# MKSSS's Cummins College of Engineering for Women Pune

# **Institute Vision Statement**

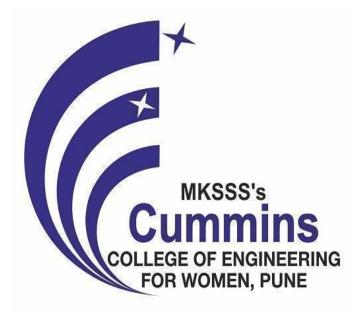
To be globally renowned engineering institute for imparting holistic education and developing professional women leaders in engineering and technology

# **Institute Mission Statements**

- 1. To impart quality engineering education with a multidisciplinary approach
- 2. To promote creativity, innovation and entrepreneurial attitude
- 3. To inculcate values, lifelong learning skills and sense of contribution towards industry and society
- 4. To provide opportunities for holistic development

# **Perspective Plan**

From AY 2024-25 to AY 2028-29



# MKSSS's Cummins College of Engineering for Women, Karvenagar, Pune.

The perspective plan of the institute for its overall development by considering various objective of NEP and actions items are as per the requirements of NBA, NAAC and NIRF is described with reference to the following dimensions:

- 1. Teaching Learning
- 2. Holistic Development of students
- 3. Staff Development
- 4. Research Ecosystem

## **Teaching - Learning**

The National Education Policy (NEP) 2020 focuses on multidisciplinary approach, skill development, holistic development and flexibility.

Considering NEP guidelines following action points are included in the Perspective plan.

## A. Curriculum Structure as per NEP Guidelines

NEP policy promotes a multidisciplinary approach to education, collaboration among universities, colleges, research institutions, and other entities. NEP policy encourages the integration of traditional Indian knowledge systems into contemporary curricula, enriching the learning process with a holistic perspective on various subjects. To develop curriculum in line with NEP and as per global technology trends and industry needs.

#### Action points :

- Offering B.Tech Degree with Multidisciplinary Minors In the curriculum every Programme will offer multidisciplinary minors. To provide exposure to a diverse range of subjects beyond their primary field of study.
- Flexibility through Choice Based Credit courses Curriculum will be framed with choice based courses in the form of Programme electives and open electives.
- Self-learning component by MOOC Courses Every Programme will provide an opportunity to students to learn the courses of their choice from the NPTEL course category. This will develop the self-learning ability of the students.

• Internships and Community Projects Inclusion of Industry internships /research internships and community projects in the curriculum.

# • **E-content created by the department** Every department will create E- contents for the courses in the curriculum which would be available to all the students.

#### Metrics and Targets :

- Number of MDM : at least two options per Programme over 5 academic years
- Percentage of Choice based credits: 20% of total credits over 5 academic years
- Percentage of MOOC courses: at least 10% of total credits over 5 academic years. At present one MOOC course with 3 credits is offered.
- Completion of industry internships by 60% students
- Number E-Content Course creation: at least 1 course per year per department should be created by a group of faculty

### **B**: Collaboration

NEP gives thrust on skill development. Lab courses, industry relevant courses help to develop technical skills of the students. Internships, projects give opportunities to apply these skills. Institute aims to collaborate with the Industries, foreign universities and NGO for skill development, internships and projects. Action points are as follows:

#### Action points :

- **Collaboration with Industry** For Expert lectures, co-teaching, jointly designed courses, development of labs, industrial visits, student projects and internship.
- Collaboration with foreign Universities To provide Credit transfer, Internship and Joint certificate Programme.
- Collaboration with NGO To undertake projects of social relevance.

#### Metrics and targets :

- Number of MOU's with Industry / Academic Institute / Research institute/NGO: at least 10 functional MOU per academic year
- Number of Industrial Visits: at least 25 visits per academic year
- Number Expert Lectures : at least 40 expert lectures per academic year
- Number of internships / Projects with Industry: at least 60% of students will go for industry internships
- Number of course development / Co teaching with industry: at least 2 theory courses and one 1 lab per department
- Number of MOU with Foreign universities for Credits transfer / internships / joint certificate Programme: MOU with at least 10 foreign universities
- Number of Community Projects with NGO: at least 10% of total projects

# **Holistic Development of Students**

Along with academics and skill development; holistic development of students is important. Co-curricular and extracurricular activities play a big role in holistic development of students. Professional society chapters, students clubs provide a platform for organization of different activities. Soft skill training programs help students to develop communication skills.

#### Action points :

- To organize training programs on soft skill development and leadership development
- To facilitate students to participate in Co- Curricular and extracurricular activities

By providing financial support, resources, and faculty guidance etc. Institute aims to see participation of every student in co-curricular and extracurricular activities.

- Organize sessions on
  - Competitive exams
  - Higher studies
  - Career path
  - Entrepreneurship
- Organize sessions on physical and mental well-being

#### • Organize students events

- Techfest
- Cultural
- Sports
- Professional society
- Students clubs

#### Metrics and Targets:

- Number of value added program of soft skills and leadership development : At least one program for SY and TY each
- Participation in technical competitions, paper presentations, NSS membership, Unnat Bharat Abhiyan, Sports events, cultural events, representing college, college magazine, department newsletter etc. : Every student will participate in at least one activity every year
- Number of Sessions on Competitive exams preparations, Higher studies, Career path, Entrepreneurship, physical and mental well-being : Arrange Periodic sessions every year for all students
- Number of Techfest, Cultural, Sports, Professional society, Students clubs events : Organize at least one event for each category per year

## Staff Development

To enhance the knowledge and skills of the staff, following are the action points.

#### Action points :

- Organization of FDP/ STTP / Workshop
- Facilitate faculty to attend FDP / STTP / Workshop
- Facilitate faculty to complete NPTEL course
- Organization of training program for Non-teaching staff

#### Metrics and Targets :

- Number of FDP and STTP organized by every department : at least 1 per year
- Number of FDP/ STTP/ workshop attended by faculty : 1 per year
- Number of NPTEL course certification by faculty : at least 1 per year
- Organization of training programs for non-teaching staff : at least 2 per year

## **Research Ecosystem**

The goal is to enhance the current research activities such as research publications, funded projects, startups, consultancy, patents etc.

#### Action points :

#### • Quality Research Publication

To increase the number of research publications by providing guidance/mentoring, providing incentives.

#### • Patent Filing

IPR cell of the college will create awareness about patent filing. The cell will also take care of patent filing, patent examination etc. the fees for filing and examination will be paid by the institute.

#### • Establishment of Incubation and Entrepreneurship Ecosystem College will establish an incubation center to promote startup ideas.

#### • Funded Research projects and Consultancy

Institute aims to attract more research projects and consultancy. For this dean R&D office will arrange awareness sessions about research funding schemes and will provide seed money for pre research work. Adjunct faculty members will guide the faculty for proposal writing and research work.

#### Metrics and targets:

- Number of research publication :at least 125 per year
- Number of patents filed: at least 10 per year
- Number of startup companies : at least 5 over 5 academic years
- Amount of funded research projects: at least 50 lakhs per year
- Number of consultancies : at least 25 consultancies over 5 academic years
- Conferences Organization : at least 3 over 5 academic years