Annexure A Amended B.Tech. Curriculum Structure

Department of Mechanical Engineering, TU

1 AICTE Curriculum vs. Proposed Curriculum

\mathbf{SN}	Category	AICTE Model	Proposed
		Curriculum	Curriculum
		Credits	Credits
1	Humanities and Social Sciences including Manage-	12	12
	ment courses		
2	Basic Science courses	29	23
3	Engineering Science courses	27	29
4	Professional core courses	58	58
5	Professional Elective courses relevant to chosen	9	12
	branch		
6	Open subjects Electives from other technical and /or	9	9
	emerging Subjects		
7	Project work, seminar and internship in industry or	16	17
	elsewhere		
8	Mandatory Courses [Environmental Sciences, Induc-	0	0
	tion Program, Indian Constitution, Essence of Indian		
	Knowledge Tradition]		
	Total	160	160

2 Proposed Curriculum :: Category-wise distribution of courses

SEC102	Humanities and Social Sciences including Management courses (HSMC)								
SEEC103	SN	Code	Course	L	Т	Р	CR	СН	
SEEC103	1	SEEC102	English	2	0	0	2	2	
SEEC104	2	SEEC103	~	0	0	1	1	2	
Transport Tran	3	SEEC104		2	1	0	3	3	
SEEC302 Finance and Accounting SEEC302 SEEC302 Finance and Accounting SEEC302 SEEC303 SEEC	4	SEEC200		3	0	0	3	3	
SN Code Course L T P CR CH	5	SEEC300	,	3	0	0	0	3	
SN Code Course L T P CR CH	6	SEEC302	Finance and Accounting	3	0	0	3	3	
APMS100 Mathematics - I	Bas	ic Science Co	urses (BSC)						
APCH100 Chemistry Chemis	SN	Code	Course	L	Τ	Р	CR	СН	
A PCH101 Chemistry Lab 0 0 0 1 1 2 4 APMS101 Mathematics - II 3 1 0 4 4 4 5 APPH100 Physics 3 1 0 4 4 4 6 APPH101 Physics 3 0 0 0 1 1 2 2 7 SEEC101 Biology for Engineers 3 0 0 3 3 3 8 APMS200 Mathematics - III 2 1 0 3 3 3 5 2 1 0 3 3 3 5 2 1 0 3 3 3 5 2 1 0 3 3 3 5 2 1 0 3 3 3 2 2 2 2 2 2 2	1	APMS100	Mathematics - I	3	1	0	4	4	
A PCH101 Chemistry Lab 0 0 0 1 1 2 4 APMS101 Mathematics - II 3 1 0 4 4 4 5 APPH100 Physics 3 1 0 4 4 4 6 APPH101 Physics 3 0 0 0 1 1 2 2 7 SEEC101 Biology for Engineers 3 0 0 3 3 3 8 APMS200 Mathematics - III 2 1 0 3 3 3 5 2 1 0 3 3 3 5 2 1 0 3 3 3 5 2 1 0 3 3 3 5 2 1 0 3 3 3 2 2 2 2 2 2 2	2	APCH100	Chemistry	3	0	0	3	3	
A PMS101 Mathematics - II 3	3	APCH101	· ·	0	0	1	1	2	
6 APPH101 Physics Lab 0 0 1 1 2 7 SEEC101 Biology for Engineers 3 0 0 3 3 8 APMS200 Mathematics - III 2 1 0 3 3 Engineering Science Courses (ESC) SN Code Course L T P CR CH 1 CSBT100 Programming for Problem Solving 2 0 0 2 2 4 3 MEBT100 Manufacturing Practices Workshop 0 0 2 2 4 4 EEBT100 Basic Electrical Engineering 2 1 0 3 3 3 3 2 2 4 4 EEBT101 Basic Electronics 2 0 0 1 1 2 2 0 0 2 2 4 4 1 2 1 0 3 3 5	4	APMS101	· ·	3	1	0	4	4	
6 APPH101 Physics Lab 0 0 1 1 2 7 SEEC101 Biology for Engineers 3 0 0 3 3 8 APMS200 Mathematics - III 2 1 0 3 3 Emission of Mathematics - III 2 1 0 3 3 Simposition of Code Course L T P CR CH 1 CSBT100 Programming for Problem Solving 2 0 0 2 2 4 3 MEBT100 Manufacturing Practices Workshop 0 0 2 2 4 4 EEBT100 Basic Electrical Engineering 2 1 0 3 3 3 3 3 3 2 2 4 4 EEBT101 Basic Electronics Lab 0 0 1 1 2 2 0 0 2 2 2 0 0 1	5	APPH100	Physics	3	1	0	4	4	
7 SEEC101 APMS200 Biology for Engineers Mathematics - III 3 0 0 3 3 Engineering Science Courses (ESC) SN Code Course L T P CR CH 1 CSBT100 Programming for Problem Solving 2 0 0 2 2 2 CSBT101 Programming Lab 0 0 2 2 4 3 MEBT100 Manufacturing Practices Workshop 0 0 2 2 4 4 EEBT100 Basic Electrical Engineering 2 1 0 3 3 3 3 3 3 3 3 3 3 3 3 3 2 0 0 2 2 4 4 EEBT100 Basic Electronics Lab 0 0 1 1 2 2 0 0 2 3 1 0 2 3 1 0 2 3	6	APPH101	·	0	0	1	1	2	
Engineering Science Courses (ESC) SN Code Course L T P CR CH 1 CSBT100 Programming for Problem Solving 2 0 0 2 2 2 CSBT101 Programming Lab 0 0 2 2 4 3 MEBT100 Manufacturing Practices Workshop 0 0 2 2 4 4 EEBT100 Basic Electrical Engineering 2 1 0 3 3 5 EEBT101 Basic Electronics 2 0 0 2 2 4 6 ECBT102 Basic Electronics 2 0 0 2 2 0 0 2 2 0 0 2 2 2 0 0 2 2 2 0 0 2 2 4 4 1 2 2 0 0 2 2 0 0 2		SEEC101			0	0	3		
SN Code Course L T P CR CH 1 CSBT100 Programming for Problem Solving 2 0 0 2 2 2 CSBT101 Programming Lab 0 0 2 2 4 3 MEBT100 Manufacturing Practices Workshop 0 0 2 2 4 4 EEBT100 Basic Electrical Engineering 2 1 0 3 3 5 EEBT101 Basic Electronics 2 0 0 1 1 2 6 ECBT102 Basic Electronics Lab 0 0 1 1 2 7 ECBT103 Basic Electronics Lab 0 0 1 1 2 8 CEBT100 Engineering Graphics and Design 1 0 2 3 5 9 DDBD100 Design Thinking 0 0 1 1 2 10 MEBT203	8		0, 0	2	1	0	3	3	
1 CSBT100 Programming for Problem Solving 2 0 0 2 2 2 CSBT101 Programming Lab 0 0 2 2 4 3 MEBT100 Manufacturing Practices Workshop 0 0 2 2 4 4 EEBT100 Basic Electrical Engineering 2 1 0 3 3 5 EEBT101 Basic Electronics 2 0 0 2 2 2 6 ECBT102 Basic Electronics Lab 0 0 1 1 2 2 0 0 2 2 2 0 0 2 2 2 0 0 2 2 2 0 0 2 2 2 0 0 2 2 2 0 0 2 2 2 2 0 0 2 2 2 2 2 1 0 2 3 1	Eng	gineering Scien	nce Courses (ESC)						
2 CSBT101 Programming Lab 0 0 2 2 4 3 MEBT100 Manufacturing Practices Workshop 0 0 2 2 4 4 EEBT100 Basic Electrical Engineering 2 1 0 3 3 5 EEBT101 Basic Electronics 2 0 0 1 1 2 6 ECBT102 Basic Electronics 2 0 0 2 2 7 ECBT103 Basic Electronics Lab 0 0 1 1 2 8 CEBT100 Engineering Graphics and Design 1 0 2 3 5 9 DDBD100 Design Thinking 0 0 1 1 2 10 MEBT202 Engineering Mechanics 3 1 0 4 4 11 MEBT203 Basic Thermodynamics 3 1 0 4 4 12 SEC201 IDEA Lab Workshop 0 0 2 0 4 1<	SN	Code	Course	L	Т	Р	CR	СН	
2 CSBT101 Programming Lab 0 0 2 2 4 3 MEBT100 Manufacturing Practices Workshop 0 0 2 2 4 4 EEBT100 Basic Electrical Engineering 2 1 0 3 3 5 EEBT101 Basic Electronics 2 0 0 1 1 2 6 ECBT102 Basic Electronics 2 0 0 1 1 2 6 ECBT103 Basic Electronics Lab 0 0 1 1 2 8 CEBT100 Engineering Graphics and Design 1 0 2 3 5 9 DDBD100 Design Thinking 0 0 1 1 2 10 MEBT202 Engineering Mechanics 3 1 0 4 4 11 MEBT203 Basic Thermodynamics 3 1 0 4 4 12 SEEC201 IDEA Lab Workshop 0 0 2 0 4	1	CSBT100	Programming for Problem Solving	2	0	0	2	2	
3 MEBT100 Manufacturing Practices Workshop 0 0 2 2 4 4 EEBT100 Basic Electrical Engineering 2 1 0 3 3 5 EEBT101 Basic Electronics Lab 0 0 1 1 2 6 ECBT102 Basic Electronics 2 0 0 2 2 7 ECBT103 Basic Electronics Lab 0 0 1 1 2 8 CEBT100 Engineering Graphics and Design 1 0 2 3 5 9 DDBD100 Design Thinking 0 0 1 1 2 10 MEBT202 Engineering Mechanics 3 1 0 4 4 11 MEBT203 Basic Thermodynamics 3 1 0 4 4 12 SEC201 IDEA Lab Workshop 0 0 2 0 4 13 MEBT205	2	CSBT101		0	0	2		4	
4 EEBT100 Basic Electrical Engineering 2 1 0 3 3 5 EEBT101 Basic Electronics Lab 0 0 1 1 2 6 ECBT102 Basic Electronics 2 0 0 2 2 7 ECBT103 Basic Electronics Lab 0 0 1 1 2 8 CEBT100 Engineering Graphics and Design 1 0 2 3 5 9 DDBD100 Design Thinking 0 0 1 1 2 10 MEBT202 Engineering Mechanics 3 1 0 4 4 11 MEBT203 Basic Thermodynamics 3 1 0 4 4 12 SEEC201 IDEA Lab Workshop 0 0 2 0 4 13 MEBT205 Applied Thermodynamics 3 1 0 4 4 Professional Core Course L T P CR CH 1 MEBT204 <	3			0	0			4	
5 EEBT101 Basic Electrical Engineering Lab 0 0 1 1 2 6 ECBT102 Basic Electronics 2 0 0 2 2 7 ECBT103 Basic Electronics Lab 0 0 1 1 2 8 CEBT100 Engineering Graphics and Design 1 0 2 3 5 9 DDBD100 Design Thinking 0 0 1 1 2 10 MEBT202 Engineering Mechanics 3 1 0 4 4 11 MEBT203 Basic Thermodynamics 3 1 0 4 4 12 SEEC201 IDEA Lab Workshop 0 0 2 0 4 13 MEBT205 Applied Thermodynamics 3 1 0 4 4 Professional Core Courses (PCC) Engineering Materials and Applications 3 0 1 4 5 2 M	4	EEBT100		2	1	0	3	3	
6 ECBT102 Basic Electronics 2 0 0 2 2 7 ECBT103 Basic Electronics Lab 0 0 1 1 2 8 CEBT100 Engineering Graphics and Design 1 0 2 3 5 9 DDBD100 Design Thinking 0 0 1 1 2 10 MEBT202 Engineering Mechanics 3 1 0 4 4 11 MEBT203 Basic Thermodynamics 3 1 0 4 4 12 SEEC201 IDEA Lab Workshop 0 0 2 0 4 13 MEBT205 Applied Thermodynamics 3 1 0 4 4 Professional Core Courses (PCC) SN Code Course L T P CR CH 1 MEBT201 Measurement and Metrology 3 0 1 4 5 <	5	EEBT101		0	0	1	1	2	
7 ECBT103 Basic Electronics Lab 0 0 1 1 2 8 CEBT100 Engineering Graphics and Design 1 0 2 3 5 9 DDBD100 Design Thinking 0 0 1 1 2 10 MEBT202 Engineering Mechanics 3 1 0 4 4 11 MEBT203 Basic Thermodynamics 3 1 0 4 4 12 SEEC201 IDEA Lab Workshop 0 0 2 0 4 13 MEBT205 Applied Thermodynamics 3 1 0 4 4 Professional Core Courses (PCC) SN Code Course L T P CR CH 1 MEBT201 Measurement and Metrology 3 0 1 4 5 2 MEBT204 Engineering Materials and Applications 3 1 0 4 4	6		9 9	2	0	0	2	2	
8 CEBT100 Engineering Graphics and Design 1 0 2 3 5 9 DDBD100 Design Thinking 0 0 1 1 2 10 MEBT202 Engineering Mechanics 3 1 0 4 4 11 MEBT203 Basic Thermodynamics 3 1 0 4 4 12 SEEC201 IDEA Lab Workshop 0 0 2 0 4 13 MEBT205 Applied Thermodynamics 3 1 0 4 4 Professional Core Courses (PCC) SN Code Course L T P CR CH 1 MEBT201 Measurement and Metrology 3 0 1 4 5 2 MEBT204 Engineering Materials and Applications 3 1 0 4 4 3 MEBT206 Mechatronics, Robotics and Control 3 0 1 4	7		Basic Electronics Lab	0	0	1	1	2	
9 DDBD100 Design Thinking 0 0 1 1 2 10 MEBT202 Engineering Mechanics 3 1 0 4 4 11 MEBT203 Basic Thermodynamics 3 1 0 4 4 12 SEEC201 IDEA Lab Workshop 0 0 2 0 4 13 MEBT205 Applied Thermodynamics 3 1 0 4 4 Professional Core Courses (PCC) SN Code Course L T P CR CH 1 MEBT201 Measurement and Metrology 3 0 1 4 5 2 MEBT204 Engineering Materials and Applications 3 1 0 4 4 3 MEBT206 Mechatronics, Robotics and Control 3 0 1 4 5 4 MEBT207 Mechanics of Deformable Solids 3 1 0 4	8		Engineering Graphics and Design	1	0	2	3	5	
10 MEBT202 Engineering Mechanics 3 1 0 4 4 11 MEBT203 Basic Thermodynamics 3 1 0 4 4 12 SEEC201 IDEA Lab Workshop 0 0 2 0 4 13 MEBT205 Applied Thermodynamics 3 1 0 4 4 Professional Core Courses (PCC) SN Code Course L T P CR CH 1 MEBT201 Measurement and Metrology 3 0 1 4 5 2 MEBT204 Engineering Materials and Applications 3 1 0 4 4 3 MEBT206 Mechatronics, Robotics and Control 3 0 1 4 5 4 MEBT207 Mechanics of Deformable Solids 3 1 0 4 4				0	0	1	1	2	
11 MEBT203 Basic Thermodynamics 3 1 0 4 4 12 SEEC201 IDEA Lab Workshop 0 0 2 0 4 13 MEBT205 Applied Thermodynamics 3 1 0 4 4 Professional Core Courses (PCC) SN Code Course L T P CR CH 1 MEBT201 Measurement and Metrology 3 0 1 4 5 2 MEBT204 Engineering Materials and Applications 3 1 0 4 4 3 MEBT206 Mechatronics, Robotics and Control 3 0 1 4 5 4 MEBT207 Mechanics of Deformable Solids 3 1 0 4 4	10			3	1	0	4	4	
12 SEEC201 IDEA Lab Workshop 0 0 2 0 4 13 MEBT205 Applied Thermodynamics 3 1 0 4 4 Professional Core Courses (PCC) SN Code Course L T P CR CH 1 MEBT201 Measurement and Metrology 3 0 1 4 5 2 MEBT204 Engineering Materials and Applications 3 1 0 4 4 3 MEBT206 Mechatronics, Robotics and Control 3 0 1 4 5 4 MEBT207 Mechanics of Deformable Solids 3 1 0 4 4	11	MEBT203		3	1	0	4	4	
13 MEBT205 Applied Thermodynamics 3 1 0 4 4 Professional Core Courses (PCC) SN Code Course L T P CR CH 1 MEBT201 Measurement and Metrology 3 0 1 4 5 2 MEBT204 Engineering Materials and Applications 3 1 0 4 4 3 MEBT206 Mechatronics, Robotics and Control 3 0 1 4 5 4 MEBT207 Mechanics of Deformable Solids 3 1 0 4 4	12	SEEC201		0	0	2	0	4	
SN Code Course L T P CR CH 1 MEBT201 Measurement and Metrology 3 0 1 4 5 2 MEBT204 Engineering Materials and Applications 3 1 0 4 4 3 MEBT206 Mechatronics, Robotics and Control 3 0 1 4 5 4 MEBT207 Mechanics of Deformable Solids 3 1 0 4 4	13		•	3	1	0	4	4	
SN Code Course L T P CR CH 1 MEBT201 Measurement and Metrology 3 0 1 4 5 2 MEBT204 Engineering Materials and Applications 3 1 0 4 4 3 MEBT206 Mechatronics, Robotics and Control 3 0 1 4 5 4 MEBT207 Mechanics of Deformable Solids 3 1 0 4 4	Pro	fessional Core							
2 MEBT204 Engineering Materials and Applications 3 1 0 4 4 3 MEBT206 Mechatronics, Robotics and Control 3 0 1 4 5 4 MEBT207 Mechanics of Deformable Solids 3 1 0 4 4				L	Т	Р	CR	СН	
3 MEBT206 Mechatronics, Robotics and Control 3 0 1 4 5 4 MEBT207 Mechanics of Deformable Solids 3 1 0 4 4	1	MEBT201		3	0	1	4	5	
3 MEBT206 Mechatronics, Robotics and Control 3 0 1 4 5 4 MEBT207 Mechanics of Deformable Solids 3 1 0 4 4	2	MEBT204	Engineering Materials and Applications	3	1	0	4	4	
	3	MEBT206	Mechatronics, Robotics and Control	3	0	1	4	5	
5 MEBT208 Kinematics and Dynamics of Machines 3 1 0 4 4	4	MEBT207	Mechanics of Deformable Solids	3	1	0	4	4	
	5	MEBT208	Kinematics and Dynamics of Machines	3	1	0	4	4	

Pro	fessional Core	e Courses (PCC)					
SN	Code	Course	L	Т	Р	CR	СН
6	MEBT209	Fluid Mechanics and Hydraulic Machines	3	1	0	4	4
7	MEBT210	Mech. Engg. Lab 1	0	0	2	2	4
8	MEBT301	Machine Element and System Design	3	1	0	4	4
9	MEBT302	Heat Transfer	3	1	0	4	4
10	MEBT303	Manufacturing Processes	3	1	0	4	4
11	MEBT304	Production and Operation Management	3	1	0	4	4
12	MEBT305	Mech. Engg. Lab 2	0	0	2	2	4
13	MEBT306	Computer-Aided Engineering	2	0	2	4	6
14	MEBT307	Manufacturing Automation	3	0	1	4	5
15	MEBT308	Product Innovation, Marketing and Finance	3	1	0	4	4
16	MEBT309	Mech. Engg. Lab 3	0	0	2	2	4
Pro	fessional Elec	tive Courses (PEC)					
SN	Code	Course	L	Τ	Р	CR	CH
1	MEBT3XX	Professional Elective – 1	3	0	0	3	3
2	MEBT4XX	Professional Elective – 2	3	0	0	3	3
3	MEBT4XX	Professional Elective – 3	3	0	0	3	3
4	MEBT4XX	Professional Elective – 4	3	0	0	3	3
Ope	en Elective Co	ourses (OE)					
SN	Code	Course	L	Τ	Р	CR	СН
1	OEBT4XX	Open Elective – 1	3	0	0	3	3
2	OEBT4XX	Open Elective – 2	3	0	0	3	3
3	OEBT4XX	Open Elective – 3	3	0	0	3	3
Pro	ject work, se	minar and internship in industry or elsewh	ere	(Pr)		
SN	Code	Course	L	Τ	Р	CR	CH
1	MEBT310	Engineering Project 1 (Literature Review)	0	0	2	2	4
2	MEBT401	Engineering Project 2 (Design and Analysis)	0	0	6	6	12
3	MEBT403	Engineering Project 3 (Prototype and Test-	0	0	8	8	16
4	MEBT402	ing) Seminar	0	0	1	1	2
Mai	ndatory Non-	credit Courses (MNC)					
SN	Code	Course	L	Т	Р	CR	СН
1	SEIP100	Induction Program	0	0	4	0	8
$\overline{2}$	SEEC100	Environmental Sciences	2	0	1	0	4
	SESP100			-		-	
	SENS100	Sports and Yoga/NSS/NCC	0	0	2	0	4
3		· · · · · · · · · · · · · · · · · · ·					
3	SENC100						
3 4	SENC100 SEEC303	Essence Of Indian Knowledge Tradition	1	0	0	0	1

3 Proposed Curriculum :: Semester-wise distribution of courses

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Sem	Code	Course	\mathbf{L}	\mathbf{T}	P	\mathbf{CR}	\mathbf{CH}	$\overline{ extbf{CR}_{sem}}$
	APMS100	Mathematics - I	3	1	0	4	4	
	APCH100	Chemistry	3	0	0	3	3	
	APCH101	Chemistry Lab	0	0	1	1	2	
	CSBT100	Programming for Problem Solving	2	0	0	2	2	
-	CSBT101	Programming Lab	0	0	2	2	4	20
Ι	MEBT100	Manufacturing Practices Workshop	0	0	2	2	4	20
	SEEC102	English	2	0	0	2	2	
	SEEC103	Language Lab	0	0	1	1	2	
	SEEC104	Universal Human Values	2	1	0	3	3	
	SEIP100	Induction Program	0	0	4	0	8	
		0						
	APMS101	Mathematics - II	3	1	0	4	4	
	APPH100	Physics	3	1	0	4	4	
	APPH101	Physics Lab	0	0	1	1	2	
	EEBT100	Basic Electrical Engineering	2	1	0	3	3	
	EEBT101	Basic Electrical Engineering Lab	0	0	1	1	2	
\mathbf{II}	ECBT102	Basic Electronics	2	0	0	2	2	23
	ECBT103	Basic Electronics Lab	0	0	1	1	2	
	CEBT100	Engineering Graphics and Design	1	0	2	3	5	
	DDBD100	Design Thinking	0	0	1	1	2	
	SEEC100	Environmental Sciences	2	0	1	0	3	
	SEEC101	Biology for Engineers	3	0	0	3	3	
	SESP100 or							
	SENS100 or	Sports and Yoga or NSS or NCC	0	0	2	0	4	
	SENC100	-						
	MEBT201	Measurement and Metrology	3	0	1	4	5	
	APMS200	Mathematics - III	2	1	0	3	3	
III	MEBT202	Engineering Mechanics	3	1	0	4	4	22
111	MEBT203	Basic Thermodynamics	3	1	0	4	4	22
	MEBT204	Engineering Materials and Applica-	3	1	0	4	4	
	MED 1204	tions	9	1	U	4	4	
	SEEC200	Fundamentals of Economics and	3	0	0	3	3	
	SEECZOO	Entrepreneurship for Engineers	3	U	U	3	3	
							<u> </u>	
	SEEC201	IDEA Lab Workshop	0	0	2	0	4	
	MEBT205	Applied Thermodynamics	3	1	0	4	4	
	MEBT206	Mechatronics, Robotics and Con-	3	0	1	4	5	
IV		trol				<u> </u>		22
	MEBT207	Mechanics of Deformable Solids	3	1	0	4	4	
	MEBT208	Kinematics and Dynamics of Ma-	3	1	0	4	4	
		chines				1		
	MEBT209	Fluid Mechanics and Hydraulic Ma-	3	1	0	4	4	
		chines						
	MEBT210	Mech. Engg. Lab 1	0	0	2	2	4	

Sem	Code	Course	\mathbf{L}	\mathbf{T}	P	$\mathbf{C}\mathbf{R}$	СН	\mathbf{CR}_{sem}
	MEBT301	Machine Element and System Design	3	1	0	4	4	
	MEBT302	Heat Transfer	3	1	0	4	4	•
\mathbf{V}	MEBT303	Manufacturing Processes	3	1	0	4	4	21
V	MEBT304	Production and Operation Management	3	1	0	4	4	- 21
	MEBT305	Mech. Engg. Lab 2	0	0	2	2	4	-
	SEEC302	Finance and Accounting	3	0	0	3	3	
	SEEC303	Essence Of Indian Knowledge Tradition	1	0	0	0	1	-
	MEBT306	Computer-Aided Engineering	2	0	2	4	6	
	MEBT307	Manufacturing Automation	3	0	1	4	5	-
VI	MEBT308	Product Innovation, Marketing and Finance	3	1	0	4	4	10
V I	MEBT309	Mech. Engg. Lab 3	0	0	2	2	4	19
	SEEC300	Professional Practice, Law and Ethics of Engineering	3	0	0	0	3	•
	MEBT310	Engineering Project 1 (Literature Review)	0	0	2	2	4	
	MEBT3XX	Professional Elective – 1	3	0	0	3	3	-
	SEEC301	Constitution of India	1	0	0	0	1	-
	MEBT4XX	Professional Elective – 2	3	0	0	3	3	
	MEBT4XX	Professional Elective – 3	3	0	0	3	3	
VII	OEBT4XX	Open Elective – 1	3	0	0	3	3	19
V 11	OEBT4XX	Open Elective – 2	3	0	0	3	3	
	MEBT401	Engineering Project 2 (Design and Analysis)	0	0	6	6	12	
	MEBT402	Seminar	0	0	1	1	2	•
	MEBT4XX	Professional Elective – 4	3	0	0	3	3	
VIII	OEBT4XX	Open Elective – 3	3	0	0	3	3	14
	MEBT403	Engineering Project 3 (Prototype and Testing)	0	0	8	8	16	

Industry internship: Internship in industry, start-up, or R&D lab in 2nd/3rd year summer is compulsory (audit). Longer internships for 6 months or full year including summer can be taken in the 7th/8th semester, in lieu of Engineering Project and Seminar. The internship must be properly evaluated. In case of the students who undergo Industry Internship for the full 7th/8th semester, the credits for the Elective Courses in the corresponding semester shall be covered through MOOCS prescribed by the Department.

4 Course Approval Status as Per AICTE and External BoS Members

Code	Course	Designed As Per AICTE	External BoS Members' Comments	Other Experts' Comments
MEBT100	Manufacturing Practices Workshop	NO	YES	YES
MEBT201	Measurement and Metrology	NO	NA	YES
MEBT202	Engineering Mechanics	NO	NA	YES
MEBT203	Basic Thermodynamics	NO	YES	YES
MEBT204	Engineering Materials and Applications	NO	NA	YES
MEBT205	Applied Thermodynamics	YES	YES	NA
MEBT206	Mechatronics, Robotics and Control	YES	NA	NA
MEBT207	Mechanics of Deformable Solids	YES	NA	NA
MEBT208	Kinematics and Dynamics of Machines	YES	NA	NA
MEBT209	Fluid Mechanics and Hydraulic Machines	YES	YES	NA
MEBT210	Mech. Engg. Lab 1	YES	NA	YES
MEBT301	Machine Element and System Design	YES	NA	YES
MEBT302	Heat Transfer	NO	YES	NO
MEBT303	Manufacturing Processes	NO	NA	YES
MEBT304	Production and Operation Management	YES	NA	NA
MEBT305	Mech. Engg. Lab 2	NO	NA	NA
MEBT306	Computer-Aided Engineering	NO	YES	NA
MEBT307	Manufacturing Automation	YES	NA	NA
MEBT308	Product Innovation, Marketing and Finance	YES	YES	NA
MEBT309	Mech. Engg. Lab 3	YES	NA	YES
MEBT310	Engineering Project 1	YES	NA	NA
MEBT401	Engineering Project 2	YES	NA	NA
MEBT402	Seminar	YES	NA	NA
MEBT403	Engineering Project 3	YES	NA	NA