Bharath Institute of Higher Education and Research, Chennai

Curriculum Chart – B.Tech. –Mechanical Engineering – CBCS System

L-Lecture Hrs/Week | ***T – Tutorial Hours / Week*** | ***C- Credits*** | ***P – Practical Hours/Week***

Category	Category wise % of Credits	Year - I												Year - II												Year - III												Year - IV											
		Semester - 1						Semester - 2						Semester-3						Semester - 4						Semester - 5						Semester-6						Semester-7						Semester-8					
		Course Code	Course Title	L	T	P	C	Course Code	Course Title	L	T	P	C	Course Code	Course Title	L	T	P	C	Course Code	Course Title	L	T	P	C	Course Code	Course Title	L	T	P	C	Course Code	Course Title	L	T	P	C	Course Code	Course Title	L	T	P	C	Course Code	Course Title	L	T	P	C
Art & Humanities-H	**11.67%**	BEN101	English-I	3	1	0	3	BEN 201	English-II	3	1	0	3							BMA401	Numerical Methods	3	2	0	4							BSS601	Value Education and Professional Ethics	3	0	0	3												
		BSS101	Personality Development	1	1	0	2		Foreign/Indian Language	3	0	0	3							BCE406	Environmental Studies	3	0	0	3																								
		BSS1L4/ 1L5/IL6	NCC/NSS/NSO				1	BSS2L7	Yoga				1																																				
	23	Total					6	Total					7	Total						Total					7	Total						Total					3	Total						Total					
Basic Sciences - B	**14.72%**	BMA101	Mathematics –I	3	1	0	3	BMA201	Mathematics- II	3	1	0	3	BMA301	Mathematics III	3	2	0	4																							BME702	Operations Research for Engineers	4	0	0	4						
		BPH 101	Engineering Physics – I	3	0	0	3	BPH 201	Engineering Physics – II	3	0	0	3																																				
		BCH101	Engineering Chemistry – I	3	0	0	3	BCH201	Engineering Chemistry – II	3	0	0	3																																				
		BBT 102	Biology for Engineers	2	0	0	2	BPC2L1*	Physics and Chemistry Laboratory	0	0	3/3	1																																				
		BPC1L1 *	Physics and Chemistry Laboratory	0	0	3	0																																								
	29	Total					11	Total					10	Total					4	Total						Total						Total						Total					4	Total					
Engineering Science-E	**8.63%**	BCS101	Fundamentals of Computing and Programming	3	0	0	3	BME202	Engineering Mechanics	3	1	0	3																																				
		BCE101	Basic Civil Engineering	2	0	0	2	BEE201	Basic Electrical and Electronics Engineering	2	0	0	2																																				
		BME101	Engineering Graphics-E	2	3	0	4	BCS2L2	Computer Practices Lab	0	0	3	1																																				
		BCM1L1	Basic Civil and Mechanical Engineering Practices Laboratory	0	0	3	1	BEE2L1	Basic Electrical and Electronics Engineering Practices	0	0	3	1																																				
	17	Total					10	Total					7	Total						Total						Total						Total						Total						Total					
Professional Core - P	**45.21%**													BME301	Kinematics of Machines	4	0	0	4	BME401	Dynamics of Machines	4	0	0	4	BME501	Machine Design I	3	2	0	4	BME601	Machine Design II	4	0	0	4	BME701	Industrial Engineering	3	0	0	3						
														BME302	Thermodynamics	4	0	0	4	BME402	Thermal Engineering I	4	0	0	4	BME502	Thermal Engineering II	3	0	0	3	BME602	Finite element analysis	4	0	0	4	BMT7L1	Fluid Power Automation Lab & Microprocessor	0	0	3	2						
														BME303	Mechanics of Solids	4	0	0	4	BME403	Industrial Metallurgy	3	0	0	3	BME503	Fluid Power Systems	3	0	0	3	BME603	Heat and Mass Transfer	4	0	0	4	BME7L1	Computer Aided Analysis and Simulation Lab	0	0	3	2						
														BME304	Fluid Mechanics and Machinery	3	0	0	3	BME404	Engineering Metrology and Instrumentation	3	0	0	3	BME504	Automobile Engineering	3	0	0	3	BME604	CAD/CAM	3	0	0	3												
														BME305	Manufacturing Technology –I	4	2	0	3	BME4L1	Metrology and Metallurgy Lab	0	0	3	2	BME505	Manufacturing Technology –II	3	0	0	3	BME6L1	Heat Transfer Lab	0	0	3	2												
														BME3L1	Machine Drawing	2	0	2	3	BME4L2	Manufacturing Technology Lab-I	0	0	3	2	BME5L1	Thermal Engineering Lab	0	0	3	2	BME6L2	CAD/CAM Lab	0	0	3	2												
														BCE3L3	Fluid Mechanics, Machinery and Strength of Materials Lab	0	0	3	2							BME5L2	Manufacturing Technology Lab-II	0	0	3	2																		
																										BME5L3	Instrumentation and Dynamics lab	0	0	3	2																		
	89	Total						Total						Total					23	Total					18	Total					22	Total					19	Total					7	Total					
Open Electives	**3.04%**																																											Open Elective (OE) - I	3	0	0	3		Open Elective (OE) - II	3	0	0	3
	6	Total						Total						Total						Total						Total						Total						Total					3	Total					3
Projects/Internships	**7.61%**																			BME4L3	Technical Seminar-I	0	0	2	1	BME5C1	Comprehension-I	0	0	0	1	BME6L3	Technical Seminar -II	0	0	2	1	BME7P1	Term Paper	0	0	4	2	BME8P1	Project work	0	0	18	9
																																													BME8C1	Comprehension-II	0	0	0	1
	15	Total						Total						Total						Total					1	Total					1	Total					1	Total					2	Total					10
Core Electives	**4.56%**																										**Core Elective (CE) - I**	3	0	0	3		**Core Elective (CE) - II**	3	0	0	3		**Core Elective (CE) - III**	3	0	0	3						
	9	Total						Total						Total						Total						Total					3	Total					3	Total					3	Total					
Non –Major Electives	**4.56%**																																											**Non Major Elective (NE) - I**	3	0	0	3		**Non Major Elective (NE) - III**	3	0	0	3
																																										Non Major Elective (NE) - II	3	0	0	3						
	9	Total						Total						Total						Total						Total						Total						Total					6						3
Total Credits	**197**						**27**						**24**						**25**					**26**					**26**					**26**					**25**					**16**					