

Institute Development plan 2024-25

Actions for Planning and Development

Supplementing Curriculum

➤ Add-on Programs to curriculum relevant to employability / skill development

Civil Engineering: Smart Designs, Building Information Modelling (BIM),

Mechanical Engineering: Hybrid Electric Vehicles; Green Manufacturing

EEE: Integrated Circuits and Systems; Automatic control

ECE: Fields and Optics, VLSI and Circuit Design

CSE: Human Computer Interaction; Cloud computing & virtualization

ECM: Deep Learning and Neural Networks; Natural Language Processing, IoT Security and Labeling;

CSE (DS) & AI & DS: Data & informatics; Data Science and Cybersecurity AI in Business systems

CSE (AI ML) & AI & ML: Deep Neural Networks; Generative Modeling

IT: Health IT; Video analytics, Industrial Internet of Things

MBA: Techpreneurship; Design Thinking, Innovation, Intellectual Property Rights (Types, process and management)

➤ Add-on courses relevant to cross cutting issues such as gender equity, environment, human values, professional ethics, contribution to society, quality, safety, business laws, constitution, human anatomy and disaster management

Power of eve – lecture series (3): Three popular women - Engineering; business and civil services (September 2024, December 2024, March 2025) – H&S and Women's cell

Environment and Disaster management: climate change and global warming; environmental pollution (Civil engineering)

Human values and professional ethics: Empathy and leadership; Ethics in Engineering (DMS)

Constitution and Law: Rights and responsibilities of Indian citizens (H&S and Grievance Redressal Cell)

Medical awareness and hygiene: health and hygiene in day -to- day life (H&S and NSS)

➤ **Value added courses (Minimum 30 H) (minimum 2 per department)**

Civil Engineering: sustainable construction practices; High performance concrete, 3d modelling and Printing; Remote sensing via cloud technologies

Mechanical Engineering: System Dynamics and Control; Robotic Process Automation; Smart manufacturing and industry 4.0; Automotive Engineering and Vehicle Dynamics

EEE: Consumer Electronics; Renewable power; Electrical machinery, drives, and power electronics; Electrical system design

ECE: Photonics; signal processing and artificial intelligence; Smart communication systems; computational electromagnetics

CSE: Databases and Data Mining; Human centered Computing, quantum computing, Natural Language Processing

CSE (AI ML) & AI & ML: Knowledge representation and reasoning; Real time operating systems; AI in Business systems

CSE (DS) & AI & DS : AI and robotics;, Embedded systems, Big data Analytics; Data Engineering; Applied cryptography

IT: Information Security and Privacy; Health analytics; Web Technologies; Modern computer apps

ECM: Block chain technologies, Adaptive networks for IoT, computer architecture,

MBA: Business Analytics using Python Program; Business Sustainability Management

➤ **Strategies for students undertaking field projects/ internships / student projects (All Departments)**

Target number for

- Field Projects
- Internships
- Student Curricular Projects
- Projects beyond Curriculum

➤ **Feedback collection from stakeholders on curriculum**

Target for number of Samples from

- Students
- Teachers
- Employers
- Alumni

Teaching-Learning and Evaluation

- **Special programs for advanced learners and slow learners (Diagnostic Tests, seminars and projects and remedial, reinforcement sessions)**

Schedule for both semesters to be given

- Diagnostic tests
- Remedial for slow learners
- Support mechanisms for advanced learners

- **Preparation of teaching plans for all the courses and submission before the start of the semester (mandatory)**
- **Allotment of teacher mentors (2025-26)**

List of mentors of all the four years B. Tech and MBA (circulars, allotment orders and mentorship file)

- **New teaching methods and styles to be introduced (minimum two tools that are to be recorded into the teaching plan and implementation) (Please refer the suggestive list given discipline wise)**

- Civil Engineering:
- Mechanical Engineering:
- EEE:
- ECE:
- CSE:
- CSE (AI ML) & AI & ML:
- CSE (DS) & AI & DS :
- IT:
- ECM:
- MBA:

➤ **Measuring attainment of program outcomes, program specific outcomes and course outcomes including individual student learning outcomes**

Semester wise Schedule for submission of course outcomes program outcomes and program specific outcomes

➤ **Industrial training and internship for student real time experience (Placement Officer and Heads)**

Target number for

- Student training programs
- Number of internships planned

➤ **Semester abroad program in premier international Institutions**

- Target number of students for semester abroad through international collaboration

➤ **Student satisfactory Survey for the year 2024-2025**

Research, Innovations and Extension

➤ **New research groups and labs proposed per department (Minimum 1 research group from each department)**

Minimum two activities from each group

Civil Engineering:

Mechanical Engineering:

EEE:

ECE:

CSE:

CSE (AI ML) & AI & ML:

CSE (DS) & AI & DS:

IT:

ECM:

MBA:

Physics:

Chemistry:

Mathematics:

English:

➤ **Events planned to develop research capabilities of teachers and students**

- Research competence of Teachers: 2 programs once in each semester (Dean research) September 2025 & January 2026
- Research competence of students: 1 program per department (final year students) – Dean research and HOD – October 2025

➤ **Number of proposals for seeking seed money/minor research grant from the management**

Civil Engineering: 2

Mechanical Engineering: 2

EEE: 2

ECE: 4

CSE: 4

CSE (AI ML) & AI & ML: 2

CSE (DS) & AI & DS: 2

IT: 2

ECM: 2

MBA: 2

Physics:1

Chemistry:1

Mathematics: 1

English:1

➤ **Applying for research projects seeking grants from the government and strategies for seeking Grants for research projects from non-government sources such as industry, corporate houses, international bodies**

Government funding proposals:

Civil Engineering: 2

Mechanical Engineering: 2

EEE: 2

ECE: 4

CSE: 4

CSE (AI ML) & AI & ML: 2

CSE (DS) & AI & DS: 2

IT: 2

ECM: 2

MBA: 2

Physics:2

Chemistry:2

Mathematics: 2

English:1

Private funding proposals:

Civil Engineering: 1

Mechanical Engineering: 1

EEE: 1

ECE: 2

CSE:2

CSE (AI ML) & AI & ML: 1

CSE (DS) & AI & DS: 1

IT: 1

ECM: 1

MBA: 1

Physics:1

Chemistry:1

Mathematics: 1

English:1

➤ **Proposed Number of research scholars registered under teachers of the Department**

- As supervisors
- As co supervisors

➤ **Workshops/seminars on Intellectual Property Rights (IPR) and industry-Academia Innovative practices
HOD + Dean (Research) + TAP**

Civil Engineering: 1 IPR event + I industry collaborated event

Mechanical Engineering: 1 IPR event + I industry collaborated event

ECE: 1 IPR event + I industry collaborated event

CSE: 1 IPR event + I industry collaborated event

CSE (AI ML) & AI & ML: 1 IPR event + I industry collaborated event

CSE (DS) & AI & DS: 1 IPR event + I industry collaborated event

IT: 1 IPR event + I industry collaborated event

ECM: 1 IPR event + I industry collaborated event

MBA: 1 IPR event + I industry collaborated event

➤ **Special awareness and training programs on entrepreneurship with the participation of successful entrepreneurs,
Angel investors and other financial entities for prospective funding for their ideas.**

Entrepreneurship awareness programs – 8 (4 per semester) – Dean (IIC)

➤ **Student/faculty start-ups on campus**

Proposed Numbers:

➤ **Research papers in the Journals and Books and chapters in edited volumes / books published,**

Papers:

Civil Engineering: 10
Mechanical Engineering: 10
EEE: 10
ECE: 20
CSE:20
CSE (AI ML) & AI & ML: 20
CSE (DS) & AI & DS: 20
IT: 20
ECM: 10
MBA: 6
Physics: 6
Chemistry: 6
Mathematics: 6
English: 6

Books and chapters

Civil Engineering: 4
Mechanical Engineering: 4
EEE: 4
ECE: 6
CSE: 6
CSE (AI ML) & AI & ML: 6

CSE (DS) & AI & DS: 6

IT: 6

ECM: 4

MBA: 4

Physics: 2

Chemistry: 2

Mathematics: 2

English: 2

➤ **Identification of network of potential clients created for consultancy and target revenue (All departments)**

- Proposed number of Consultancy activities, corporate training/executive education and target revenue generated

➤ **Functional MoUs and Linkages with institutions/industries for Joint educational programs, internship, on-the- job training, project work, sharing of research facilities (Department wise)**

- Mous with Industry (Names of industry)
- Mous with academic Institutions (Names of institutions)

➤ **Professionals from industry as adjunct faculty / professor of practice (Department wise)**

Name of the professional proposed, Experience, designation, willingness to work, mode of interaction preferred

➤ **Technical associations of the departments:**

Plan of action for the year 2025-26 (HoDs)

➤ **Activities of EDC, IIC**

Plan of action for the year 2025-26 (coordinators)

- **Extension activities carried out in the neighborhood community, sensitizing students to social issues, for student holistic development, and impact (NSS & Department Associations)**

Detailed plan of NSS activities to be conducted month wise along with special camps and events + student participation from all the departments (NSS officer and department)

Infrastructure and learning resources

- **New facilities or equipment or software**
 - Department wise requirement
- **Purchase of books/ e-books and subscription to journals/e-journals**
 - Department wise requirement
- **Strategies for modernization, purchase of Advanced / Research Equipment**
 - Department wise requirement
- **Starting industry sponsored labs and skills development centers**
 - Department wise Proposals

Student support and progression

- **Capability enhancement and development schemes such as - Vocational Education and Training (VET), Guidance for competitive examinations, Career Counseling, soft skill development, Bridge courses, Yoga and Meditation, Personal Counseling**

Guidance for competitive examinations, Career Counseling: I and II-year students – 2 programs – September 2025 & Feb 2026 (TAP)

- **Professional and hobby clubs for students and linking them to attainment of Program outcomes**
 - Civil, Mechanical, EEE and ECE – design club
 - CSE & allied branches– Coding and programming club
 - MBA – Innovation and entrepreneurship club
- **Training plan for the students**
 - Training plan for the students – Domain, aptitude, and industry specific training

TAP cell + HoDs – detailed plan for the year 2025-2026
- **Alumni database collection and website**
 - Target number of alumni contacts per department
- **Alumni Contributions to the development of the institution through financial and non-financial means**
 - Target contributions from alumni (financial and non-financial) all departments
- **Alumni endorsements on College Website**
 - 5 per department
- **Sports and cultural events / competitions organized by the Department (through department associations)**
 - 2 per year (indoor sports like chess, and caroms)
 - 2 per year singing, dancing mimicry

Governance, Leadership and Management

- **Meetings of IQAC – 4 in a year (Agenda and minutes)**
- **Faculty performance appraisal system - IQAC and departments**
- **Monitoring teaching- learning Practices**

Two new Initiatives for the academic year 2024-25 - IQAC

Internal Academic audit – Annually twice - Semester end preferably as data is available – IQAC

Academic and Administrative Audit – (involving external auditors) – IQAC

Conferences, Seminars, Workshops on quality (6 programs)

Areas:

Assessment and accreditation -2

Research competence -2

Pedagogy - 2

- **Comprehensive training development plan for faculty and staff**

HoDs and IQAC

- **Faculty/students certification in NPTEL/Edx/MOOC Courses**

Civil Engineering: 6

Mechanical Engineering: 6

EEE: 6

ECE: 10

CSE: 15

CSE (AI ML) & AI & ML: 15

CSE (DS) & AI & DS: 15

IT: 10

ECM: 15

MBA: 10

Physics: 6

Chemistry: 6

Mathematics: 6

English: 6

➤ **Teachers undergoing online/ face-to-face Faculty Development Programmes**

Civil Engineering: 4

Mechanical Engineering: 4

EEE: 4

ECE: 6

CSE: 8

CSE (AI ML) & AI & ML: 8

CSE (DS) & AI & DS: 8

IT: 8

ECM: 4

MBA: 4

Physics: 2

Chemistry: 2

Mathematics: 2

English: 2

➤ **Professional development / administrative training programs organized by the Department for teaching and non-teaching staff**

Civil Engineering: 2

Mechanical Engineering: 2

EEE: 2

ECE: 2

CSE: 2

CSE (AI ML) & AI & ML: 2

CSE (DS) & AI & DS: 2

IT: 2

ECM: 2

MBA: 2

Physics: 2

Chemistry: 2

Mathematics: 2

English: 2

- **Meetings of all the committees: minimum twice a year**

All committees

Institutional Values and Best Practices

- **Events organized by the department for the promotion of gender equity**

Gender equity plan – 2025-2026 – Women's cell

- **Activities conducted for promotion of universal values (Truth, Righteous conduct, Love, Non-Violence and peace); national values, human values, national integration, communal harmony and social cohesion as well as for observance of fundamental duties – S&H**

Two events on Universal values (Righteous conduct and Empathy)

Two events on national values (Fundamental duties and National Integration)

- **Organizing national festivals and birth / death anniversaries of the great Indian personalities.**

Calendar of events for the year 2025-26 – S&H