

B.Tech (Mechanical Engineering) OVERALL CREDIT STRUCTURE

Undergraduate Core (UC)		Undergraduate Elective (UE)	
Category	Credit	Category	Credit
DC	118	DE	50 (Minimum)
BS	38	HM	12(Minimum)
ES	40	OC	50 (Balance)
HM	12	UN	00 (Courses)
Total	208	Total	112
Grand Total	UC+UE		320

Course Code	Course	L-T-P	Credit
Basic Sciences (BS)			
SCL102	Applied Mathematics-I	3-2-0	8
SCL103	Applied Mathematics-II	3-2-0	8
SCL201	Applied Mathematics-III*	3-0-0	6
SCL104	Applied Physics	3-0-2	8
SCL105	Applied Chemistry	3-0-2	8
Total			38

Engineering Arts and Sciences (ES)		L-T-P	Credit
CEL101	Engineering Mechanics	3-0-2	8
EEL101	Elementary Electrical Engineering	3-0-2	8
MEL101	Engineering Drawing	3-0-2	8
CSL101	Computer Programming	3-0-2	8
MEP101	Mechanical Workshop	0-0-2	2
EEP101	Electrical Workshop	0-0-2	2
CEL102	Environmental Science	2-0-0	4
Total			40

Humanities and Management (Core) (HM)		L-T-P	Credit
HMP102	Spoken English	1-0-2	4
HMP103	Written English	1-2-0	4
HML101	Social Science	2-0-0	4
Total			12

Non Credit Requirement		L-T-P	Credit
NCN101	NCC#	-	0
NCN102	NSS#	-	0
NCN103	NSO#	-	0
SPB101	Sports-I#	0-0-4	0
SPB102	Sports-II#	0-0-4	0
MED201	Project	-	0
MED301	Literature Review Paper Writing	-	0
MET201	Practical Training	-	0
HMD201	Community Project	-	0

Departmental Core (DC)		L-T-P	Credit
MEL201	Mechanical Behaviour of Materials*	3-0-0	6
MEL202	Engineering Thermodynamics*	3-2-0	8
MEL203	Fluid Mechanics*	3-0-2	8
MEL204	Solid Mechanics*	3-0-2	8
MEL205	Kinematics of Machines*	3-2-0	8
MEL206	Machine Drawing**	3-2-0	8
MEL207	Casting Welding and Forming**	3-0-2	8
MEL208	Machining and Machine Tools**	3-0-2	8
MEL301	Applied Thermodynamics*	3-0-2	8
MEL302	Fluid Machines**	3-0-2	8
MEL303	Heat and Mass Transfer***	3-0-2	8
MEL304	Dynamics of Machines**	3-0-2	8
MEL305	Metrology and SQC***	3-0-2	8
MEL306	Operations Management***	3-2-0	8
MEL307	Design of Machine Elements***	3-2-0	8

Departmental Elective (DE)		L-T-P	Credit
SCL403	Probability Theory and Statistics	3-0-0	6
MEL308	Mechanical Measurements	3-0-2	8
MEL401	Operations Research Techniques	3-2-0	8
MEL402	Automatic Control	3-0-0	6
MEL403	Fluid Dynamics	3-0-0	6
MEL405	Computer Aided Design	3-2-0	8
MEL406	Finite Element Methods	3-2-0	8
MEL407	Lubrication	3-0-0	6
MEL408	Mechatronics	3-0-2	8
MEL409	Theory of Elasticity	3-0-2	8
MEL410	Mechanical Vibrations	3-0-2	8
MEL411	Robotics	3-0-2	8
MEL412	Automation in Production	3-0-0	6
MEL413	Advanced Manufacturing Techniques	3-0-0	6
MEL414	Power Plant Engineering	3-0-0	6
MEL415	Renewable Energy Sources	3-0-0	6
MEL416	Refrigeration & Air Conditioning	3-0-2	8
MEL417	Automobile Engineering	3-0-2	8
MEL418	IC Engine	3-0-2	8
MEL419	Tool Design	3-2-0	8
MEL420	Machine Tool Design	3-2-0	8
MEL421	Material Resource Planning	3-0-0	6
MEP401	Machine System Design	0-2-4	6
MED401	Major Project Part-I	-	2
MED402	Major Project Part-II	-	6

#A student has to opt at least one from NCC, NSS, NSO and sports (I & II both).

Note: Students are required to opt the core courses in the order (*, **, ***)