

STUDY & EVALUATION SCHEME
INTEGRATED B.TECH + M.TECH (MECHANICAL ENGINEERING)
SPECIALIZATION: PRODUCTION & INDUSTRIAL ENGINEERING
II YEAR: III SEMESTER

S. NO.	SUBJECT CODE	SUBJECT	L	T	P	CIE	ESE	TOTAL	C
1	BME 3005	Engineering Mechanics	3	1	0	40	60	100	4
2	BME 3006	Thermodynamics	3	1	0	40	60	100	4
3	BEC 3016	Basic Electronics Engineering	3	1	0	40	60	100	4
4	BPH 3004-ME	Physics II (ME)	3	1	0	40	60	100	4
5	BMA 3010-ME	Mathematics III (ME)	3	1	0	40	60	100	4
6	BSS3001	Soft Skills & Interpersonal Communication	2	0	0	100	00	100	2
TOTAL			17	5	0	300	300	600	22

L - Lecture

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II YEAR: IV SEMESTER

S. NO.	SUBJECT CODE	SUBJECT	L	T	P	CIE	ESE	TOTAL	C
1	BME 4006	Applied Thermodynamics	3	1	0	40	60	100	4
2	BME 4007	Fluid Mechanics and Fluid Machines	3	1	0	40	60	100	4
3	BME 4008	Strength of Materials	3	1	0	40	60	100	4
4	BME 4009	Instrumentation and Control	3	1	0	40	60	100	4
5	BME 4010	Materials Engineering	3	0	0	40	60	100	3
6	BBT 4023	Biology	2	0	0	40	60	100	2
7	XHU X602	Essence of Indian Traditional Knowledge	2	0	0	Satisfactory/Unsatisfactory			0
PRACTICAL/TRAINING/PROJECT									
8	XME X601	Industrial Visit	-	-	-	Satisfactory/Unsatisfactory			0
TOTAL			19	4	0	240	360	600	21

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III YEAR: V SEMESTER

S. NO.	SUBJECT CODE	SUBJECT	L	T	P	CIE	ESE	TOTAL	C
1	BME 5006	Heat Transfer	3	1	0	40	60	100	4
2	BME 5007	Solid Mechanics	3	1	0	40	60	100	4
3	BME 5008	Manufacturing Processes	3	0	0	40	60	100	3
4	BME 5009	Kinematics and Theory of Machines	3	1	0	40	60	100	4
5	-	Open Elective -I	3	0	0	40	60	100	3
6	XLA X601	Constitution of India	2	0	0	Satisfactory/Unsatisfactory		0	
PRACTICAL/TRAINING/PROJECT									
7	BME 5506	Mechanical Engineering Laboratory (Thermal) I	0	0	3	80	20	100	1.5
8	BME 5507	Seminar	0	0	2	100	-	100	1
9	BAP 5501	Aptitude and Reasoning & Online Test	0	0	0	Satisfactory/Unsatisfactory		0	
TOTAL			17	3	5	380	320	700	20.5
	BME 5001-PE	*** MOOC: Theory and Practices of Non Destructive Testing	3	1	0	40	60	100	4
	BME 5001-IE	****MOOC: Concurrent Engineering	3	1	0	40	60	100	4

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III YEAR: VI SEMESTER

S. NO.	SUBJECT CODE	SUBJECT	L	T	P	CIE	ESE	TOTAL	C
1	BME 6004	Manufacturing Technology	4	0	0	40	60	100	4
2	BME 6005	Design of Machine Elements	3	1	0	40	60	100	4
3	-	Department Elective-I	3	0	0	40	60	100	3
4	-	Department Elective-II	3	0	0	40	60	100	3
5	-	Open Elective -II	3	0	0	40	60	100	3
PRACTICAL/TRAINING/PROJECT									
6	BME 6506	Mechanical Engineering Laboratory (Design) II	0	0	3	80	20	100	1.5
7	BAP 6601	Aptitude and Reasoning & Online Test	0	0	0	Satisfactory/Unsatisfactory			0
TOTAL			16	1	3	280	320	600	18.5
	BME 6001-PE	***Micro Manufacturing	3	1	0	40	60	100	4
	BME 6001-IE	**** MOOC: Quality Design and Control	3	1	0	40	60	100	4

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IV YEAR: VII SEMESTER

S. NO.	SUBJECT CODE	SUBJECT	L	T	P	CIE	ESE	TOTAL	C
1	BME 7005	Automation in Manufacturing	3	0	0	40	60	100	3
2	MMA 7001	Applied Statics and Operation Research	4	2	0	40	60	100	5
3	MME 7001	Production and Operations Management-1	4	2	0	40	60	100	5
4	MME 7002	Production Engineering-1	4	2	0	40	60	100	5
5	MME 7003	Material & Manufacturing Technology	4	2	0	40	60	100	5
PRACTICAL/TRAINING/PROJECT									
6	BME 7506	Mechanical Engineering Laboratory (Manufacturing) III	0	0	3	80	20	100	1.5
7	MME 7501	P & I Engineering-I Lab	0	0	4	80	20	100	2
8	MME 7503	Summer Training	0	0	2	100	0	100	1
TOTAL			19	8	9	460	340	800	27.5

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IV YEAR: VIII SEMESTER

S. NO.	SUBJECT CODE	SUBJECT	L	T	P	CIE	ESE	TOTAL	C
1	MCS 8004	A.I in Engineering	4	2	0	40	60	100	5
2	MME 8001	Production and Operations Management-2	4	2	0	40	60	100	5
3	MME 8002	Production Engineering-2	4	2	0	40	60	100	5
4	MME 8004	Industry 4.0 & Internet of Things	4	0	0	40	60	100	4
5	--	Department Elective-III	4	2	0	40	60	100	5
PRACTICAL/TRAINING/PROJECT									
6	MME 8501	P & I Engineering-I Lab	0	0	4	80	20	100	2
TOTAL			20	8	4	280	320	600	26

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V YEAR: IX SEMESTER

S. NO.	SUBJECT CODE	SUBJECT	L	T	P	CIE	ESE	TOTAL	C
1	--	Department Elective-IV	4	2	0	40	60	100	5
2	--	Department Elective-V	4	2	0	40	60	100	5
PRACTICAL/TRAINING/PROJECT									
3	MME 9501	Seminar/Minor Project	0	0	4	0	0	100	4
4	MME 9502	Dissertation-I	0	0	6	0	0	100	6
TOTAL			8	4	10	80	120	400	20

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V YEAR: X SEMESTER

S. NO.	SUBJECT CODE	SUBJECT	L	T	P	CIE	ESE	TOTAL	C
PRACTICAL/TRAINING/PROJECT									
1	MME 0501	Dissertation-II	0	0	18	80	20	100	18
2	MME 0502	Comprehensive Viva	0	0	0	100	0	100	2
TOTAL			0	0	18	180	20	200	20
GRAND TOTAL			115	31	49	2400	2100	4500	173.5

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LIST OF ELECTIVES

LIST OF OPEN ELECTIVES

	SUBJECT CODE	SUBJECT	DEPARTMENT	SEMESTER
Open Elective-I	BHU 5301	Organizational Psychology	Humanities	V
	BHU 5302	Organizational Sociology	Humanities	V
Open Elective-II	BMG 6302	Principle of Management	IMCE	VI
	BMG 6301	Economics	IMCE	VI

LIST OF DEPARTMENTAL ELECTIVES

	SUBJECT CODE	SUBJECT	SEMSESTER
Department Elective-I	BME 6001-DE1	Mechatronics System	VI
	BME 6002-DE1	Refrigeration and Air Conditioning	VI
	BME 6003-DE1	Composite Materials	VI
	BME 6004-DE1	Operations Management –I	VI
Department Elective-II	BME 6001-DE2	Finite Element Analysis	VI
	BME 6002-DE2	Unconventional Manufacturing Processes	VI
	BME 6003-DE2	I.C Engine	VI
	BME 6004-DE2	Maintenance Engineering and Management	VI
Department Elective-III	MCS 8107-DE3	Simulation, Modeling and Analysis	VIII
	MCS 8108-DE3	Management Information System	VIII
	MEC 8105-DE3	Neural Network, Fuzzy System & Genetic Algorithm	VIII

	MME 8101-DE3	Finite Element Method	VIII
Department Elective-IV	MME 9101-DE4	Advanced Foundry Technology	IX
	MME 9102-DE4	Advanced Welding Technology	IX
	MME 9103-DE4	Modern Manufacturing Processes	IX
	MME 9104-DE4	Nonconventional Machining Process	IX
Department Elective-V	MME 9201-DE5	Total Quality Management	IX
	MME 9201-DE5	Reliability, Maintenance Management & Safety	IX
	MME 9201-DE5	Work Science	IX
	MME 9201-DE5	Supply Chain Management	IX