I am sure, no obstacles, however formidable or insurmountable they may appear at present, can stop our progress... (if) all work unitedly, keeping our vision clear, and with a firm grasp of our problems”

Dr. Bidhan Chandra Roy

2. PRELIMINARY DEFINITIONS AND NOMENCLATURES

2.1 Institutional and Organizational Terms

2.1.1 AICTE: Refers to the All India Council for Technical Education, headquartered in New Delhi, which oversees technical education in India.

2.1.2 Autonomous Institute: An institute granted autonomy by the University Grants Commission (UGC) with approval from the affiliating university (Maulana Abul Kalam Azad University of Technology, Kolkata) and the respective State Government.

2.1.3 Academic Autonomy: The independence granted to an institution by the UGC to design and manage its academic programs to achieve excellence.

2.1.4 Institute: Specifically denotes Dr. B. C. Roy Engineering College (Autonomous), Durgapur unless otherwise indicated.

2.1.5 University: Refers to Maulana Abul Kalam Azad University of Technology (MAKAUT), Kolkata, which serves as the affiliating body.

2.2 Academic Bodies

2.2.1 Academic Council: The highest academic authority in the institution, tasked with ensuring the quality of teaching, education, and examinations. It operates as per UGC regulations and holds decision-making power over all academic matters, including research.

2.2.2 Board of Studies (BOS): Department-specific authority established by the Head of the Institution, as per UGC norms. It handles curriculum development and updates for all departmental programs.

2.3 Academic Structure

2.3.1 Academic Year: The period required to complete a course of study within a year, generally comprising two main semesters (odd and even) and a supplementary semester exclusively for final-year students.

2.3.2 Semester: A defined academic period of 21 weeks, ensuring a minimum of 90 working days. Odd semesters typically start in July, while even semesters begin in January.

2.3.3 Discipline: Denotes the specialization offered in a program, such as B.Tech in Electronics and Communication Engineering or Computer Science and Engineering.

2.3.4 Department: Represents the academic division responsible for conducting curricular and co-curricular activities related to a specific discipline, involving both teaching and support staff.

2.4 Courses and Credits

2.4.1 Course: A subject taught by a department during a semester.

2.4.2 Core Course: Courses integral to the discipline and mandatory for the specific program.

2.4.3 Elective Course: Optional subjects that students can choose from a set of courses. Electives may be classified as Professional (discipline-specific) or Open (general options).

2.4.4 Compulsory Course: A course that must be completed as part of the degree requirements.

2.4.5 Credit: Represents the academic weight of a course, calculated based on the number of contact hours per week. One credit is equivalent to one lecture/tutorial hour per week.

2.4.6 Credit Point: The numerical value derived from multiplying the grade point by the course credit.

2.4.7 Pre-requisite: A course that must be completed before advancing to another course.

2.4.8 MOOCs: Massive Open Online Courses offered to promote self-learning. These courses can be included as elective options.

2.4.9 Major: The primary courses of specialization in the degree program, focusing on core concepts, advanced theories, and practical applications within a specific domain

2.4.10 Minor: A supplementary courses chosen alongside the major to broaden interdisciplinary knowledge or acquire additional skills relevant to emerging technologies or complementary disciplines.

2.5 Evaluation and Assessment

2.5.1 Continuous Internal Assessment: An ongoing evaluation system integrated into the learning process to assess student performance throughout the semester.

2.5.2 End Semester Examinations: Final exams conducted at the conclusion of the semester for all courses.

2.5.3 Grade: A letter-based representation of student performance in a course.

2.5.4 Grade Point: A numerical value assigned to grades, based on a 10-point scale.

2.5.5 Cumulative Grade Point Average (CGPA): A measure of a student's overall academic performance across semesters, expressed up to two decimal places.

2.5.6 Backlog Course: Any course in which a student has earned a failing grade (F).

2.6 Program and Outcomes

2.6.1 Program: Refers to undergraduate or postgraduate degree programs such as B.Tech, M.Tech, MBA, or MCA.

2.6.2 Program Educational Objectives (PEOs): Broad goals outlining the career, professional, and personal achievements expected from students after few years (typically 3-5 years) after graduation. PEOs guide how a program contributes to graduates' long-term success and societal impact. They are critical for ensuring the program aligns with the broader vision and mission of the institution.

2.6.3 Program Specific Outcomes (PSOs): PSOs are narrower statements that describe what graduates are expected to know and be able to do in a specialized area of the program immediately after graduation. PSOs focus on specific technical knowledge and skills that graduates need to demonstrate upon completing the program.

2.6.4 Student Outcomes: A set of skills and competencies to be developed during the program, focusing on employability, entrepreneurship, and social/behavioral capabilities.

2.6.5 Course Outcomes: Specific skills and knowledge to be gained upon completing a particular course.

2.6.6 Project Work: A credit-based final-year activity involving design and development or research to achieve specific objectives.

2.7 Other Key Definitions

2.7.1 Curriculum: The planned interaction of students with course content, instructional materials, and assessment methods aimed at meeting educational objectives.

2.7.2 Basic Sciences: Foundational courses like Mathematics, Physics, and Chemistry that provide essential knowledge.

2.7.3 Choice Based Credit System (CBCS): A system offering flexibility in course selection and curriculum design, with credits assigned based on course content and teaching hours.

2.7.4 Experiential Engineering Education (ExEEd): A program blending technical skills with business acumen to prepare students for innovation in engineering entrepreneurship.

2.7.5 Engineering Sciences Courses: Foundational courses covering engineering practices, graphics, and basics of electrical, mechanical, electronics, and computer engineering.

2.7.6 Professional Core Courses: Essential courses that form the core knowledge base of the chosen specialization or discipline.

2.7.7 Elective Courses: Courses offering flexibility, including Professional Electives (advanced topics within the specialization) and Open Electives (interdisciplinary courses from other disciplines).

3. ACADEMIC AUTONOMY: APPLICABILITY, SCOPE, AND IMPLEMENTATION

3.1 Academic Autonomy Applicability:

The academic autonomy granted to the institute applies to all programs offered, including:

- **Undergraduate (UG):** B.Tech degree programs.
- **Postgraduate (PG):** M.Tech, MBA, and MCA programs.

These programs meet the minimum academic quality standards set by the University and the Council for awarding Degrees.

3.2 Scope of Academic Autonomy: Autonomy enables the institute to independently

- Develop schemes of instruction, syllabi, examination methods, and other academic components.
- Obtain approvals for these components from the institute's **Academic Council** and **Governing Body**, while adhering to the University's minimum academic standards for awarding Degrees.

3.3 Introduction of Additional Programs: The Institute can initiate new programs, such as

- **PG Diplomas:** Post-Polytechnic, Post-UG, or Post-PG levels.
- **Certificate Programs:** With approvals from its Academic Council and Governing Body. Certificates or diplomas for such programs will be issued exclusively under the seal of the Institute.
- **PhD:** With approval from its affiliating university (e.g., MAKAUT) complying with the latest UGC (Minimum Standards and Procedure for Award of PhD Degree) Regulations, The degree awarding authority will be the affiliating university (e.g., MAKAUT)

3.4 Performance Assessment and Certification: The institute has the liberty to establish its methods for

- Assessing student performance.
- Publishing results.
- Issuing grade cards, transcripts, and provisional degree certificates (PDC).
- Providing other certificates like College Leaving Certificate (CLC), Character Certificate etc., excluding the Degree Certificate.

3.5 Implementation: To maximize the benefits of autonomy, the institute must

- Structure its academic programs based on a **Semester Scheme** with Credits assigned to various academic activities.
- Introduce **Examination Reforms** to enhance the evaluation process.
- Set appropriate **Passing Standards**, as detailed in subsequent regulations.

4. PROGRAM OUTCOMES (PO'S)

Graduates of UG Engineering Program will be able to:

PO1: Engineering Knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

PO2: Problem Analysis: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

PO3: Design/Development of Solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

PO4: Conduct Investigations of Complex Problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

PO5: Modern Tool Usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations.

PO6: The Engineer and Society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

PO7: Environment and Sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

PO8: Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

PO9: Individual and Team Work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

PO10: Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

PO11: Project Management and Finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

PO12: Life-Long Learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

Graduates of PG Engineering Program will be able to:

PO1: Independently carry out research /investigation and development work to solve practical problems.

PO2: Write and present a substantial technical report/document.

PO3: Demonstrate a degree of mastery over the area as per the specialization of the program. The mastery should be at a level higher than the requirements in the appropriate bachelor program



5. PREFACE

As Principal of Dr. B.C. Roy Engineering College, I am delighted to present the Academic Regulations for our esteemed institution, operating with autonomous status from year 2024-25 onwards. This document represents a significant step in our journey towards academic excellence and reflects our commitment to providing a world-class education. It serves as the definitive guide for all academic activities within the college, outlining the policies, procedures, and expectations for our students, faculty, and staff. It is essential that every member of our academic community carefully reviews and understands the contents herein and give a feedback if any changes are suggested.

Achieving autonomy has provided us with the opportunity to craft a curriculum and assessment framework that is both innovative and relevant to the needs of the 21st-century workforce. These regulations reflect this newfound freedom, allowing us to offer greater flexibility, promote research and innovation, Industry relations, and foster a student-centric learning environment. They are designed to empower our faculty to develop cutting-edge programs and equip our students with the skills and knowledge necessary to thrive in a rapidly changing world.

This Academic Regulations document is the culmination of extensive deliberations and collaborative efforts involving faculty members, academic administrators, industry experts, and student representatives. Their valuable insights and contributions have been instrumental in shaping these regulations, ensuring they are practical, forward-looking, and aligned with the colleges vision and mission for the students who will serve for future generations.



The regulations outlined in this document encompass a wide spectrum of academic matters, including admissions, registration, course structure, examinations, grading, academic integrity, student support services, and grievance procedures. It aims to provide clarity, transparency, and consistency in all our academic processes, ensuring fairness and equity for all members of the college community including students and staff.

I urge all students, faculty, and staff to thoroughly familiarize themselves with this document and refer to it regularly. It is our collective responsibility to uphold these regulations and contribute to a vibrant and intellectually stimulating academic environment. The college administration is committed to providing the necessary support and guidance to ensure the effective implementation of these regulations.

We firmly believe that these updated Academic Regulations will further enhance the academic rigor and reputation of Dr. B.C. Roy Engineering College, enabling our students to achieve their full potential and make significant contributions to society. We welcome feedback and suggestions for the continuous improvement of these regulations in the future.

(Prof (Dr) Sanjay S Pawar)
Principal, Dr. B.C. Roy Engineering College

6. PREAMBLE

Dr. B. C. Roy Engineering College is located in Durgapur, West Bengal, a city known as the heart of the region's industrial belt. Set within a sprawling 14-acre campus surrounded by lush greenery, the Institute provides an inspiring environment for learning and holistic development. Durgapur is significant in India's industrial landscape, particularly for its thriving steel, power, and chemical industries. The Institute is a premier institution dedicated to fostering academic excellence and innovation under an autonomous framework. The Institute proudly bears the name of Bharat Ratna Dr. Bidhan Chandra Roy, honoring his remarkable contributions as a visionary philanthropist, an eminent physician, and the first Chief Minister of West Bengal after the implementation of the Indian Constitution. This naming serves as a tribute to his enduring legacy of service and inspiration. His life and work continue to inspire us.

The institution began its journey on August 21, 2000, and operates as a self-financed institute. Governed by a visionary Board of Trustees, the College is committed to upholding Dr. B. C. Roy's illustrious legacy—a legacy characterized by a dedication to education and social welfare.

The Institution has ten academic departments:

- i. Civil Engineering (CE)
- ii. Computer Science and Design (CSD)
- iii. Computer Science and Engineering (CSE)
- iv. Computer Science and Engineering (Artificial Intelligence & Machine Learning) [CSE (AIML)]
- v. Computer Science and Engineering (Cyber Security) [CSE (Cyber Security)]
- vi. Computer Science and Engineering (Data Science) [CSE (DS)]
- vii. Electronics and Communication Engineering (ECE)
- viii. Electrical Engineering (EE)
- ix. Information Technology (IT)
- x. Mechanical Engineering (ME)

These departments collectively offer ten undergraduate programs leading to a Bachelor of Technology (B. Tech) degree in their respective disciplines. Additionally, the College provides five postgraduate programs, granting Master of Technology (M. Tech) degrees in the following areas:

- Computer Science and Engineering (CSE)
- Electronics and Communication Engineering (ECE)
- Mechanical Engineering (ME)
- Power Systems (under the Electrical Engineering Department)

The College also has two postgraduate departments:

- The Department of Computer Applications, which offers a Masters of Computer Applications (MCA) program.
- The Faculty of Management Science (FMS), which offers a Master of Business Administration (MBA) program.

In April 2024, the college was conferred autonomous status by the **University Grants Commission (UGC), New Delhi**, via **Letter No. F.2-10/2023/(AC-Policy)**, and by the **Maulana Abul Kalam Azad University of Technology, West Bengal**, via **Letter No. 7.30/MAKAUT/Autonomy(BCREC)/2024/567**

As an autonomous institution, it is paramount to establish well-defined statutory bodies and implement robust mechanisms for curriculum development, examination, and evaluation. Furthermore, the institution must formulate and enforce comprehensive rules, regulations, and ordinances to ensure the effective governance and sustained integrity of its autonomous status. The autonomy granted enables the institution to design curricula, evaluation frameworks, and pedagogical approaches that adhere to global standards and align with evolving industry demands, all while upholding its commitment to social responsibility and ethical values. This document serves as a strategic guideline to empower students, faculty, and staff to attain the pinnacle of academic and professional excellence.

The academic regulations presented in this document are meticulously structured to provide a coherent and systematic framework for planning, executing, and managing the academic operations of the institution. These regulations are a testament to the institution's unwavering commitment to:

- Upholding the highest standards of academic integrity and fostering a culture of ethical scholarship.
- Ensuring fairness, transparency, and accountability in all academic processes and practices.
- Advancing innovation, research excellence, and the holistic development of students, preparing them to meet global challenges with competence and integrity.

7. INSTITUTE CORE VALUES AND GUIDING PRINCIPLES

7.1 Academic Integrity: Achieving success through sincerity, loyalty, and ethical practices in all endeavors by

- Demonstrating sincerity and unwavering commitment in all activities.
- Conducting ourselves with professionalism and setting exemplary standards for others.
- Responding thoughtfully to situations rather than reacting impulsively.

7.2 Mutual Respect: Fostering a culture of inclusion, fairness, and courtesy among all stakeholders by

- Treating everyone with dignity, courtesy, and respect.
- Ensuring impartial treatment of students and stakeholders.
- Acknowledging and giving due credit to others for their contributions.

7.3 Social Responsibility: Acting as responsible citizens and sharing collective achievements with the wider community by

- Maintaining a safe and healthy environment for living, learning, and working.
- Collaborating to share knowledge and celebrating collective successes.
- Acting with empathy and kindness while nurturing students' development.

7.4 Accountability: Taking ownership of actions and decisions, especially in service to students by

- Accepting responsibility for outcomes resulting from our decisions and actions.
- Practicing ethical and prudent management of institutional resources.
- Striving for excellence in every situation to uphold institutional values.

7.5 Adaptability: Embracing change as a driver of progress, innovation, and success by

- Welcoming change that leads to growth and innovation.
- Challenging conventional methods and proposing better alternatives when appropriate.
- Continuously expanding personal and professional knowledge, skills, and competencies.

7.6 Creativity: Driving performance, innovation, and student success through transformative initiatives by

- Embracing innovative approaches that promote progress and change.
- Fostering entrepreneurial skills among students with a focus on innovation.
- Providing opportunities for self-directed learning to nurture students' potential and capabilities.

8. ELIGIBILITY CRITERIA AND ADMISSION PROCESS

The admission process and eligibility criteria for B.Tech, MCA, MBA, and M.Tech at Dr. B. C. Roy Engineering College are structured as follows:

8.1 FOR B. TECH

8.1.1 Eligibility Criteria

8.1.1.1 Educational Qualification:

8.1.1.1.1 Must pass the '10+2' exam with **Physics and Mathematics** as compulsory subjects along with any one of:

- Chemistry
- Biotechnology
- Biology
- Computer Science
- Computer Application
- Technical Vocational Subject.

Individual passing marks (theory and practical/project where applicable) are required in all three subjects.

8.1.1.1.2 Must pass **English** in 12th standard with at least **30% marks**.

8.1.1.1.3 **Minimum Marks:** At least **45% marks** (40% for SC/ST/OBC-A/OBC-B/PWD) in the above three subjects (as mentioned in sect 8.1.1.1) taken together.

8.1.1.1.4 Recognized Boards:

8.1.1.1.4.1 Qualifying board must be recognized by the **Central/State Government**.

8.1.1.1.4.2 NIOS qualifications are valid, provided all 12th-level papers are passed.

8.1.2 Admission Procedure

8.1.2.1 **Entrance Exams:** Admission is based on **JEE Main** (National level) or **WBJEE** (State level) and JELET (For Lateral Entry)

8.1.2.2 Counselling Process:

- Candidates must apply for online counselling.
- Submit the counselling fee and fill in choices for institutions and Disciplines.
- Seat allocation is based on:
 - Exam Rank
 - Preferences
 - Category
 - Availability of seats.

8.1.2.3 Required Documents for Counselling:

10th & 12th Admit Cards, Mark Sheets, and Passing Certificates.
Entrance Exam Admit Card and Score/Rank Card.
Allotment Card, Domicile Certificate, and Category Certificate (if applicable).
Guardian's Aadhaar/PAN Card.
Annual Income Certificate (for TFW quota).
Transfer Certificate (TC) or School Leaving Certificate (SLC) of 12th Standard

8.2 FOR M. TECH

8.2.1 Eligibility Criteria

8.2.1.1 Educational Qualification:

- 8.2.1.1.1 A bachelor's degree in **Engineering/Technology** in the relevant discipline.
- 8.2.1.1.2 Graduation with at least **60% marks** or **6.75 CGPA**.

8.2.1.2 Provisional Application:

Candidates appearing for qualifying exams (BE/B.Tech/M.Sc./AMIE Sec A & B) may apply provisionally. Admission is granted on valid proof of qualification.

8.2.2 Selection Criteria

8.2.2.1 Entrance Exams:

Based on **PGET** or **GATE** scores. Candidates with a valid GATE score receive proportional weightage.

8.2.2.2 Counselling:

Through CCMT or counselling conducted by the university.

8.3 FOR MCA

8.3.1 Eligibility Criteria

8.3.1.1 Educational Qualification:

- 8.3.1.1.1 Passed **BCA** or **Bachelor's Degree in Computer Science Engineering**.
OR
Passed **B.Sc./B.Com./B.A.** with Mathematics at **10+2 Level**, or
Graduation level (additional bridge courses as per university norms).
- 8.3.1.1.2 Minimum **50% marks** (45% for reserved categories).

8.3.2 Selection Criteria

- 8.3.2.1 Based on scores in **WB JECA**.
- 8.3.2.2 Selection through counselling.

8.4 FOR MBA

8.4.1 Eligibility Criteria

- 8.4.1.1 **Educational Qualification:** Must have a **Bachelor's Degree** (any field/stream) completed via full-time study.
- 8.4.1.2 **Entrance Exams:** Qualified in **CAT/MAT/JEMAT**.



9. INSTITUTIONAL ADMISSION WORKFLOW AND DOCUMENTATION PROCEDURES

9.1 Admission Workflow

Step 1: Submission of Application Forms for Registration and ID Card

- a. Students collect the **two Application Forms i) for Registration** (for university enrollment) and **ii) for generating the student ID card** from the Admission Department.
- b. They fill out the forms with personal, academics, stream applied for, WBJEE rank, JEE(Mains), JECA rank and contact details and attach required documents (e.g., mark sheets, certificates, photos).
- c. The completed forms are submitted to the Admission Department, where the details are verified for accuracy and completeness.

Step 2: Online Admission Form Fill-Up and Verification

- a. Students visit the department where they are applying to for filling out the **Online Admission Form** (for creating a digital ERP record).
- b. Academic staff verifies the mark sheets, certificates, and other documents to confirm eligibility for admission.
- c. After successful submission, an **ERP Application Number** is generated, which uniquely identifies the student in the system.
- d. Students are then guided to return to the Admission Department for further formalities.

Step 3: Approval, Roll Number Allotment, and Fee Payment

- a. Students provide the **ERP Application Number** to the Admission Department for verification of their details and forms.
- b. The Admission Department approves the application and assigns a **College Roll Number** to the student (their unique identifier in the college system).
- c. Students complete the **admission fee payment** at the designated counter or via the ERP system.
- d. A payment receipt is issued, confirming that the admission process is officially complete.

Step 4: Submission of Anti-Ragging Affidavit

- a. Students prepare an **Anti-Ragging Affidavit** as per UGC guidelines, via a legal service provider.
- b. The signed affidavit is submitted to the Admission Department for compliance with anti-ragging regulations.

Step 5: Measurement for Dress Uniform

- a. Measurements for the **college uniform** are taken by a designated tailor or uniform vendor.
- b. Students are informed of the expected timeline for the delivery of their uniforms.

Step 6: Transfer of Documents to the Academic Department

- a. The Admission Department organizes all documents, including:
 - i. Registration Form
 - ii. Verified mark sheets and certificates
 - iii. Anti-Ragging Affidavit
 - iv. ERP details
- b. These documents are forwarded to the respective **Academic Department**, ensuring the student's records are complete and available for academic management.

Step 7: Commencement of Classes

- a. Students are notified of the **official start date** for their classes.
- b. They can begin attending classes from the **scheduled date**, as announced by their institute.
- c. Timetables and other relevant academic information are shared with students to ensure a smooth transition to their academic journey in Dr B C Roy Engineering college

ENGINEERING

9.2 Student Registration And Roll Number Generation

9.2.1 University Registration

1. Upload Data on University Portal

- a. The data from the already filled-in **Online Admission Form and Registration Form** is uploaded to the University Portal.
- b. Scanned copies of all required testimonials (e.g., mark sheets, certificates, ID proof) are also uploaded as part of the registration process.

2. Generation of University Registration Number

After successful data upload and verification, the University generates a **Registration Number** for the student, which serves as their unique identifier within the university system.

9.2.2 Generation of Institution Examination Roll Number

- The institute generates a **12-digit Exam Roll Number** through the Office of the Controller of Examinations (COE) of Dr. B.C. Roy Engineering College.
- The 12-digit format of the Exam Roll Number is structured as follows:

First 3 digits: College code (e.g., **120** for Dr. B.C. Roy Engineering College).

Next 3 digits: Program code (e.g., **001** for CSE, **003** for ECE).

Next 2 digits: Year of registration (e.g., **24** for the year 2024).

Next digit: Duration of the course (e.g., **4** for B.Tech, **2** for MCA).

Last 3 digits: Serial number of the student (e.g., **001**, **002**, etc.).

Example:

For a student admitted to the **B. Tech in Computer Science Engineering** program in the academic year **2024-25**, their roll number will follow this format: **120001244001**

120: College code (Dr. B.C. Roy Engineering College).

001: Program code for CSE.

24: Year of registration (2024).

4: Duration of the course (4 years for B.Tech).

001: Serial number of the student.

9.2.3 Institute Level Semester Course Enrollment/Registration

From the second semester (of the first year) onwards, it is **mandatory** for students to complete and submit the Course Enrollment/Registration Form before the commencement of every semester. This process ensures the smooth functioning of the academic system and the orderly progression of students through their courses.

9.2.3.1 The importance of Registration:

- a. The registration process formalizes a student's continuation in the program, serving as an official record of their enrollment for the semester.
- b. It enables the department to allocate resources effectively, including faculty, classrooms, and study materials, based on the number of registered students.
- c. Registration ensures that students have fulfilled academic and financial prerequisites, allowing only eligible students to advance to the next semester.
- d. Accurate registration records are crucial for institutional audits, accreditation processes, and compliance with regulatory requirements.
- e. Registered students are granted access to regular academic classes, course materials, and institutional facilities such as libraries and laboratories.
- f. By enforcing deadlines and compliance, the process reduces confusion and ensures efficient management of academic, administrative, and financial activities.
- g. Timely registration reflects a student's dedication to their academic responsibilities and helps prevent disruptions caused by late submissions or non-enrollment.

9.2.3.2 Mandatory Submission and Consequences of Non-Compliance

9.2.3.2.1 The Course Enrollment/Registration Form, available from the department, must be submitted to their respective department within the stipulated deadline at the beginning of each semester.

9.2.3.2.2 Submission of this form is **compulsory**, and failure to comply will result in serious consequences as follows:

9.2.3.2.2.1 Students who do not submit the form within the due date will be deemed to have voluntarily withdrawn from the course.

9.2.3.2.2.2 Such students will be **de-enrolled from the program** and will not be permitted to attend regular academic classes.



10. INSTITUTE WORKING HOUR AND HOLIDAYS

10.1 Regular Working Days:

Monday to Friday (10:00 AM to 5:30 PM)

These timings are subject to change as needed, with prior notification.

Exceptional Working Saturdays:

- If required, prior notice will be given by the Institute.
- On such Saturdays, the **Monday time-table** will be followed unless specified otherwise

10.2 Holidays:

- **Saturdays and Sundays** are usually weekend holidays.
- **Annual Holiday List:**

Besides the above weekend holidays, a **list of holidays for the entire year** (January to December) will be issued by the Institute in the **first week of January** every year.



11. MEDIUM OF INSTRUCTION

The **medium of instruction** for all courses, examinations, seminar presentations, and project work shall be **English**.

12. PROGRAM CURRICULUM

- The program curriculum will consist of **courses of study** as outlined in the **course structure**.
- The curriculum will strictly follow the **prescribed syllabi** for each course.

12.1 Programs Offered in Under Graduate

Under the autonomous status, the institution offers following UG programmes in the Academic year 2024-25 as mentioned in Table 1:

Table1: Undergraduate Programmes

S. No	Program code	Programmes	Dept	Minimum Credit required		Duration in Years	
				Regular	Lateral	Regular	Lateral
1	013	Bachelor of Technology in Civil Engineering	CE	160	120	4	3
2	315	Bachelor of Technology in Computer Science And Design	CSD	160	120	4	3
3	001	Bachelor of Technology in Computer Science & Engineering	CSE	160	120	4	3
4	308	Bachelor of Technology in Computer Science & Engineering (Artificial intelligence and Machine learning)	CSE (AI ML)	160	120	4	3
5	317	Bachelor of Technology in Computer Science and Engineering (Cyber Security)	CSE (CS)	160	120	4	3
6	305	Bachelor of Technology in Computer Science and Engineering (Data Science)	CSE (DS)	160	120	4	3
7	003	Bachelor of Technology in Electronics & Communication Engineering	ECE	160	120	4	3
8	016	Bachelor of Technology in Electrical Engineering	EE	160	120	4	3
9	002	Bachelor of Technology in Information Technology	IT	160	120	4	3
10	007	Bachelor of Technology in Mechanical Engineering	ME	160	120	4	3

A student after securing admission should complete the UG programme in a minimum period of **four** academic years (8 semesters), and a maximum period of **nine** academic years (18 semesters) starting from the date of commencement of first year first semester, failing which student shall forfeit seat in B.Tech course. Each student shall secure atleast 160 credits (120 for Lateral Entry students) (with CGPA \geq 6) required for the completion of the undergraduate programme and award of the B.Tech. degree.

12.2 Programs Offered in Post Graduate

Under the autonomous status, the institution offers following PG programmes in the Academic year 2024-25 as mentioned in Table 2:

Table 2: Postgraduate Programmes

S. No	Program code	Programmes	Dept	Min. Credit required	Duration in Years
1	009	Master of Business Administration	FMS	80	2
2	710	Masters of Computer Application	CA	80	2
3	112	Master of Technology in Computer Science & Engineering	CSE	80	2
4	105	Master of Technology in Electronics & Communication Engineering	CEC	80	2
5	624	Master of Technology in Mechanical Engineering	ME	80	2
6	133	Master of Technology in Power Systems Engineering	EE	80	2

A student after securing admission should complete the PG programme in a minimum period of **two** academic years (4 semesters), and a maximum period of **five** academic years (10 semesters) starting from the date of commencement of first year first semester, failing which student shall forfeit seat in PG course. Each student shall secure atleast 80 credits (with CGPA \geq 6) required for the completion of the postgraduate programme and award of the M.Tech/MBA/MCA degree.

13. SEMESTER STRUCTURE

The Institute follows semester system. An academic year consists of two semesters. The duration of each semester is around 21 weeks with 90 working days and 5 days a week. A working day shall have eight lecture hours with a recession period of 50 minutes from 1:20 PM to 2:10 PM. Each academic year is divided into two semesters, **ODD and EVEN** semester. Both the semesters have regular class work.

- Each semester shall be of 18 weeks (Table 3) duration, and this period includes time for course registration, regular instruction class (both theory and practical) for academic curriculum and placement related activities, extracurricular and co-curricular activities and conduction of Continuous Internal Assessments (CIA).
- Additional 3 weeks will be allotted for End Semester Examinations
- Each semester shall have a minimum of 90 Instructional / working days.
- The academic calendar for both Odd and Even semester as shown in Table 3 will be declared at the beginning of the academic year.

Table 3: Academic Calendar Framework

FIRST SEMESTER (ODD) (21 Weeks)	Instruction Period: Spell- I	8 weeks	18 weeks
	Continuous Internal Assessment (CIA 1): MID SEM	1 week	
	Instruction Period: Spell- II	8 weeks	
	Continuous Internal Assessment (CIA 2)	1 week	
	End semester Practical Exam	1 week	3 weeks
	End semester Theory examination	2 week	
SEMESTER BREAK			2 weeks
SECOND SEMESTER (EVEN) (21 Weeks)	Instruction Period: Spell- I	8 weeks	18 weeks
	Continuous Internal Assessment (CIA 1): MID SEM	1 week	
	Instruction Period: Spell- II	8 weeks	
	Continuous Internal Assessment (CIA 2)	1 week	
	End semester Practical Exam	1 week	3 weeks
	End semester Theory examination	2 week	
SEMESTER BREAK			2 weeks

14. CREDIT SYSTEM

All subjects/ courses are to be registered by the student in a semester to earn credits. Depending on the complexity and volume of the course, the number of contact periods per week will be assigned. Each theory and laboratory course carries credits based on the number of hours/ weeks.

- Contact classes (Theory): 1 credit per lecture hour per week, 1 credit per tutorial hour per week. Accordingly, one Credit would approximately equivalent of 14-15 hrs of theory in a semester.
- Laboratory hours (Practical): 1 credit for 2 practical hours per week. Accordingly, one Credit would approximately equivalent of 28-30 hrs of workshop/lab work in a semester.
- Project work: 1 credit for 2 hours of project work per week. Accordingly, one Credit would approximately equivalent of 28-30 hrs of workshop/lab work in a semester.
- Experiential learning including relevant experience and proficiency/ professional levels acquired: 1 Credit is approximately equivalent to 40-45 hours.
- Mandatory courses/ Value added courses: No credit is awarded. However, for MCA department 2 credit is awarded.

Courses like Environmental Science, Constitution of India, Intellectual Property Rights, Indian Knowledge System, Gender Sensitization Lab are mandatory courses. These courses will not carry any credits.

15. CATEGORIZATION OF COURSES

Courses in a curriculum may be of three broad kinds: **Foundation / Skill courses, Program core courses, Program elective courses and Open elective courses.**

Foundation / Skill Course:

Foundation courses are designed to enhance **knowledge**, and **values** essential for holistic education. They focus on building a strong base aimed at **character development** and **man-making education**.

Skill courses are designed to develop specific **skills** that are fundamental for learning any course or discipline. These courses equip students with the ability to grasp advanced concepts and excel in their academic and professional journeys.

Program core courses (PCC):

- Program Core Courses are **mandatory courses** that must be studied by students as part of the core requirements to complete the program in their respective discipline.
- These courses are offered in **every semester** to ensure a structured and comprehensive understanding of the core subject areas.

- The PCC ensures that students gain essential **theoretical knowledge** and **practical skills** central to their field of study.

Program elective courses (PEC) / Open elective courses (OEC):

Electives are designed to provide students with a **broader academic experience** in their respective fields and related application areas.

Program Elective Courses (PEC):

- Program Electives are **discipline-centric courses** chosen from a **pool of courses**.
- These courses focus on:
 - Supporting the core discipline of study.
 - Providing an **expanded scope** of learning within the field.
 - Nurturing students' **proficiency** and skills related to the discipline.

Open Elective Courses (OEC):

- Open Electives are courses selected from **unrelated disciplines** or domains.
- They provide students with:
 - Exposure to new fields of study.
 - Opportunities to develop interdisciplinary skills.
 - Flexibility to explore areas of personal or professional interest.

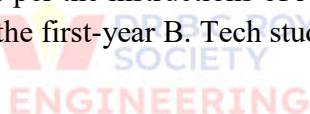
These broad three categories are further categorised in nine subcategories. Every course of the B.Tech program will be placed in one of the nine categories with minimum credits as listed in the Table 4.

Table 4: Course categories

Sr. No.	Categories	Category Details	Approx. Credits
1	Humanities and Social Sciences including Management Courses (HMSC)	Technical English, Engineering Ethics and Human Values, Environmental Science and Engineering, Communication skills and Management Courses	07
2	Basic Sciences courses (BSC)	Mathematics, Physics, Chemistry, Biology, etc.	28
3	Engineering Sciences Courses (ESC)	Engineering Practices, Engineering Graphics, Basics of Electrical / Electronics / Mechanical / Computer Engineering, Instrumentation etc	09
4	Professional Core Courses (PCC)	Core courses relevant to the chosen Specialization / Discipline	75
5	Professional Elective Courses (PEC)	Elective courses relevant to the chosen specialization / Discipline	18

6	Open Elective Courses (OEC)	Courses from other Disciplines which a Student can choose from the list specified in the curriculum of B. Tech. Programmes	09
7	Employability Enhancement Courses (EEC)	Project Work, Internship, Career Development Skills, Creative and Innovative Project, Seminar, Professional Practices, Case Study and Industrial/Practical Training	14
8	Mandatory Course (MC) / Audit Course (AC):	Courses like (i) Constitution of India and (ii) Essence of Indian Traditional Knowledge which are non-credit courses. A student shall register for courses for audit only, with a view to supplement his/her knowledge and/or skills. The student's grades in such course(s) will be reflected in the grade card. These shall not be considered in determining the student's academic performance in the semester and also for vertical progression.	Non Credit
TOTAL			160

In addition to the above courses, as per the instructions of AICTE in its model UG, there will be a three-week Induction Program for the first-year B. Tech students



As per NEP 2020

The categorization of Courses and the minimum credit required of each category:

For UG Programs

Sl. No.	Broad category	Minimum Credit required	
		3-Yr UG	4 Yr UG
1	Major (Core)	60	80
2	Minor	24	32
3	Multidisciplinary	09	09
4	Ability Enhancement Courses (AEC)	08	08
5	Skill Enhancement Courses (SEC)	09	09
6	Value Added Courses(VAC)	6-8	6-8
7	Summer Internship	2-4	2-4
8	Research Project/ Dissertation	NA	12
	TOTAL	160	160

For PG Programs

Sl. No.	Broad category	Minimum Credit required
		2-Yr PG
1	Major (Core)	32
2	Minor (Interdisciplinary)	16
3	Multidisciplinary (open Elective)	4
4	Skill Enhancement Courses (SEC)	8
5	Research Project/ Dissertation/Thesis	20
	TOTAL	80

Major:

The major would provide the opportunity for a student to pursue in-depth study of a particular subject or discipline. Students may be allowed to change major within the broad discipline at the end of the second semester by giving her/him sufficient time to explore interdisciplinary courses during the first year. The final semester will be devoted to seminar presentation, preparation, and submission of project report/dissertation. The project work/dissertation will be on a topic in the disciplinary programme of study or an interdisciplinary topic.

Minor:

Students will have the option to choose courses from disciplinary/interdisciplinary minors and skill-based courses relating to a chosen vocational education programme. Students who take a sufficient number of courses in a discipline or an interdisciplinary area of study other than the chosen major will qualify for a minor in that discipline or in the chosen interdisciplinary area of study. A student may declare the choice of the minor and vocational stream at the end of the second semester, after exploring various courses.

Multidisciplinary:

All UG students are required to undergo 3 introductory-level courses relating to any of the broad disciplines given below.

- **Natural and Physical Sciences:** Biology, Botany, Zoology, Biotechnology, Biochemistry, Chemistry, Physics, Biophysics, Astronomy and Astrophysics, Earth and Environmental Sciences, etc.
- **Mathematics, Statistics, and Computer Applications:** The course may include training in programming software like Python among others and applications software like STATA, SPSS, Tally, etc.
- **Library, Information, and Media Sciences:** Journalism, mass media, and communication
- **Commerce and Management:** Courses include business management, accountancy, finance, financial institutions, fintech, etc.,

- **Humanities and Social Sciences:** Anthropology, Communication and Media, economics, History, Linguistics, Political Science, Psychology, Social Work, Sociology, Archaeology, History, Comparative Literature, Arts & Creative expressions, Creative Writing and Literature, language(s), Philosophy, Cognitive Science, Environmental Science, Gender Studies, Global Environment & Health, International Relations, Political Economy and Development, Sustainable Development, Women's and Gender Studies

Ability Enhancement Courses (AEC):

Modern Indian Language (MIL) & English language focused on language and communication skills

Skills Enhancement Courses (SEC):

These are the Courses which are aimed at imparting practical skills, hands-on training, software tools, soft skills, etc., to enhance the employability of students.

Value-Added Courses (VAC):

The courses which are aimed at **Understanding India, Environmental science/education, Digital and technological solutions, Health & Wellness, Yoga education, sports, and fitness**

Summer Internship /Apprenticeship:

All students need to undergo internships / Apprenticeships in a firm, industry, or organization or Training in labs with faculty and researchers in their own or other HEIs/research institutions during the summer term.

Research Project / Dissertation:

Students choosing a 4-Year Bachelor's degree (Honours with Research) are required to take up research projects under the guidance of a faculty member. The students are expected to complete the Research Project in the eighth semester. The research outcomes of their project work need to be published in peer-reviewed journals or may be presented in conferences /seminars or may be patented.

Students in 2-year PG programs must undertake a Research Project or Dissertation, starting in the third semester and completing it in the fourth. Under faculty guidance, the project aims to foster critical thinking and research skills, with outcomes to be published in peer-reviewed journals, presented at conferences, or patented, ensuring meaningful contributions to their field.

16. ATTENDANCE REQUIREMENTS

16.1 A student is eligible to appear for the **End Semester Examinations** only if they achieve a minimum of **75% attendance in aggregate** for all subjects/courses, including **mandatory courses** such as Environmental Science, Constitution of India, Intellectual Property Rights, Gender Sensitization Lab etc.

16.2 Shortage of attendance up to 10% (65% and above, but below 75%) may be condoned by the **Institute Academic Council**, provided the following conditions are met:

- The student submits a **representation** along with valid supporting evidence for the shortage.
- The grounds for the shortage are deemed **genuine and valid** by the Academic Council.

16.3 Shortage of attendance below 65% in aggregate shall **not** be condoned under any circumstances.

16.4 Consequences of Insufficient Attendance:

Students whose shortage of attendance is **not condoned**:

16.4.1 Will **not be eligible** to take the **Semester End Examinations**.

16.4.2 Will be **detained**, and their **registration for the semester will be canceled**, including all academic credentials (e.g., internal marks) for that semester.

16.4.3 Will **not be promoted** to the next semester.

17. ACADEMIC REQUIREMENTS

The following academic requirements have to be satisfied, in addition to the attendance requirements mentioned in Section. 16.

17.1 For Theory Papers:

17.1.1 If a student fails to secure 40% in CIA, the course coordinator/faculty will implement remedial measures and reassess the student to help meet the required target.

17.1.2 If a **final-year student** fails to secure 40% in the ESA (End Semester Assessment), a supplementary examination will be conducted after the necessary remedial measures. The supplementary examination will be organized within **two months** of the ESA result declaration, and the schedule will be notified by the Office of **Controller of Examinations (CoE)**.

17.1.3 Students in **1st, 2nd, and 3rd years** who fail to secure 40% in the ESE must clear the backlog in the **next regular semester** as part of their routine examination

schedule. The institution will provide remedial support, such as additional classes, tutorials, or study resources, to help students address the gaps in understanding.

17.1.4 Students will need to pay a fee for appearing in the supplementary/backlog examination, as determined by institution.

17.2 For Practical Papers:

17.2.1 If a student fails to secure 50% in **Practical Continuous Internal Assessment (PCIA)**, the course coordinator/faculty will provide remedial tasks, which may include additional experiments, projects, or viva assessments. The student must complete these tasks within a specified period, followed by reassessment.

17.2.2 A **final-year student** who fails to secure **50% in Practical End semester Examination (PESE)**, a **supplementary practical examination** will be organized after remedial training within **two months** of the initial examination result declaration under the supervision of the **Head of the Department (HoD)** and upon getting approval from the office of **Controller of Examinations (CoE)**

17.2.3 Students in the **1st, 2nd, or 3rd years** who fail to secure 50% in PESE the Practical End Semester Examination (PESE) will be **subject to a Year Lag** and will be required to repeat the academic year, irrespective of their current year of study.

During the repeated year, students must:

17.2.3.1 Re-register for all courses of the both the semesters.

17.2.3.2 Participate fully in all classes, practical sessions, and assessments.

17.2.3.3 Complete remedial tasks or additional preparation as assigned by the Course.

17.2.3.4 Undergo all continuous assessments and end-semester examinations afresh.

17.3 Mandatory Additional Requirements (MAR) for B.Tech. and B.Tech. (Honours) Degrees:

17.3.1 Applicability:

The **Mandatory Additional Requirements (MAR)** are compulsory for all students pursuing a **B.Tech.** or **B.Tech. (Honours)** degree under the autonomous framework.

17.3.2 Points Requirement:

17.3.2.1 Students must accumulate a total of **100 points** over four years of study to qualify for the degree.

17.3.2.2 **Lateral entry students** are required to accumulate **75 points** within three years of study.

17.3.3 Yearly Distribution of Points:

The required points are evenly distributed across the academic years:

17.3.3.1 **25 points per year** for regular-entry students.

17.3.3.2 **25 points per year** for lateral entry students over three years.

17.3.3.3 Students **must earn the minimum required points each year** to avoid a backlog.

17.3.3.4 A **backlog of MAR points** must be cleared in the **subsequent academic year**, failing which the student may face delays in academic progression.

17.3.4 Final-Year Criteria:

For **final-year students**, the **degree will not be awarded** if they fail to accumulate the required total of **100 points** (or **75 points** for lateral entry) by the end of their program.

17.3.5 Recognition for Outstanding Achievements:

Students demonstrating **outstanding performance or special achievements** in MAR activities will receive certification or awards recognizing their contributions.

17.3.6 Exceeding Maximum Points:

Students who accumulate points exceeding the required total will have their **total MAR points reflected** on their final certificate, showcasing their exceptional engagement in MAR activities.

17.3.7 Guidance and Certification:

17.3.7.1 The **MAR table within the syllabus** provides the detailed categories and activities through which students can earn points.

17.3.7.2 Certification of MAR points will be handled by the respective committees, under the supervision of the institution.

17.4 MOOCs and Credit Requirements for B.Tech. (Honours) Degree:

To obtain a **B.Tech. (Honours)** degree, students must earn an additional **20 credits** (or **16 credits** for lateral entry students) through **MOOCs (Massive Open Online Courses)**. A comprehensive list of relevant MOOCs, aligned with the curriculum from the **first to the fourth year**, is provided in the syllabus.

17.4.1 Credit Distribution:

17.4.1.1 **Regular Students (20 Credits)** While the following distribution is provided as a guideline only, it is not mandatory for students to adhere to it. The departments with the approval of the BOS can decide the distribution of 20 credits:

First Year: 3–6 credits

Second Year: 3–6 credits

Third Year: 3–6 credits

Fourth Year: 6 credits

17.4.1.1 **Lateral Entry Students (16 Credits):**

Credits can be earned flexibly across the three years of study as determined by the department with BOS approval.

17.4.2 Guidelines for MOOCs Selection:

17.4.2.1 MOOCs must be taken on **recognized platforms** selected by the Institute (e.g., NPTEL, Swayam, Coursera, IIT Mumbai Spoken Tutorial, edX, Udemy, Simplilearn, etc.) to earn **MOOCS Honours**.

17.4.2.2 Students must avoid selecting MOOCs that overlap with courses (with or without credit) offered in the regular **B.Tech. curriculum**.

17.4.3 Credit Points for MOOCs:

17.4.3.1 **For NPTEL/Swayam platforms/IIT Mumbai Spoken Tutorial:** Credits will be awarded as per the platform's specifications.

17.4.3.2 **For other platforms (approved by BOS):**

4 to 7 weeks: 1 credit

8 to 11 weeks: 2 credits

12 to 15 weeks: 3 credits

16 weeks or more: 4 credits

17.4.3.3 **For courses with durations specified in hours:**

Every 8 hours of course content: 1 credit

Courses less than 8 hours can be combined (preferably in the same subject area) to achieve 1 credit.

Hour-based calculation does not apply if the duration is specified in weeks.

17.4.4 Flexibility in Credit Allocation:

The **Board of Studies (BoS)** may propose alternative credit allocations based on the content, difficulty level (beginner/intermediate/advanced), or platform.

17.4.5 Credit Transfer for MOOCs:

Students can complete various courses in the curriculum through MOOCs, and the **earned credits** can be transferred upon successful completion.

17.4.6 Special Permission for MOOCs:

If a student cannot attend a theory course due to valid reasons (e.g., internship), they may:

- Seek **special permission** to complete an equivalent MOOCs course.
- The course content must be **mapped by the BoS**, and students may need to complete multiple MOOCs courses to match the syllabus.

17.4.7 Evaluation of MOOCs:

Evaluation will be conducted by the offering organization. In exceptional cases, the evaluation method will be decided by the appropriate authority (online/offline/certified personnel).

17.4.8 Uploading of MOOCs Data:

Departments must upload details of completed MOOCs to the **Institute's examination portal** and/or submit documentation (hard or soft copies) as directed from the office of Controller of Examinations (CoE).

17.4.9 MOOCs under Mandatory Additional Requirements (MAR)

- MOOCs taken under MAR aim to encourage students to engage with digital learning resources.
- Unlike the credit-based MOOCs for Honours, MOOCs under MAR earn **points** as per the MAR scheme and do **not carry credits**.
- **MOOCs used for Honours credit cannot be counted towards MAR points.**

17.4.10 General Guidelines:

Certificates uploaded to the Institution Examination portal must be approved by the relevant committee or expert review.

18. PROMOTION POLICY FOR B.TECH./M.TECH./MBA/MCA PROGRAMS:

18.1 Promotion Policy:

The promotional status is reflected on the **even semester grade card (year-wise)** and is determined based on the following criteria:

18.1.1 Eligibility for Promotion with Backlogs:

A student may be promoted to the next academic level/year even with **backlogs**, provided that the backlogs are cleared within the **time limit set for course completion**, as per Institute/University guidelines.

18.1.2 Non-eligibility for Promotion:

A student will not be eligible for promotion if:

18.1.2.1 They **fail to meet the required passing criteria** in either theory or practical papers even after:

- **Supplementary examinations** for final-year students.
- **Backlog examinations** for other-year students.

18.1.2.2 They have been involved in **disciplinary violations**, as determined by the Institute/University. Students with records of disciplinary violations will have their promotion status reviewed by the appropriate disciplinary committee

18.1.2.3 They have exceeded the **time limit for course completion**, as prescribed by the Institute/University.

18.1.3 Time Limit for Course Completion:

The **time limit for course completion**, is calculated as $2n + 1$, where **n** represents the course duration in years (e.g., 4 years for B.Tech., 2 years for M.Tech./MBA/MCA).

For example:

- B.Tech. program: $4 \times 2 + 1 = 9$ years maximum.
- M.Tech./MBA/MCA program: $2 \times 2 + 1 = 5$ years maximum.

19. EVALUATION METHODOLOGY

Faculty members who have a ward or close relative enrolled in their subject(s) are required to declare this relationship in writing to the respective Head of Department (HOD) at the commencement of the semester. This declaration ensures transparency and addresses potential conflicts of interest. To maintain fairness and impartiality in the evaluation process, such faculty members will be excluded from participating in the assessment of that specific subject.

The evaluation process for all courses, designed to ensure consistency and fairness, will be based on a total of 100 marks, divided between Continuous Internal Assessment (CIA) and End Semester Examinations (ESE). For theory courses, the weightage will be 40% for CIA and 60% for ESE, while for practical courses; it will be 60% for CIA and 40% for ESE. This structured evaluation system, combined with the conflict-of-interest policy, upholds academic integrity and ensures unbiased assessment for all students.

19.1 For Theory Papers

The institute will conduct two Continuous Internal Assessments (CIA-1 and CIA-2) for theory courses, where **CIA-1 will serve as the mid-semester evaluation**. All aspects of a student's performance will be evaluated and considered for the allocation of CIA marks.

Table 5: Outline for Continuous Internal Assessments (CIA-1 and CIA-2) and ESE:

Activities	CIA-1	CIA-2	SEE	Total Marks
Continuous Internal Examination (CIE)	30 marks (to be scaled down to 20)	20 marks		40 marks (sum of two CIA marks.)
End Semester Examination (ESE)			70 marks	60 marks (scaled down from 70 marks)
Total				100 marks

19.1.1 Continuous Internal Assessments (CIA-1 and CIA-2) [40marks]:

Assessment is a continuous process that starts with defining clear and measurable learning outcomes for students, ensures that students are provided ample opportunities to achieve those outcomes, and culminates in collecting and analyzing evidence to evaluate how effectively student learning aligns with the established expectations.

The first component of assessment (CIA-1) will be a written examination of 30 marks. This exam will be conducted by the respective course faculties under the supervision of the Head of

the Department (HOD). It will be scheduled after the completion of the first 50% of the course syllabus and must be conducted within 45 working days from the start of the semester program.

The second component of assessment (CIA-2) will account for 20 marks and include activities such as assignments (case studies, report writing, simulations), mini-projects, group discussions, presentations, open-book tests, or quizzes. This evaluation will take place after the remaining 50% of the syllabus has been completed and must be concluded before the semester ends.

If a student fails to appear for CIA-1 or CIA-2 on the scheduled date, it will be considered as a dropped assessment. However, if the absence is due to genuine reasons, the student may appeal to the HOD or Principal. Upon review, and in consultation with the respective faculty, the HOD or Principal will assess the validity of the case. If deemed genuine, a Make-Up Examination will be arranged for the student on a date decided by the department, provided it is conducted before the commencement of the End Semester Examinations.

19.1.2 End Semester Examination (ESE) [60 marks]:

The End Semester Examinations (ESE), for theory courses, will be conducted for 70 marks which will be scaled down to 60 marks. The duration of examination is 3 (Three) hours. The End Semester Examination (ESE) will consist of three distinct sections to evaluate various cognitive levels:

Group A: Very Short Answer Type Questions (10 Marks)

Format: This section will include 12 questions, each carrying 1 mark. Students are required to attempt any 10 questions.

Focus: Designed to test foundational knowledge and basic understanding of concepts.

Group B: Short Answer Type Questions (15 Marks)

Format: This section will include 5 questions, each worth 5 marks. Students must answer any 3 questions.

Focus: Evaluates conceptual clarity and the ability to explain or demonstrate understanding through concise answers.

Group C: Long Answer Type Questions (45 Marks)

Format: This section will consist of 5 questions, each carrying 15 marks. Students are required to answer any 3 questions. Each question must include subparts, with **no individual subpart exceeding 5 marks**.

Focus: Assesses analytical, evaluative, and design skills, ensuring that the questions require deeper understanding and problem-solving abilities.

19.1.3 Comprehensive Guide to Question Paper Design for a course with illustration

Question paper design for a course (for example: Signals and Systems) must align with learning objectives, leveraging Bloom's Taxonomy and Course Outcomes (COs) to ensure a balanced

evaluation of cognitive levels. This guide incorporates a Continuous Internal Assessment (CIA) component of 30 marks and an End Semester Examination (ESE) of 70 marks. Additionally, the guide outlines the mapping of Bloom's Taxonomy with COs, structuring question papers, and attainment calculation.

Step 1: Course Outcomes (COs) and Learning Levels

Example Course Outcomes for Signals and Systems:

1. CO1: Explain the basic properties and classifications of signals and systems. (Understand)
2. CO2: Apply Fourier and Laplace transforms to analyze signals in time and frequency domains. (Apply)
3. CO3: Analyze linear time-invariant (LTI) systems for stability, causality, and frequency response. (Analyze)
4. CO4: Design filters or systems to meet specific requirements. (Create)

(For demonstration purpose, only 4(Four) COs are considered. It is advisable to have atleast 6(Six) COs for each course.)

Step 2: Mapping Bloom's Taxonomy with COs

The mapping of Bloom's Taxonomy to Course Outcomes ensures assessments for various cognitive skills.

Table 6: Mapping of Bloom's Taxonomy with Cos

Bloom's Taxonomy	Bloom's Level (BL)	Description	Mapped COs
Remember	1	Recall facts, definitions or properties	CO1
Understand	2	Explain properties and relationships	CO1
Apply	3	Solve problems using learned techniques	CO2
Analyze	4	Examine system behavior and components	CO3
Evaluate	5	Compare and assess system performance	CO3
Create	6	Design solutions or systems for specific needs	CO4

Step 3: Structuring Question Papers

End Semester Examination (ESE)

The ESE is structured into three groups to assess students across different cognitive levels:

Group A: Very Short Answer Type Questions (1 X 10 =10 Marks)

Question Type: Objective type to get one liner answer

Examples:

Question: State the Laplace Transform of a unit impulse signal. (CO: CO2, BL: 3)

Question: Identify a condition that makes a signal periodic.(CO: CO1, BL:2)

Question: What does the sampling theorem state about the sampling frequency for a band-limited signal? (CO: CO2, BL: 3)

Question: What condition must the impulse response of a stable LTI system satisfy? (CO: CO3, BL: 4.)

Group B: Short Answer Type Questions (3x5=15 Marks)

Question Type: Conceptual and problem-solving, each worth 5 marks.

Examples:

Question: Illustrate the properties of LTI systems with examples. (CO1, BL: 2)

Question: Compute the Fourier transform of a rectangular pulse. (CO2,BL:3)

Question: Explain the causality and stability of systems with respect to impulse response. (CO3, BL:2)

Group C: Long Answer Type Questions (45 Marks)

Question Type: Analytical and design-focused, divided into subparts

Examples:

Question: (5x3=15)

a) Analyze the frequency response of a low-pass filter and justify its performance in noise reduction. (CO3,BL: 4, 5)

b) Design a band-pass filter for a given frequency range using a specified technique. (CO4, BL: 6)

c) Derive and analyze the Laplace transform of a given signal and discuss its applications. (CO2, BL: 4)

Step 4: Weightage Distribution

Weightage is distributed proportionally to ensure balanced evaluation:

Table 7: Weightage of Bloom's level

Bloom's Level	CIA Weightage (%)	ESE Weightage (%)	Average Weightage (%)
Remember	10%	10%	10%
Understand	20%	20%	20%
Apply	40%	30%	35%
Analyze	20%	25%	22.5%
Evaluate	10%	5%	7.5%
Create	-	10%	5%

Note: The figures provided in the table are for demonstration purposes. The Board of Studies (BOS) of each department may adjust these values based on the specific requirements of their curriculum.

Step 5: Attainment Calculation

Attainment measures the extent to which COs is achieved through assessments.

1. Direct Attainment (Assessment Scores):

Collect the average marks for questions mapped to each CO.

2. Indirect Attainment (Feedback: Student program End & Exit Survey, Alumni and Employer):

Use surveys to assess students' perceived understanding.

3. Calculation Formula:

Direct Attainment Weightage: 80%

Indirect Attainment Weightage: 20%

Example Calculation for CO1:

Direct Attainment (CIA + ESE):

CIA Average marks out of 40: 28 (say) i.e 70%

ESE Average marks out of 60: 45 (say) i.e.75%

Therefore, Weighted Average = $(0.4 \times 70) + (0.6 \times 75) = 73\%$

So, the Direct Attainment= 80% of 73%= $0.8 \times 73\%= 58.4\%$

Indirect Attainment (Survey):

Feedback Score: 85% (say)

So, the Indirect Attainment= 20% of 85%= $0.2 \times 85\%= 17.0\%$

Final Attainment for CO1:

Direct Attainment (58.4%) + Indirect Attainment (17%) = 75.4%

Similarly for all other COs of the course the attainments are to be calculated

19.2 For Practical Papers

For each laboratory courses there shall be a CIA during the semester for 60 marks and 40 marks for ESE.

19.2.1 Continuous Internal Assessment of laboratory courses (PCIA) [60 Marks]

The **60 marks** for Continuous Assessment in the laboratory can be distributed as follows to ensure comprehensive evaluation of a student's practical skills, understanding, and overall performance:

19.2.1.1 Regular Laboratory Performance (20 Marks)

- Punctuality, and adherence to lab protocols.
- Proper handling of equipment and demonstration of experimental skills.
- Active participation and contribution during lab sessions.

19.2.1.2 Experiment Execution and Results (15 Marks)

- Successful completion of experiments within the allocated time.
- Accuracy and correctness of the results obtained.
- Ability to troubleshoot issues during the experiment.

19.2.1.3 Laboratory Record/Report (10 Marks)

- Quality, completeness, and timely submission of lab reports.
- Proper documentation of procedures, observations, and results.
- Clarity and logical presentation of the data and conclusions.

19.2.1.4 Viva Voce/Quiz (5 Marks)

- Assessment of conceptual understanding related to the experiments.
- Ability to answer questions about techniques, procedures, and applications.

19.2.1.5 Attendance (10 Marks)

Attendance marks can be awarded based on the percentage (rounded up) as below:

Table 8: Mapping of attendance percentage to Marks (in scale of 10)

Percentage of attendance (Rounded Up)	Marks
95% and above	10
90% to 94%	9
87% to 89%:	8
84% to 86%	7
81% to 83%	6
78% to 80%	5
75% to 77%	4
72% to 74%	3
69% to 71%	2
65% to 68%	1
Below 65%	0

19.2.2 End Semester Examination of Laboratory Course (PESE) [40 marks]

The End Semester Examination (ESE) for laboratory courses is designed to comprehensively assess the practical and theoretical understanding of students. It shall be conducted collaboratively by the laboratory handling faculty in presence of an external examiner. The Principal, in consultation with the academic policies of the institution, will appoint an external examiner for each department. The selection will be made from a list of three qualified members recommended by the Head of the Department (HOD), ensuring the selection of subject matter experts familiar with the course objectives and outcomes.

The ESE will be conducted over **2 hours** and will carry a total of **40 marks**, distributed as follows:

Table 9: Break-up of PESE marks of 40

1	Write-Up about the given Experiment/Program	10 marks
2	Execution of the Experiment/Program	10 marks
3	Evaluation of the outcome or results of the Experiment/Program	10 marks
4	Viva-Voce (on the concerned Experiment/Programming)	10 marks

19.3 Mandatory/Non-Credit Courses Policy:

Mandatory/non-credit courses are a compulsory part of the curriculum but do not carry any credits. However, passing each such course during the program is a mandatory requirement for the student to qualify for the award of the degree.

No marks or letter grades shall be assigned for these courses. Instead, the performance in these courses will be evaluated and declared as either "**Satisfactory**" or "**Not Satisfactory**".

19.4 Project Work Guidelines and Evaluation Methodology

The eighth semester is exclusively dedicated to project work, marking a pivotal phase in the academic curriculum where students focus entirely on their projects under the guidance of their supervisors. This semester provides students with the opportunity to immerse themselves in meaningful research and development, fostering technical, analytical, and collaborative skills. Students are expected to devote their entire eighth semester to completing their projects, ensuring impactful outcomes.

To ensure readiness for this intensive phase, groundwork begins earlier. At the end of the sixth semester, project titles will be allocated to student groups. In the seventh semester, a preparatory course titled "**Project Initiation and Methodology**" (1 credit) will be offered which may include Literature Review, Planning & Conceptualisation, necessary theoretical classes by Supervisors etc. By dedicating the seventh semester to foundational work, students are well-prepared to execute their projects effectively during the eighth semester.

To actualize the aforementioned objectives, the departments must undertake proactive measures to establish a clearly defined framework that aligns student projects with the department's strengths and research priorities while making effective use of available resources and expertise. The key steps are as follows:

- I. **Identifying Specialized Research/Expertise Areas:** Departments must define **4-5 specialized research/expertise domains** that reflect faculty proficiency and departmental strengths.
- II. **Guiding Research and Projects:** These domains will serve as a foundational guide for all research and project-related activities, fostering a structured and focused approach.
- III. **Displaying Research Domains:** The identified research domains must be prominently displayed within the department. Importance of Displaying Research Domains
 - ✓ Highlights the department's **focus areas and expertise** to students, faculty, visitors and external stakeholders.
 - ✓ Communicates the department's **strengths and capabilities** in research and innovation.
 - ✓ Encourages students to align their interests with departmental priorities and fosters engagement in impactful research activities.
 - ✓ Positions the department as a hub of specialized knowledge and innovation, enhancing its academic and professional reputation.

19.4.1 Project Proposal and Selection:

- a. Faculty members propose project topics exclusively within the identified research domains.
- b. Students select their projects from the list of proposed topics, ensuring alignment with the department's research priorities.
- c. Projects may involve collaboration with external organizations, such as industries, R&D institutions, or academic bodies.
- d. This entire process of topic proposal and project selection must be completed by the **end of the sixth semester**, ensuring a seamless transition into the preparatory phase in the seventh semester.

19.4.2 Supervision and Monitoring:

- 19.4.2.1 Each project will have an internal faculty member as a supervisor or co-supervisor (in case of collaborative project with external organization) to provide academic guidance and maintain adherence to institutional standards.

19.4.2.2 The **Project Coordinator**, in consultation with the Head of the Department (HOD) and concerned faculty members, will oversee the quality of projects and monitor progress.

19.4.2.3 The Project Coordinator will maintain detailed records of student marks across all project phases, ensuring consistent evaluation.

19.4.3 **Expected Outcomes:**

Each project must achieve at least one of the following:

- A. Publication in a peer-reviewed journal or conference.
- B. Filing or granting of a patent.
- C. Development of a physical product, prototype, or system with a specific application.

19.4.4 **Project Preparatory Course:**

In the seventh semester, a preparatory course titled "**Project Initiation and Methodology**" (1 credit) will be offered. This course will include the following components:

1. **Theoretical Foundations:** Supervisors will conduct necessary theoretical sessions to equip students with the foundational knowledge required for their projects.
2. **Literature Review and Feasibility Analysis:** Students will conduct a detailed review of existing research to understand the current state of knowledge and assess the feasibility of their proposed projects.
3. **Project Planning:** Students will develop a comprehensive project plan, including milestones, timelines, and resource allocation.
4. **Conceptual Framework Design:** An initial design or conceptual framework for the project will be prepared to guide subsequent development.
5. **Preparatory Work for Outcomes:** Students will initiate preparatory work for potential project outcomes, such as drafting plans for publications, patents, or initial product designs.
6. **Prototyping and Layout Design:** Students will create detailed prototypes or layouts as part of the preparatory phase to ensure a solid foundation for project implementation.

By engaging in this preparatory course, students will be well-equipped to undertake their projects effectively in the eighth semester. The "**Project Initiation and Methodology**" course will be evaluated out of 100 marks, distributed as follows:

1. **Attendance and Participation:** 20 marks for regular attendance and active engagement in sessions.

2. **Report Submission:** 50 marks for the quality, depth, and clarity of the report, which includes literature review, feasibility analysis, and project plan.
3. **Presentation:** 30 marks for the effectiveness, structure, and delivery of the presentation, showcasing the conceptual framework and prototyping progress.

19.4.5 Project Work Phases and Evaluation:

The eighth semester is divided into four distinct phases, each lasting four weeks, to ensure systematic progress and effective monitoring. The evaluation for this semester includes two Continuous Internal Assessments (CIA1 and CIA2) and an End-Semester Examination (ESE) with a total of **200 marks** distributed as follows:

CIA1: 60 marks

CIA2: 60 marks

ESE: 80 marks

.Phase-I (First Four-Weeks):

- ✓ Finalize designs, concepts, and development strategies through collaborative brainstorming sessions with supervisors and peers.
- ✓ Begin implementation of the initial components, ensuring proper documentation of every step taken.
- ✓ Conduct preliminary testing to identify challenges and refine the approach early in the process.
- ✓ Organize weekly review meetings to track progress and receive constructive feedback.

Milestones: Achieve **30% project completion** with clear deliverables.

Phase-II (Second Four-Weeks):

- ✓ Develop intermediate components, refining designs based on feedback from Phase-I.
- ✓ Conduct comprehensive testing and validation of the modules developed so far, focusing on functionality and reliability.
- ✓ Document insights from testing to improve the overall approach and optimize the workflow.
- ✓ Schedule peer-review sessions where students present their work-in-progress and gather diverse perspectives.

Milestones: Achieve **60-70% project completion**.

Deliverables:

- ✓ Updated progress report with detailed testing outcomes and refined designs.
- ✓ Intermediate results, including draft publications, enhanced prototypes, or partial system integrations.

Continuous Internal Assessment 1 (CIA1):

Timing	Evaluation Criteria	Marks
After completion of Phase-II	<ul style="list-style-type: none"> ✓ Quality and depth of progress reports. ✓ Effectiveness of the mid-phase PowerPoint presentation. ✓ Supervisor feedback on work quality, problem-solving skills, and adherence to timelines. 	60

Phase-III (Third Four-Weeks):

- ✓ Complete the integration of all components into a cohesive system, ensuring seamless functionality.
- ✓ Initiate activities for journal/conference paper submission or patent filing, including drafting and consultation with mentors.
- ✓ Conduct final testing and validation to ensure the project meets its objectives and quality standards.
- ✓ Develop comprehensive user manuals or operational guides for the completed project.
- ✓ Making efforts towards publication or patent filing.
- ✓ Deliver a finalized prototype or a fully functional system.

Milestones: 100% completion of the project work

Deliverables:

- ✓ Submission drafts for journals or patents.
- ✓ Finalized and validated project system.

Phase-IV (Fourth Four-Weeks):

Objective: Prepare final reports (using LateX), presentations, and related documentation.

Activities:

- ✓ Compile a detailed and comprehensive project report, incorporating all aspects of the work done.
- ✓ Conduct multiple rounds of revisions and corrections under supervisor guidance to ensure clarity and precision.

- ✓ Re-edit and refine all documentation, ensuring it meets academic and professional standards.
- ✓ Prepare a polished PowerPoint presentation and rehearse for effective delivery during assessments.

Deliverables:

- ✓ Final project report, thoroughly revised and approved by supervisors.
- ✓ Presentation slides and supporting materials for evaluation.

Continuous Internal Assessment 2 (CIA2):

Timing	Evaluation Criteria	Marks
After completion of Phase-IV	<ul style="list-style-type: none"> ✓ Quality, structure and depth of the final project report. ✓ Effectiveness of the final PowerPoint presentation and demonstration of project outcomes. ✓ Peer and Supervisor feedback on the completeness and impact of the work. 	60



End-Semester Examination (ESE):

Timing	Evaluation Criteria	Marks
During PESE	<ul style="list-style-type: none"> ✓ Comprehensive demonstration of the completed project in the presence of an external examiner. ✓ Submission of evidence for journal/conference paper submission or patent filing. ✓ Clarity, coherence, and depth of the PowerPoint presentation, followed by viva-voce. 	80

19.4.5.1 General Guidelines:

- i. The Project Coordinator will collect project proposals from faculty members and external organizations and ensure their quality in consultation with the HOD and concerned faculties.
- ii. The Project Coordinator will facilitate student group formation (2–3 members per group) and provide guidance for project selection.

- iii. Regular reviews and feedback sessions will be conducted to track progress and address challenges.
- iv. Groups must collaborate effectively, maintain documentation for all phases, and participate in activities such as peer presentations and progress reviews.
- v. Students must achieve a minimum of 50% of the total marks (50 out of 100) across all phases to qualify for the corresponding credits.
- vi. Out of the 60 marks allocated for each CIA, **10 marks will be awarded based on attendance and regular contact with the project supervisor.** These marks will be given by the supervisor to encourage consistent interaction and involvement.
- vii. The final project must result in at least one of the outcomes mentioned in Sec.19.4.4

20. PASSING CRITERIA:

To uphold high standards in all aspects of examinations, the institute will adhere to the following guidelines for evaluating student performance in CIA (sum of CIA-1 and CIA-2), ESE, PCIA, and PESE for each course. A student's performance will be assessed based on their scores as outlined below:

20.1 For Theory Courses



20.1.1 **Eligibility for ESE:** A student must secure a minimum of 40% marks in the combined score of CIA-1 and CIA-2 to qualify for appearing in the End Semester Examination (ESE) for theory courses.

20.1.2 **Passing Criteria for ESE:** A minimum of 40% marks must be obtained in the ESE to pass a theory course.

20.1.3 **Overall Passing Criteria for Theory Courses:** A minimum of 40% marks must be achieved when combining the scores of CIA and ESE to pass a theory course.

20.2 For Laboratory Courses

20.2.1 **Eligibility for Practical End Semester Examination (PESE):** A student must secure a minimum of 50% marks in the (PCIA) to qualify for appearing in the Practical End Semester Examination (PESE).

20.2.2 **Passing Criteria for PESE:** A minimum of 50% marks must be obtained in the PESE to pass the practical examination.

20.2.3 **Overall Passing Criteria for Laboratory Courses:** A minimum of 50% marks must be achieved when combining the scores of PCIA and PESE to pass a laboratory course.

20.3 Passing Criteria for Program: To successfully pass the B.Tech./M.Tech./MBA/MCA program, a candidate must fulfill the following conditions:

- A. Achieve at least a **"D" grade** in each theory, and **"C" grade** in each practical, and sessional paper.
- B. Obtain a minimum **DGPA/CGPA of 6.0** as required for AICTE-regulated courses.

21. SUPPLEMENTARY EXAMINATION

Supplementary examinations for backlog papers of an odd semester will be conducted alongside the regular examinations of the next odd semester. Similarly, supplementary examinations for backlog papers of an even semester will be conducted with the regular examinations of the next even semester. Students may appear for these supplementary examinations for any backlog papers as long as their registration remains valid, which is typically up to (2 X course duration in years)+1 years.

For **final-year** students, **separate supplementary examinations** will be conducted **within two months** of the declaration of results to ensure timely opportunities for course completion. However, this is contingent on the absence of any backlog papers from their previous years.

22. GRADING SYSTEM

22.1 The Institute shall follow a **seven-point grading system** based on a scale of 10. The categorization of grades, their corresponding score ranges, and grade points are outlined below:

Table 10: Mapping between Classification, Letter Grade, Percentage and Points

Classification	Letter Grade	Score on 100 Percentage points	Points
Outstanding	O	100 to 90	10
Excellent	E	89 to 80	9
Very Good	A	79 to 70	8
Good	B	69 to 60	7
Fair	C	59 to 50	6
Below average	D	49 to 40	5
Failed	F	Below 40	2

22.2 A provisional letter grade of '**I**' (with a grade point value of **2**) will be assigned in the following cases:

- When a student is **unable to appear** for the End Semester Examination(s) due to valid reasons.
- When the **results are incomplete**, pending assessments or documentation.

The provisional '**I** grade will automatically be converted to the appropriate grade once:

- The student completes the required assessments.
- The results are finalized.

No student shall be permitted to receive or complete their **final degree** with '**I** grade or '**F** grade in any course

22.3 A student's level of competence will be categorized using a Grade Point Average (GPA), which will be defined as follows:

SGPA - Semester Grade Point Average

YGPA - Yearly Grade Point Average

DGPA - Degree Grade Point Average

CGPA - Cumulative Grade Point Average

22.4 Definition of Terms:

22.4.1 **Grade Points (GP):** An integer value assigned to each letter grade within the seven-point grading system, earned by a candidate for each item in a semester.

22.4.2 **Credits (C):** An integer that signifies the relative weight of individual course items in a semester, as specified in the course structure and syllabus.

22.4.3 **Credit Point:** The product of (C) and (GP) for each course item.

22.4.4 **Credit Index:** The sum of the **Credit Points** for all course items in a semester.

22.4.5 **Grade Point Average (GPA)** is generally defined as:

$$GPA = \text{Credit Index} / \sum \text{Credits}$$

However, it is always contextualized by a specific time reference, as detailed below.

$$\boxed{SGPA = \text{Credit Index} / \sum \text{Credits}} \text{ for a Semester}$$

$$YGPA = \frac{\text{Credit Index}(\text{Odd semester}) + \text{Credit Index}(\text{Even semester})}{\sum \text{Credits}(\text{Odd Semester}) + \sum \text{Credits}(\text{Even Semester})}$$

22.4.6 For final Degree Grade Point Average (DGPA) the calculation is as under:

22.4.6.1 For 4-Year Degree Course

$$DGPA = \frac{YGPA(1^{st} \text{ Year}) + YGPA(2^{nd} \text{ Year}) + 1.5 \times YGPA(3^{rd} \text{ Year}) + 1.5 \times YGPA(4^{th} \text{ Year})}{4}$$

22.4.6.2 For Lateral entry Students

$$DGPA = \frac{YGPA(2^{nd} \text{ Year}) + 1.5 \times YGPA(3^{rd} \text{ Year}) + 1.5 \times YGPA(4^{th} \text{ Year})}{3}$$

22.4.6.3 For 2-Year Degree Courses

$$DGPA = \frac{YGPA(1^{st} \text{ Year}) + YGPA(2^{nd} \text{ Year})}{2}$$

22.4.7 For Cumulative Grade Point Average (CGPA) the calculation is as under

$$CGPA = \frac{\sum_{k=1}^{k=n} \text{Credit Index upto } k^{th} \text{ Semester}}{\sum_{k=1}^{k=n} \text{Credits upto } k^{th} \text{ Semester}}$$

where, $n = \text{Semester Number}$
upto which CGPA is calculated

Illustration for calculation of CGPA upto 3rd semester (Say)

Semester	Course Title	Credits Allotted	Letter Grade Secured	Corresponding Grade Point (GP)	Credit Points (CP)
I	Course 1	3	A	8	24
I	Course 2	3	O	10	30
I	Course 3	3	C	6	18
I	Course 4	4	A	8	32
I	Course 5	3	E	9	27
I	Course 6	4	D	5	20
II	Course 7	4	C	6	24
II	Course 8	4	A	8	32
II	Course 9	3	D	5	15
II	Course 10	3	O	10	30
II	Course 11	3	B	7	21
II	Course 12	4	C	6	24
II	Course 13	4	A	8	32
II	Course 14	3	O	10	30
III	Course 15	2	A	8	16

III	Course 16	1	D	5	5
III	Course 17	4	O	10	40
III	Course 18	3	B	7	21
III	Course 19	4	C	6	24
III	Course 20	4	A	8	32
III	Course 21	3	B	7	21
		\sum Credit	69		Credit Index 518

Thus CGPA= 518/69=7.51

22.5 Conversion of Grade Point to Percentage of marks (On 10 Point Scale)

The SGPA/YGPA/DGPA/CGPA will be converted into equivalent percentage of marks as follows:

$$\text{Percentage of Marks} = (\text{SGPA} / \text{YGPA} / \text{DGPA} / \text{CGPA} - 0.75) \times 10$$

Table 11: Percentage Equivalence of Grade Points (For a 10 – Point Scale)

Grade Point	Percentage of Marks
5.75	50
6.25	55
6.75	60
7.25	65
7.75	70
8.25	75

22.5.1 Result Status:

X = Not eligible for promotion/Degree

XP = Eligible for Promotion with backlogs

P = Passed and Promoted

23. POST-PUBLICATION AMENDMENT OF RESULT

If any result is identified as **incorrect** due to **inadequate** or **erroneous marks entry** by the examiner, the matter must be brought to the attention of the **Controller of Examinations (CoE)** immediately. The examiner must **assume personal responsibility** for the correction of the result

Procedure for Correction:

The examiner must:

- a. Execute an **affidavit** before the **Judicial Magistrate of the Durgapur Sub-Divisional Court**.
- b. The affidavit should:
 - i. Be prepared on **non-judicial stamp paper** with a minimum value of ₹100/-.
 - ii. Clearly state the nature of the error and the necessary correction.
- c. Submit the affidavit to the CoE for further processing.

This procedure must be completed within **7 (seven) working days** from the date of publication of the result. Upon receipt of the affidavit, the office of the CoE will verify the details and take the necessary steps to correct the result, following institutional guidelines.

24. POST PUBLICATION REVIEW (PPR)

The Institute provides a mechanism for **Post Publication Review (PPR)** to ensure fairness in the evaluation process for students who believe their answer scripts were not subjectively evaluated fairly during the recently concluded **End-Semester Examination**. Students dissatisfied with the evaluation of their answer scripts in the **End-Semester Examination**.

24.1 PPR is applicable only for theory papers. Practical, sessional, and project evaluations are **not eligible** for review.

24.2 The **Controller of Examinations (CoE)** will issue a notification regarding the availability of PPR after the declaration of results.

24.3 Application:

24.3.1 Candidates must apply for PPR within the timeframe specified in the notification.

24.3.2 Applications must be submitted **ONLINE** to the Office of CoE at the Institute.

24.3.3 A prescribed **Non-Refundable PPR Fee** must be paid for each paper submitted for review.

24.3.4 Applications that are incomplete, contain errors, or fail to meet the prescribed format will be **rejected**.

24.3.5 No correspondence regarding rejected applications will be entertained.

24.4 Process for Review:

The answer script will undergo a fresh and comprehensive re-evaluation by an experienced faculty member who is not the original evaluator.

24.5 The scope of the review encompasses the followings activities:

24.5.1 A complete reevaluation of all answers will be conducted to ensure that they have been accurately assessed.

24.5.2 Particular attention will be paid to verify that no answers have been left unevaluated.

24.5.3 The total marks awarded will be thoroughly checked to confirm that they have been calculated correctly.

24.6 Outcome of Review:

24.6.1 The revised result will be communicated to the student.

24.6.2 The outcome of this review process will be considered final and binding, and no further requests for review or re-evaluation will be entertained.

25. Code of Conduct for Students

Each student of Dr. B. C. Roy Engineering College (BCREC) is expected to conduct themselves in a manner that upholds the dignity and reputation of the institution. The following guidelines outline the expected behavior and responsibilities of students:

25.1 General Conduct:

25.1.1 Students shall not engage in any activities that may tarnish the reputation of the Institute.

25.1.2 Students must exhibit respect and courtesy toward teachers, administrators, officers, staff, and fellow students, fostering a harmonious campus environment.

25.1.3 Any lack of courtesy, inappropriate behavior, or unbecoming attitude, both within and outside the Institute premises, is strictly prohibited.

25.2 Protection of Property:

25.2.1 Students must respect and safeguard the property of the Institute and the belongings of fellow students.

25.2.2 Any willful damage, defacement, or misuse of Institute property will result in disciplinary action and Fine will be imposed as per the Institute Norms & regulations.

25.3 Academic Integrity and Discipline:

- 25.3.1 Students must avoid creating disturbances during academic sessions and strictly refrain from using unfair means during examinations.
- 25.3.2 Violations of Institute rules, including undesirable behavior or activities, will be treated as misconduct.

25.4 Anti-Ragging Policy:

- 25.4.1 Ragging in any form is a severe offense and is strictly prohibited as per law.
- 25.4.2 Any student found guilty of ragging will face severe disciplinary action, including expulsion from the Institute.

25.5 Mobile Phone Usage:

- 25.5.1 The use of mobile phones is not encouraged unless absolutely necessary for academic or institutional purposes.
- 25.5.2 During regular teaching sessions in the classroom, the use of mobile phones is strictly prohibited.
- 25.5.3 Students are not allowed to bring mobile phones into the examination hall. If a mobile phone is found in possession of a student during an examination, it will be confiscated, and necessary disciplinary action will be taken.

25.6 Disciplinary Action:

- 25.6.1 Violation of the code of conduct may lead to disciplinary measures such as reprimand, probation, denial of placement services, withholding of grades or degrees, cancellation of registration, or expulsion from the Institute.
- 25.6.2 In the case of hostel residents, the hostel authorities may impose fines or other suitable penalties for violating hostel rules.

25.7 Degree/Certificate Denial: Students found guilty of serious offenses may be denied their degree or certificate, even if they have completed all academic requirements.

25.8 Attendance During Suspension: A student under suspension will not be entitled to attendance during the suspension period.

25.9 Identity Card Policy: Students must wear their identity cards at all times while on campus, during travel to and from the Institute, and while participating in field visits, industrial visits, competitions, or other events representing the Institute.

Dr. B. C. Roy Engineering College is committed to maintaining a disciplined, respectful, and conducive academic environment. Students are encouraged to adhere to this code of conduct and contribute positively to the institutional ethos. Violations will invite appropriate disciplinary actions as deemed necessary by the Institute authorities.

26. SCOPE, REVISION OF REGULATIONS, AND INTERPRETATION

26.1 Scope

- 26.1.1 The academic regulations outlined in this document must be read as a whole for accurate understanding and interpretation.
- 26.1.2 In case of any doubt or ambiguity in the interpretation of these regulations, the decision of Dr. B. C. Roy Engineering College shall be considered final and binding on all stakeholders.
- 26.1.3 The Institute reserves the right to revise, amend, or change academic regulations, course structures, or syllabi as deemed necessary, and these changes shall be applicable to all concerned.

26.2 Revision of Regulations and Curriculum

- 26.2.1 Dr. B. C. Roy Engineering College may revise, amend, or modify the regulations, scheme of examinations, and syllabi from time to time to meet academic and professional standards or institutional needs.
- 26.2.2 Such revisions, amendments, or modifications will be effective upon approval by the Academic Council and the Governing Body and will be binding on students, faculty, staff, and all other authorities of the Institute.

26.3 Interpretation

- 26.3.1 Any questions or disputes regarding the interpretation of these rules and regulations shall be resolved by the Institute. The decision of Dr. B. C. Roy Engineering College in such matters will be final and binding on all parties.
- 26.3.2 The Institute reserves the right to issue clarifications to address any doubts, difficulties, or anomalies that may arise in the implementation of these regulations.