DEPARTMENT OF MECHANICAL ENGINEERING
SCHEME OF B.Tech.(MECHANICAL ENGINEERING) (Autonomy)

Sub.Code	Name of the Course	Teaching Scheme				Credits	Evaluation Scheme						
							Theory			Practical		Total	Duration of paper (hrs)
		Th.	Tu	Pr.	Total		TAE (20)	CAE (20)	ESE (60)	**Cont Ass**	Ext.		
SEM-III													
BEML120	Applied MathematicsIII	3	1	-	4	4	20	20	60	-	-	100	3
BMEL201	Machine Drawing	3	-	-	3	3	20	20	60	-	-	100	3
BMEP201	Machine Drawing	-	-	2	2	1	-	-	-	25	-	25	-
BMEL202	Fluid Mechanics	3	1	-	4	4	20	20	60	-	-	100	3
BMEL203	Materials Engineering	3	-	-	3	3	20	20	60	-	-	100	3
BMEP203	Materials Engineering	-	-	2	2	1	-	-	-	-	25	25	-
BMEL204	Kinematicsof Machines	3	1	-	4	4	20	20	60	-	-	100	3
BMEL205	Engineering Thermodynamics	3	1	-	4	4	20	20	60	-	-	100	3
BMEP206	Computer aided component design	-	-	2	2	Audit Course	-	-	-	-	-	-	-
BMEGP202	General Proficiency-II	1	-	2	3	Audit Course	-	-	-	G	-	-	-
	Total	19	4	8	31	24	120	120	360	25	25	650	-

Sub.Code	**Name of the Course**	**Teaching Scheme**				**Credits**	**Evaluation Scheme**						
							Theory			**Practical**		**Total**	**Duration of paper (hrs)**
		Th.	**Tu**	**Pr.**	**Total**		**TAE (20)**	**CAE (20)**	**ESE (60)**	**Cont. Ass**	**Ext.**		
SEM-IV													
BEML121	Applied Mathematics IV	3	1	-	4	4	20	20	60	-	-	100	3
BMEL207	Mechanics of Material	3	1	-	4	4	20	20	60	-	-	100	3
BMEL208	Manufacturing ProcessI	3	-	-	3	3	20	20	60	-	-	100	3
BMEP208	Manufacturing ProcessI	-	-	2	2	1	-	-		25		25	-
BMEL209	Dynamics of Machines	3	-	-	3	3	20	20	60	-	-	100	3
BMEP209	Dynamics of Machines	-	-	2	2	1	-	-	-	25	25	50	-
BMEL210	Fluid Machinery	4	-	-	4	4	20	20	60	-	-	100	3
BMEP210	Fluid Machinery	-	-	2	2	1	-	-	-	25	-	25	-
BMEP211	Industrial safety practices and work culture	-	-	2	2	Audit Course	-	-	-	-	-	-	-
BMEGP203	General Proficiency-III	1	-	2	3	Audit Course	-	-	-	G	-	-	-
	Total	**17**	**2**	**10**	**29**	**21**	**100**	**100**	**300**	**75**	**25**	**600**	**-**

Sub. Code	Name of the Course	Teaching Scheme				Credits	Evaluation Scheme						
							Theory			Practical		Total	Duration of paper (hrs)
		Th.	Tu	Pr.	Total		(TAE) (20)	(CAE (20)	ESE (60)	Cont. Ass	Ext.		
SEM-V													
BMEL301	Machine Design-I	3	1	-	4	4	20	20	60	-	-	100	3
BMEL302	Computer Applications in Mech. Engg.	3	-	-	3	3	20	20	60	-	-	100	3
BMEP302	Computer Applications in Mech. Engg.	-	-	2	2	1	-	-	-	25	25	50	-
BMEL303	Mechanical Measurement	4	-	-	4	4	20	20	60	-	-	100	3
BMEP303	Mechanical Measurement	-	-	2	2	1	-	-	-	25	25	50	-
BMEL304	Manufacturing Process II	3	-	-	3	3	20	20	60	-	-	100	3
BMEP304	Manufacturing Process II	-	-	2	2	1	-	-	-	25	25	50	-
BMEL305	Energy Conversion I	3	1	-	4	4	20	20	60	-	-	100	3
BMEP306	Industrial Case Study	-	-	2	2	2	-	-	-	50	-	50	-
BMEGP304	General Proficiency-IV	2	-	-	2	Audit Course	-	-	-	G	-	-	-
	Total	**18**	**2**	**8**	**28**	**23**	**100**	**100**	**300**	**125**	**75**	**700**	**-**

Sub. Code	Name of the Course	Teaching Scheme				Credits	Evaluation Scheme						
							Theory			Practical		Total	Duration of paper (hrs)
		Th.	Tu	Pr.	Total		(TAE) (20)	(CAE (20)	ESE (60)	Cont. Ass	Ext.		
SEM-VI													
BMEL307-BMEL312	Elective-I	3	-	-	3	3	20	20	60	-	-	100	3
BMEL313	Energy Conversion II	3	1	-	4	4	20	20	60	-	-	100	3
BMEP313	Energy Conversion II	-	-	2	2	1	-	-	-	25	25	50	-
BMEL314	Machine DesignII	3	-	-	3	3	20	20	60	-	-	100	3
BMEP314	Machine DesignII	-	-	2	2	1	-	-	-	25	25	50	-
BMEL315	Heat Transfer	4	-	-	4	4	20	20	60	-	-	100	3
BMEP315	Heat Transfer	-	-	2	2	1	-	-	-	25	25	50	-
BMEL316	Industrial Engineering	3	1	-	4	4	20	20	60	-	-	100	3
XXXLXXX	Open Elective	3	-	-	3	3	20	20	60	-	-	100	3
BMEGP305	General Proficiency-V	2	-	-	2	Audit Course	-	-	-	G	-	-	-
BMEGP306	General Proficiency-VI	2	-	-	2	Audit Course	-	-	-	G	-	-	-
	Total	**23**	**2**	**6**	**31**	**24**	**120**	**120**	**360**	**75**	**75**	**750**	**-**

ELECTIVE–I

BMEL307- Power Plant Engineering
BMEL308- Design of Mechanical Drives
BMEL309- Artificial Intelligence
BMEL310- Quality & Reliability Engineering
BMEL311- Mechanical Vibration
BMEL312- Advanced IC Engines & Automobile Engineering

OPENELECTIVES

BMEL417 Nanotechnology---Mechanical and Physics
BCOL413 Genetic Engineering --- Computer
BENL430 Intellectual Patents Right --- (Intellectual)
BAML301 Optimization Techniques--- Mathematics
BENL417 Sensors and Transducers --- Electronics and Telecommunication
BENL212 Principles of Business Management
BMEL212 Foundation course in Human Recourse Management
BMEL213 Electrical Drives and Electronics Controls
BCOL212 Project Management
BCVL430 Environmental Sciences-Civil & Chemistry
BCVL207 Foundation Course in Surveying

Sub. Code	Name of the Course	Teaching Scheme				Credits	Evaluation Scheme						
							Theory			Practical		Total	Duration of paper (hrs)
		Th.	Tu	Pr.	Total		(TAE) (20)	CAE (20)	ESE (60)	Cont. Ass	Ext.		
SEM-VII													
BMEL401	Self-Study	2	-	-	2	2	-	-	-	50	-	50	-
BMEP402	Industry Internship*	-	-	-	-	12	-	-	-	100	100	200	-
BMEP403	MajorProject Phase I** & Seminar***	-	-	8	8	8	-	-	-	75	75	150	-
	Total	**2**		**8**	**10**	**22**		**-**	**-**	**225**	**175**	**400**	**-**

***Compulsory Industry Internship for full semester commencing from immediately after the VI semester ESE.**

****At the place of Industry Internship**

***** Presentation of progress of Major project phase I in the college.**

Sub.Code	Name of the Course	Teaching Scheme				Credits	Evaluation Scheme						
							Theory			Practical		Total	Duration of paper (hrs)
		Th.	Tu	Pr.	Total		(TAE) (20)	CAE (20)	ESE (60)	Cont. Ass	Ext.		
SEM-VIII													
BMEL404	Operation Research & Management	3	1	-	4	4	20	20	60	-	-	100	3
BMEL405	Automation in Production	3	-	-	3	3	20	20	60	-	-	100	3
BMEP405	Automation in Production	-	-	2	2	1	-	-	-	25	25	50	-
BMEL406 BMEL408	ElectiveII	3	-	-	3	3	20	20	60	-	-	100	3
BMEP406 BMEP408	ElectiveII	-	-	2	2	1	-	-	-	25	25	50	-
BMEL409 BMEL415	ElectiveIII	3	-	-	3	3	20	20	60	-	-	100	3
BMEP416	Major Project PhaseII*	-	-	8	8	8	-	-	-	50	50	100	-
	Total	**12**	**1**	**12**	**25**	**23**	**80**	**80**	**240**	**100**	**100**	**600**	

***In the college**

ELECTIVE–II

BMEL406 Computer Aided Design
BMEP406 Computer Aided Design
BMEL407 Refrigeration and Air Conditioning
BMEP407 Refrigeration and Air Conditioning
BMEL408 Finite Element Method
BMEP408 Finite Element Method

ELECTIVE–III

BMEL409- Material Handling Systems
BMEL410- Advance Manufacturing Techniques
BMEL411- Computational Fluid Dynamics
BMEL412- Stress Analysis
BMEL413- Modeling and Simulation
BMEL414– Industrial Robotics
BMEL415- Metrology & Quality Control