

# **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




➤ **Green practices - CE, ME and EEE**

- Environmental audit
- Energy Audit
- Rain water harvesting
- Alternate energies

➤ **Best practices which are distinctive to other institutions**

Introduction of modern experiential learning methods for better student learning outcomes (student Development)

Semi technical lectures for all the faculty members (Faculty development)

  
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