

STUDY & EVALUATION SCHEME
B.TECH: MECHANICAL ENGINEERING (LATERAL)
SPECIALIZATION: ELECTRIC VEHICLE
II YEAR: III SEMESTER

S. NO.	SUBJECT CODE	SUBJECT	L	T	P	CIE	ESE	TOTAL	C
1	BME3005	Engineering Mechanics	3	1	0	40	60	100	4
2	BME3006	Thermodynamics	3	1	0	40	60	100	4
3	BEC3016	Basic Electronics Engineering	3	1	0	40	60	100	4
4	BPH3004-ME	Physics II (ME)	3	1	0	40	60	100	4
5	BMA3010-ME	Mathematics III (ME)	3	1	0	40	60	100	4
6	BSS3001	Soft Skills & Interpersonal Communication	2	0	0	100	00	100	2
7	BEE3001-VT	Fundamentals of EV & HEV	3	0	0	40	60	100	2
PRACTICAL/TRAINING/PROJECT									
8	BEE3501-VT	EV Fundamental Lab	0	0	2	80	20	100	1
TOTAL			20	5	2	420	380	800	25

L - Lecture

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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
8	BEE4001-VT	Powertrain & Modes	3	0	0	40	60	100	2
PRACTICAL/TRAINING/PROJECT									
9	XME X601	Industrial Visit	-	-	-	Satisfactory/Unsatisfactory			0
10	BEE4501-VT	EV Powertrain Lab	0	0	2	20	80	100	1
TOTAL			22	4	2	360	440	800	27

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S. NO.	SUBJECT CODE	SUBJECT	L	T	P	CIE	ESE	TOTAL	C
1	BME5006	Heat Transfer	3	1	0	40	60	100	4
2	BME5007	Solid Mechanics	3	1	0	40	60	100	4
3	BME5008	Manufacturing Processes	3	0	0	40	60	100	3
4	BME5009	Kinematics and Theory of Machines	3	1	0	40	60	100	4
5	-	Open Elective -I	3	0	0	40	60	100	3
6	BEE5001-VT	Battery, BMS & BTMS	3	0	0	40	60	100	3
7	XLA X601	Constitution of India	2	0	0	Satisfactory/Unsatisfactory			0
PRACTICAL/TRAINING/PROJECT									
8	BME5506	Mechanical Engineering Laboratory (Thermal) I	0	0	3	80	20	100	1.5
9	BME5507	Seminar	0	0	2	100	-	100	1
10	BEE5501-VT	Battery, BMS & BTMS Lab	0	0	2	20	80	100	1
11	BAP5501	Aptitude and Reasoning & Online Test	0	0	0	Satisfactory/Unsatisfactory			0
TOTAL			20	3	7	440	460	900	24.5

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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
6	BEE6001-VT	EV Charging Infra	3	0	0	40	60	100	3
PRACTICAL/TRAINING/PROJECT									
7	BME 6506	Mechanical Engineering Laboratory (Design) II	0	0	3	80	20	100	1.5
8	BEE6501-VT	EV Charging Infra Lab	0	0	2	20	80	100	1
9	BAP 6601	Aptitude and Reasoning & Online Test	0	0	0	Satisfactory/Unsatisfactory			0
TOTAL			19	1	5	340	460	800	22.5

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S. NO.	SUBJECT CODE	SUBJECT	L	T	P	CIE	ESE	TOTAL	C
1	BME7005	Automation in Manufacturing	3	0	0	40	60	100	3
2	-	Department Elective-III	3	0	0	40	60	100	3
3	-	Department Elective-IV	3	0	0	40	60	100	3
4	-	Open Elective -III	3	0	0	40	60	100	3
5	BME7006	Automotive Safety	4	0	0	40	60	100	4
PRACTICAL/TRAINING/PROJECT									
6	BME7506	Mechanical Engineering Laboratory (Manufacturing) III	0	0	3	80	20	100	1.5
7	BME7501	Project-I	0	0	12	100	20	100	6
8	BME7503	Summer Training	0	0	2	100	0	100	1
9	BME7508	EV Design Lab	0	0	4	20	20	100	2
TOTAL			16	0	21	500	400	900	26.5

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S. NO.	SUBJECT CODE	SUBJECT	L	T	P	CIE	ESE	TOTAL	C
1	-	Department Elective-V	3	0	0	40	60	100	3
2	-	Department Elective-VI	3	0	0	40	60	100	3
3	-	Open Elective -IV	3	0	0	40	60	100	3
4	-	Open Elective -V	3	0	0	40	60	100	3
PRACTICAL/TRAINING/PROJECT									
5	BME 8503	Project-II	0	0	14	80	20	100	7
TOTAL			12	8	14	240	260	500	19

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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
Open Elective-III	BMA 7301	Operations Research	INSH	VII
	BCM 7301	Finance and Accounting	IMCE	VII
Open Elective-IV	BME 8306	Operations Planning and Control	FOME	VIII
	BME 8302	Project Management	FOME	VIII
Open Elective-V	BME 8307	Total Quality Management	FOME	VIII
	BME 8308	Maintenance Engineering and Management	FOME	VIII
	BME 8309	Six Sigma	FOME	VIII

LIST OF DEPARTMENTAL ELECTIVES

	SUBJECT CODE	SUBJECT	SEMESTER
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	BME 7001-DE3	Computer Aided Design	VII

	BME 7002-DE3	Power Plant Engineering	VII
	BME 7003-DE3	Computer Aided Manufacturing	VII
	BME 7004-DE3	Operation Management II	VII
Department Elective-IV	BME 7001-DE4	Analysis and Synthesis of Mechanism	VII
	BME 7002-DE4	Gas Dynamics and Jet Propulsion	VII
	BME 7003-DE4	Micro Machining	VII
	BME 7004-DE4	Project Management	VII
Department Elective-V	BME 8001-DE5	Design of Transmission System	VIII
	BME 8002-DE5	Automobile Engineering	VIII
	BME 8003-DE5	Advance Foundry Technology	VIII
	BME 8004-DE5	Lean Manufacturing	VIII
Department Elective-VI	BME 8001-DE6	Design of Thermal System	VIII
	BME 8002-DE6	Energy Conservation and Management	VIII
	BME 8003-DE6	Advanced Welding Technology	VIII
	BME 8004-DE6	Total Quality Management	VIII