Programe Structure

General Programme in Engineering (GP)

(Semester 1 & 2) 36 credits of Core courses

No Automatic progression

Have to fulfil certain requirements to pass GP and then progress to the Special Program

Specialization Programme in Engineering (SP)

Specialization in Mechanical Engineering

Second Year (Semester 3 & 4)

BSc (Eng) Honours Course

BSc (Eng) Course

Third Year (Semester 5 & 6)

- Progression governed by prerequisite courses
- 24 credits of Core courses (inclusive of 3 credit Project course)
- Technical Elective Courses[1]
- General Elective courses[2]
- 3 credits of Industrial Training

Final Year (Semester 7 & 8)

- Progression governed by prerequisite courses
- 12 credits of Core (inclusive of 6 credit Project course)
- Technical Elective Courses[1]
- General Elective courses[2]

BSc (Eng) Honours degree

- 108 credits of Core courses (inclusive of 6 credit Project course)
- 18 credits of Technical Elective Courses[1]
- 15 credits of General Elective courses[2]
- 6 credits of Industrial training

Final Year (Semester 7 & 8)

- Progression governed by prerequisite courses
- 6 credits of Core
- Technical Elective Courses[1]
- General Elective courses[2]

BSc (Eng) degree

- 102 credits of Core courses
- 15 credits of Technical Elective Courses[1]
- 12 credits of General Elective courses[2]
- 6 credits of Industrial training

[1]Technical Elective courses

At least 10 credits of courses from one group of specialization is required. Selective basket of technical elective courses are given below.

[1]Technical Elective courses

At least 8 credits of courses from one group of specialization is required. Selective basket of technical elective courses are given below.

[2]General Elective Courses

Have to offer at least 2 credits from each of the following 3 categories of courses:

1. Management and Economics 2. Arts and Humanities 3. Political and Social Science

Technical Electives

Technical Electives adds the required flexibility into the programme by providing the students with an opportunity to select courses of their choice.

General Electives

There are a number of non-technical courses, known as General Elective courses, on offer covering a broad spectrum of disciplines including finance, law, management, arts & humanities, health safety & environmental, communication etc. add a multi-disciplinary flavour into the mechanical engineering curricular in order to help our graduates to become well-rounded engineers.

Specialisations

The Technical Electives enable the students to choose an area of specialization from 'Materials & Machines', 'Control & Automation' and 'Power & Energy'

Selective basket of technical elective course units from E11 batch of students

A minimum of 10 credits of courses should be claimed for the degree if seeking Honours

OR

A minimum of 8 credits of courses should be claimed if not seeking an Honours degree

From the following technical electives

Group A - Materials and Machines		Group B - Control & Automation		Group C - Power and Energy	
Courses	Credit	Courses	Credit	Courses	Credit
ME326 Introduction to Research Methodologies	1	ME326 Introduction to Research Methodologies	1	ME326 Introduction to Research Methodologies	1
ME502 Ergonomics	2	ME505 Advanced Controls	2	ME501 Heat Transfer	2
ME503 Composite Materials	2			ME508 Automobile Engineering	2
ME511 Advanced Vibration Theory	2	ME511 Advanced Vibration Theory	2	ME512 Energy Technology (2) OR ME330 Energy Technology (3) OR CP508 Energy Technology for the Process Industry (3)	
ME520 Computer Aided Modelling and Finite Element Analysis	3	ME515 Mechatronics	3	ME513 Applied Thermodynamics III	2
CE401 Mechanics of materials III	3	ME518 Rigid Body Dynamics	3	ME520 Computer Aided Modelling and Finite Element Analysis	3
PR510 Manufacturing Technology III	3	ME520 Computer Aided Modelling and Finite Element Analysis	3	CP305 Energy Systems Design OR ME329 Thermal Systems Design	3
CP513 Industrial Fluid Mechanics	3	EE594 Industrial Robotics and Automation	3	CP509 Petroleum Eng	3
		CO 542 Neural Networks and Fuzzy Systems	3	CP513 Industrial Fluid Mechanics	3