



Society of St. Francis Xavier, Pilar's
Fr. Conceicao Rodrigues College of Engineering
Fr. Agnel Ashram, Bandstand, Bandra (W), Mumbai – 400 050
(Autonomous College affiliated to University of Mumbai)



CURRICULUM STRUCTURE

FIRST YEAR UG: B. TECH

MECHANICAL ENGINEERING

REVISION: FRCRCE-3-26

Effective from Academic Year 2026-27

Board of Studies Approval: 05/03/2026

Academic Council Approval: 27/03/2026



Dr. Deepak Bhoir
Dean Academics

Dr. Vasim A. Shaikh
HOD (Mechanical Engg.)

Dr. Sapna Prabhu
Principal



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Preamble:

Fr. Conceicao Rodrigues College of Engineering an autonomous institute from the year 2024-25. University Grant Commission vide letter No. F. 2-10/2023 (AC-Policy) dated 23rd Nov 2023 conferred the autonomous status to Fr. Conceicao Rodrigues College of Engineering, Fr. Agnel Ashram, Bandstand, Bandra (West), Mumbai 400050 affiliated to University of Mumbai for a period of 10 years from the academic year 2024-2025 to 2033-2034 as per clause 7.5 of the UGC (Conferment of Autonomous Status Upon Colleges and Measures for Maintenance of Standards in Autonomous Colleges) Regulations, 2023. We look towards autonomy as a great opportunity to design and implement curriculum sensitive to needs of Learner, Indian Society, and Industries. We commit to ourselves to the effective implementation of UGC Regulations and NEP 2020 in its spirit. Government of Maharashtra has directed Autonomous Colleges to revise their curriculum in line with National Education Policy (NEP) 2020 through Government Resolution dated 4th July 2023. Accordingly, degree options are given to the students admitted from academic year 2024-25 based on UGC circulars and DTE guidelines ref no. 17/DTE/NEP-2020/2024/111 dated 4th June 2024 related to implementation of NEP.

Based on recent recommendations of the GR, we are pleased to offer our holistic curriculum, a “H-Tree Model” of Engineering Education. A unique “**H-Tree Model**” of Engineering Education Curriculum is carefully designed to systematically develop IQ (Intelligence Quotient), PQ (Physical Quotient), EQ (Emotional Quotient) and SQ (Spiritual Quotient) of a learner. This curriculum aims at the development of an all-rounded personality with holistic approach to education in which learner **receives 25% teacher-led learning, 25% peer learning, 25% self-learning and 25% experiential learning**. The curriculum model is outcome based that focuses on learning by doing. Curriculum is designed to provide multiple learning opportunities for students to acquire and demonstrate competencies for rewarding careers. It ensures multiple choices to learner acquiring skills through systematic planning. It has 7 verticals aligned to GR recommendations with strong science, and mathematics foundation and program core, sequel of electives, Multidisciplinary Minor courses, humanities & management courses and sufficient experiential learning through projects and semester-long industry / research internship along with employable skill-based courses. Learner gets an opportunity to acquire skills through NSDC aligned courses during summer vacations. Learner also gets additional option to choose the kind of degree i.e. **built in Multidisciplinary minor or Double Minor in emerging field or Honors with Research**.

The Mechanical Engineering curriculum is designed to provide a balanced combination of strong fundamentals and practical skills. The initial years focus on mathematics, basic sciences, computing, and engineering principles to develop analytical thinking and systematic problem-solving ability. Core



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engineering courses help students understand the working of machines, materials, and energy systems used in real-world applications. Laboratories, workshop practice, and design-based learning ensure that students learn by doing and gain hands-on experience. Elective courses introduce modern technologies and prepare students for evolving industrial requirements. Projects, internships, and experiential activities expose students to real industrial and societal challenges and enhance employability. Overall, the program aims to nurture technical competent, innovative, and responsible engineers ready for careers, entrepreneurship, and higher studies.

Various steps are taken to transform teaching learning process to make learning a joyful experience for students. We believe that this curriculum will raise the bar of academic standards with the active involvement and cooperation from students, academic and administrative units.



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Curriculum Structure for UG Programs at Fr CRCE w.e.f. A.Y. 2026-27

Nomenclature of the courses in the Curriculum

BSESC	Basic Science & Engineering Science Courses
PCPEC	Program Core and Program Elective Courses
MDC	Multidisciplinary Courses
SC	Skill Courses
HSSM	Humanities, Social Sciences and Management
EL	Experiential Learning
LLC	Liberal Learning Courses
BSC	Basic Science Courses
ESC	Engineering Science Courses
PCC	Program Core Courses
PEC	Program Elective Courses
MDM	Multidisciplinary Minor
OE	Open Elective
VSEC	Vocational and Skill Enhancement Course
VSC	Vocational Skill Courses
SEC	Skill Enhancement Courses
AEC	Ability Enhancement Course
EEMC	Entrepreneurship, Economics and Management Course
IKS	Indian Knowledge System
VEC	Value Education Course
RM	Research Methodologies
CEFP	Community Engagement or Field Project
ELC	Experiential Learning Courses
PRJ	Project
INT	Internship
CC	Cocurricular Courses
DM	Double Minor
HR	Honors with Research

Credit Specification:

- ❖ Theory: 1 credit=13 to 15 hrs of teaching
- ❖ Lab: 1 Credit=26 to 30 hrs of lab work
- ❖ Studio Activities: 1 Credit= 26 to 30 hrs of creative activities
- ❖ Workshop Based Activities: 1 Credit=26 to 30 hrs of hands-on activities related to vocation/professional practice/skill based
- ❖ Seminar/Group Discussion: 1 Credit=13 to 15 hrs of participation
- ❖ Internship: 1 Credit=Per 2 weeks OR 36 to 40 hrs of engagement
- ❖ Field Based Learning/Practices: 1 Credit=26 to 30 hrs of learning activities
- ❖ Community Engagement Projects: 1 Credit=26 to 30 hrs of contact time along with 13 to 15 hrs of activities preparation, report writing, independent reading etc.
- ❖ Notional hours include Theory, practical, tutorials and self-learning for each students per week.



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Degree/SEM	I	II	III	IV	V	VI	VII	VIII	Total
B. Tech (Multidisciplinary Minor)	20	20	22	22	22	22	20	20	168
B. Tech with Double Minor (Multidisciplinary & Specialization Minor)	20	20	22 +4*	22 +4*	22 +4*	22 +4*	20 +2\$	20	186
B. Tech with Honors with Research (Multidisciplinary Minor)	20	20	22 +4*	22 +4*	22 +4*	22 +4*	20 +2\$	20	186

*Optional Credits \$ optional 2 credits can be earned either in VII or VIII Semester

1. Learners who earn a minimum of total 168 credits will be awarded “**B.Tech in Engg. /Tech. with Multidisciplinary Minor (MDM)**” degree.

2. Learners will have the following options to earn B. Tech. in Engg. /Tech. degree in

- a) Major Engg./Tech Discipline with Double Minor (Multidisciplinary and Specialization Minor)
- b) Honors with Research and Multidisciplinary Minor

a) Major Engg./Tech Discipline with Double Minor (Multidisciplinary and Specialization Minor) (additional 18 credits): $168 + 18 = 186$ Min Credits.

There will be four courses (4 credits each), one in each semester starting from the 3rd semester which will be from emerging areas of specialisation. In 7th or 8th semester students will complete 2 credits seminar/project.

Admission eligibility min CGPA=7.5 after First year

b) B. Tech in Engg./ Tech.- Honors with Research and Multidisciplinary Minor (additional 18 credits by research): $168 + 18 = 186$ Min Credits.

(Admission eligibility min CGPA=7.5 after First and should maintain CGPA=7.5 after Third year)

3. Learner can earn the certificate/Diploma/Degree based on his/her exit from the program as follows. College shall explore feasibility to offer NSDC aligned skill-based courses to the learners:

- a) UG Certificate: After a one-year (40 credits to be earned) and 8-credits summer workshop/vocational courses/internship
- b) UG Diploma: After two-years (80 credits to be earned) and 8-credits summer workshop/vocational courses/internship/Project
- c) B. Voc.: After three-years (120 credits to be earned) and 8-credits summer workshop/vocational courses/internship/Project

Salient Features of Curriculum:

- Framed as per Government Resolution dated 4th July 2023 in line with National Education Policy (NEP) 2020.
- Minimum 168 choice-based credit structure with options of Degrees earning additional credits
- Unique ‘H-Tree’ Model of Curriculum: Hybrid model for holistic development with happy learning
- Environment having bridge connecting verticals providing unique path for each learner for 3-dimensional growth, Life Long Learning, multiple entry-exit, inclusive model indicating equal distribution of central resources
- More emphasis on laboratory based and experiential learning



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- More weightage to continuous assessment to reduce examination stress
- Mandatory Semester-long internship, courses with emotional & spiritual learning and skill-based learning aligned with NSDC framework
- Well balanced curriculum to attain Program Outcomes and skills of 21st century learners.



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SEMESTERWISE CURRICULUM STRUCTURE

UG Mechanical Engineering Programme: 2026-27 Scheme

FIRST YEAR

SEM-I												
Course Code	Course Vertical	Sub-Vertical	Course Name	Notional Hours		Examination Marks (1 Credit=50 Marks)					Credits	
						ISE	MSE	ESE		Total	Points	Total
								Min	Max			
26BSC11ME01	BSESC	BSC	Matrices and Differential Calculus	TH	2	20	30	20	50	100	2	3
				TU	1	50	-	-	50	1		
				SS/SL	3							
26BSC11ME02	BSESC	BSC	Engineering Chemistry	TH	2	20	30	20	50	100	2	3
				PR	2	50	-	-	50	1		
				SS/SL	2							
26ESC11ME01	BSESC	ESC	Programming Fundamentals (C)	TH	2	20	30	20	50	100	2	4
				TU	1	50	-	-	50	1		
				PR	2	50	-	-	50	1		
				SS/SL	3							
26PCC11ME01	PCPEC	PCC	Digital Electronics	TH	2	20	30	20	50	100	2	4
				TU	1	50	-	-	50	1		
				PR	2	50	-	-	50	1		
				SS/SL	3							
26PCC11ME02	PCPEC	PCC	Innovation and Design Thinking	PR	2	50	-	-	50	1	1	
26VSE11ME01	SC	VSEC	Skill Laboratory – 1	PR	2	50	-	-	50	1	1	
26IKS11ME01	HSSM	IKS	Indian Knowledge System	TH	2	100	-	-	100	2	2	
				SS/SL	2							
LLCXX	LLC	CC	One Course from CC	PR	2	100	-	-	100		2	
				SS/SL	2							
Total				TH:TU:PR:SL						1000	-	20
						10:3:12:15=40						

SEM-II												
Course Code	Course Vertical	Sub-Vertical	Course Name	Notional Hours		Examination Marks (1 Credit=50 Marks)					Credits	
						ISE	MSE	ESE		Total	Points	Total
								Min	Max			
26BSC11ME03	BSESC	BSC	Integral Calculus and Probability Theory	TH	2	20	30	20	50	100	2	3
				TU	1	50	-	-	50	1		
				SS/SL	3							
26BSC11ME04	BSESC	BSC	Engineering Physics	TH	2	20	30	20	50	100	2	3
				PR	2	50	-	-	50	1		
				SS/SL	2							
26ESC11ME02	BSESC	ESC	Engineering Graphics	TH	2	20	30	20	50	100	2	3
				PR	2	50	-	-	50	1		
				SS/SL	2							
26ESC11ME03	BSESC	ESC	Basic Electrical and Electronics Engineering	TH	2	20	30	20	50	100	2	4
				TU	1	50	-	-	50	1		
				PR	2	50	-	-	50	1		
				SS/SL	3							
26AEC11ME01	HSSM	AEC	Object Oriented Programming with JAVA	PR	4	100	-	-	100	2	2	
26VSE11ME02	SC	VSEC	Skill Laboratory - 2	PR	2	50	-	-	50	2	1	
26AEC11ME02	HSSM	AEC	Art of Communication	TH	1	100	-	-	-	100	1	2
				PR	2						1	
				SS/SL	1							
LLCXX	LLC	CC	One Course From CC	PR	2	100	-	-	100	2	2	
				SS/SL	2							
Total				TH:TU:PR:SL						1000	-	20
						9:2:16:13=40						

Notional Hours = Contact Hours + Self-Learning

Skill Laboratory -1		Skill Laboratory -2	
A	Measuring and Testing Tools	A	PC and Networking
B	Soldering and PCB Assembly	B	Linux Operating System
C	Mini-project (Hardware)	C	Data analysis using spreadsheets



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Curriculum Structure for UG Programs at Fr CRCE w.e.f. A.Y. 2027-28

SECOND YEAR

SEM-III												
Course Code	Course Vertical	Sub-Vertical	Course Name	Notional Hours		Examination Marks (1 Credit=50 Marks)				Credits		
						ISE	MSE	ESE		Total	Points	Total
								Min	Max			
26BSC12ME05	BSESC	BSC	Statistical Techniques and Partial Differential Equations	TH	2	20	30	20	50	100	2	3
				TU	1	50	-	-	50	1		
				SS/SL	3							
26PCC12ME03	PCPEC	PCC	Engineering Mechanics	TH	2	20	30	20	50	100	2	4
				TU	1	50	-	-	50	1		
				PR	2	50	-	-	50	1		
				SS/SL	3							
26PCC12ME04	PCPEC	PCC	Basic Manufacturing Processes	TH	2	20	30	20	50	100	2	3
				TU	1	50	-	-	50	1		
				SS/SL	2							
26PCC12ME05	PCPEC	PCC	Machine Shop Practice	PR	4	100	-	-	100	2	2	
				SS/SL	2							
26PCC12ME06	PCPEC	PCC	Thermodynamics	TH	2	20	30	20	50	100	2	2
				SS/SL	2							
26OE13ME1X	MDC	OE	1. Law for Engineers 2. Financial Planning, Taxation and Investment	TH	2	100	-	-	100	2	2	
				SS/SL	2							
26MDMXX1	MDC	MDM	MDM Course-1	TH	2	20	30	20	50	100	2	3
				TU	1	50	-	-	50	1		
				SS/SL	3							
26VEC12ME01	HSSM	VEC	Human Values and Professional Ethics	TH	1	100	-	-	-	100	1	2
				PR	2						1	
				SS/SL	1							
26CEP12CE01	EL	CEFP	Community Engagement Project	PRJ	2	50	-	-	50	1	1	
26DMX1	DM	DM	Double Minor Course	TH	2	20	30	20	50	100	2	4#
				TU	2	50	-	-	50	2		
26HR01	HR	HR	Honors with Research	SL	8	-	-	-	-	4	4*	
Total						TH:TU:PR:SL				1100	-	22
						13:4:10:18=45						

SEM-IV												
Course Code	Course Vertical	Sub-Vertical	Course Name	Notional Hours		Examination Marks (1 Credit=50 Marks)				Credits		
						ISE	MSE	ESE		Total	Points	Total
								Min	Max			
26BSC12ME06	BSESC	BSC	Materials Science	TH	2	20	30	20	50	100	2	3
				PR	2	50	-	-	50	1		
				SS/SL	2							
26PCC12ME07	PCPEC	PCC	Mechanics of Solids	TH	2	20	30	20	50	100	2	4
				TU	1	50	-	-	50	1		
				PR	2	50	-	-	50	1		
				SS/SL	3							
26PCC12ME08	PCPEC	PCC	Advanced Manufacturing Processes	TH	2	20	30	20	50	100	2	4
				TU	1	50	-	-	50	1		
				PR	2	50	-	-	50	1		
				SS/SL	3							
26PCC12ME09	PCPEC	PCC	CAD/CAM	TH	2	20	30	20	50	100	2	3
				TU	1	50	-	-	50	1		
				SS/SL	3							
26OE12ME2X	MDC	OE	1. Emerging Technology and Law 2. Principles of Management	TH	2	100	-	-	100	2	2	
				SS/SL	2							
26MDMXX2	MDC	MDM	MDM Course-2	TH	2	20	30	20	50	100	2	3
				TU	1	50	-	-	50	1		
				SS/SL	3					1		
26VSE12ME03	SC	VSEC	Computer Aided Machine Drawing	PR	2	50	-	-	50	1	1	
26VSE12ME04	SC	VSEC	CNC Lab	PR	2	50	-	-	50	1	1	
26VEC12ME02	HSSM	VEC	Technology Innovation for Sustainable Development: Mini Project	PR	2	50	-	-	50	1	1	
26DMX2	DM	DM	Double Minor Course	TH	2	20	30	20	50	100	2	4*
				TU	2	50	-	-	50	2		
26HR02	HR	HR	Honors with Research	SL	8	-	-	-	-	4	4*	
BC	BC	BC	MOOC	-	-	-	-	-	-	-	2S	
Total						TH:TU:PR:SL				1100	-	22
						12:4:12:16=44						

\$ Discipline specific additional course to Lateral Entry (Diploma) students from Swayam Plus/Swayam platform

*Indicates DM/HR course credits



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Curriculum Structure for UG Programs at Fr CRCE w.e.f. A.Y. 2028-29

THIRD YEAR:

SEM-V												
Course Code	Course Vertical	Sub-Vertical	Course Name	Notional Hours		Examination Marks (1 Credit=50 Marks)					Credits	
						ISE	MSE	ESE		Total	Points	Total
								Min	Max			
26PCC13ME10	PCPEC	PCC	Automation and Control Engineering	TH	2	20	30	20	50	100	2	3
				PR	2	50	-	-	50	1		
				SS/SL	2							
26PCC13ME11	PCPEC	PCC	Theory of Machines	TH	2	20	30	20	50	100	2	3
				PR	2	50	-	-	50	1		
				SS/SL	2							
26PCC13ME12	PCPEC	PCC	Finite Element Analysis	TH	2	20	30	20	50	100	2	3
				PR	2	50	-	-	50	1		
				SS/SL	2							
26PCC13ME13	PCPEC	PCC	Thermal Engineering	TH	2	20	30	20	50	100	2	3
				PR	2	50	-	-	50	1		
				SS/SL	2							
26PEC13ME1X	PCPEC	PEC	Program Elective - 1	TH	2	20	30	20	50	100	2	3
				TU	1	50	-	-	50	1		
				SS/SL	3							
26VSE13ME05	SC	VSEC	Condition Monitoring Lab	PR	2	50	-	-	50	1	1	
26VSE13ME06	SC	VSEC	Creative coding in Python	PR	2	50	-	-	50	1	1	
26OE13ME3X	MDC	OE	1. Health, Wellness and Psychology 2. Emotional and Spiritual Intelligence	TH	2	100	-	-	100	2	2	
				SS/SL	2							
26MDMXX3	MDC	MDM	MDM Course-3	TH	2	20	30	20	50	100	2	3
				TU	1	50	-	-	50	1		
				SS/SL	3							
26DMX3	DM	DM	Double Minor Course	TH	2	20	30	20	50	100	2	4*
				TU	2	50	-	-	50	2		
26HR03	HR	HR	Honors/ with Research	SL	8					4	4*	
Total						TH:TU:PR:SL				1100	-	22

SEM-VI												
Course Code	Course Vertical	Sub-Vertical	Course Name	Notional Hours		Examination Marks (1 Credit=50 Marks)					Credits	
						ISE	MSE	ESE		Total	Points	Total
								Min	Max			
26PCC13ME14	PCPEC	PCC	Heating Ventilation, Air Conditioning and Refrigeration	TH	2	20	30	20	50	100	2	3
				PR	2	50	-	-	50	1		
				SS/SL	2							
26PCC13ME15	PCPEC	PCC	Machine Design	TH	2	20	30	20	50	100	2	3
				TU	1	50	-	-	50	1		
				SS/SL	3							
26PCC13ME16	PCPEC	PCC	Fluid Mechanics & Hydraulic Machines	TH	2	20	30	20	50	100	2	3
				PR	2	50	-	-	50	1		
				SS/SL	2							
26PCC13ME17	PCPEC	PCC	Metrology and Quality Engineering	TH	2	20	30	20	50	100	2	2
				SS/SL	2							
26PCC13ME18	PCPEC	PCC	Product Design Lab	PR	2	50	-	-	50	1	1	
26PCC13ME19	PCPEC	PCC	Measurements Systems and Quality Engineering Lab	PR	2	50	-	-	50	1	1	
26PCC13ME20	PCPEC	PCC	Mini Project	PRJ	2	50	-	-	50	1	1	
26PEC13ME2X	PCPEC	PEC	Program Elective - 2	TH	2	20	30	20	50	100	2	3
				TU	1	50	-	-	50	1		
				SS/SL	3							
26OE13ME4X	MDC	OE	Public Relations and Corporate Communication	TH	2	100	-	-	100	2	2	
				SS/SL	2							
26MDMXX4	MDC	MDM	MDM Course -4	TH	2	20	30	20	50	100	2	3
				TU	1	50	-	-	50	1		
				SS/SL	3							
26DMX4	DM	DM	Double Minor Course	TH	2	20	30	20	50	100	2	4*
				TU	2	100	-	-	100	2		
26HR04	HR	HR	Honors/ with Research	SL	8					4	4*	
Total						TH:TU:PR:SL				1100	-	22



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Curriculum Structure for UG Programs at Fr CRCE w.e.f. A.Y. 2029-30

FINAL YEAR

SEM-VII/VIII													
Course Code	Course Vertical	Sub-Vertical	Course Name	Notional Hours		Examination Marks (1 Credit=50 Marks)					Credits		
						ISE	MSE	ESE		Total	Points	Total	
								Min	Max				
26PEC14ME3X	PCPEC	PEC	Program Elective – 3	TH	2	20	30	20	50	100	2	3	
				TU	1	50	-	-	-	50	1		
				SS/SL	3								
26PEC14ME4X	PCPEC	PEC	Program Elective – 4	TH	2	20	30	20	50	100	2	3	
				TU	1	50	-	-	-	50	1		
				SS/SL	3								
26PEC14ME5X	PCPEC	PEC	Program Elective – 5	TH	2	20	30	20	50	100	2	3	
				TU	1	50	-	-	-	50	1		
				SS/SL	3								
26PEC14ME6X	PCPEC	PEC	Program Elective – 6	TH	2	20	30	20	50	100	2	3	
				TU	1	50	-	-	-	50	1		
				SS/SL	3								
26MDMXX5	MDC	MDM	MDM Course-5	TH	2	20	30	20	50	100	2	3	
				TU	1	50	-	-	-	50	1		
				SS/SL	3								
RMC14ME01	EL	RM	Essentials of Research Methodology	TH	2	20	30	20	50	100	2	2	
				SS/SL	2								
RMC14ME02	EL	RM	Intellectual Property Rights	TH	2	20	30	20	50	100	2	2	
				SS/SL	2								
PRJ14ME01	EL	PR	Major Project	PR	12	300	-	-	-	300	6	6	
26SEM14ME01	PCPEC	PEC	Course Seminar	SL	3	As per Rubrics for Seminar					3	3	
INT14ME01	EL	INT	Semester long Internship	PR	36-40 hrs	As Per Internship Manual					12	12	
26DMX5	DM	DM	Double Minor Project	PR	4	As per Rubrics for Seminar/Project					2	2*	
26HR05	HR	HR	Honors/ with Research	SL	4	-	-	-	-	-	2	2*	
Total					TH:TU:PR:SL						1250	-	40+2*

List of Program Elective Courses (SEM V and VI)

SEM V - Program Elective - 1	SEM VI - Program Elective - 2
26PEC13ME11: Mould and Metal Forming Technology	26PEC13ME21: Industrial Robotics
26PEC13ME12: Additive Manufacturing	26PEC13ME22: Dynamics of Machinery
26PEC13ME13: Optimization Techniques	26PEC13ME23: IC Engines

- Students may earn academic credits of final year subjects through approved online courses offered on SWAYAM/NPTEL platforms, subject to prior approval.
- Online courses may be completed anytime from Semester V to Semester VIII. The total credits earned through online courses shall count toward the remaining credit requirements of the program.
- Credit Conversion Norms:
 - 1 Credit → Minimum 4-week SWAYAM course
 - 2 Credits → Minimum 8-week SWAYAM course (Combination of two approved 4-week courses is permitted)
 - 3 Credits → Minimum 12-week SWAYAM course
- Project or Internship is mutually exclusive in SEM-VII or SEM-VIII
- The remaining required credits may be earned during Semester V to Semester VIII through SWAYAM/NPTEL courses or through courses offered by the Department.



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List of Program Elective Courses (SEM VII/VIII)

SEM VII/VIII - Program Elective – 3	SEM VII/VIII - Program Elective – 4
26PEC14ME31: Design of Mechanical Systems	26PEC14ME41: Supply Chain Management
26PEC14ME32: Smart Materials	26PEC14ME42: Project Management
SEM VII/VIII - Program Elective – 5	SEM VII/VIII - Program Elective – 6
26PEC14ME51: Industrial Engineering and Operations Management	26PEC14ME61: Machinery Diagnostics
26PEC14ME52: Costing and Cost Control	26PEC14ME62: Lean Manufacturing

Comparison of Credit Distribution for Four Year UG Program for Fr CRCE and GR:

UG: Mechanical Engineering

SEM	Course Verticals																Total Credits	
	BSESC		PCPEC		MDC		SC	HSSM				EL			LLC	BC		
	BSC	ESC	PCC	PEC	MDM	OE	VSEC	AEC	EEMC	IKS	VEC	RM	CEFP	PRJ	INT	CC		BC
I	6	4	5				1			2						2	--	20
II	6	7					1	4								2	--	20
III	3		11		3	2					2		1					22
IV	3		11		3	2	2				1						2*	22
V			12	3	3	2	2											22
VI			14	3	3	2												22
VII & VIII				15	3							4		6	12		--	40
Total Credits as per Fr CRCE	18	11	53	21	15	8	6	4		2	3	4	1	6	12	4	2*	168
Total Credits as per GR	14	12	44	20	14	8	8	4	4	2	4	4	2	4	12	4		160