

BVM Engineering College (An Autonomous Institution)

Mechanical Engineering Department

B. Tech.(Mechanical Engineering)

Semester 1

Sr. No.	Course Code	Name of Course	L	T	P	H	C
1	BS111*	Advanced Calculus	3	1	0	4	4
2	ES106	Programming for Engineers	1	0	4	5	3
3	ES109	Engineering Graphics & Design	2	0	4	6	4
4	ES115	Basic Civil Engineering	3	0	2	5	4
5	HS101	English	2	0	2	4	3
Total			11	1	12	24	18

*For Students admitted in AY 2018-19, [BS101](#) (LTP:3,2,0)

Semester 2

Sr. No.	Course Code	Name of Course	L	T	P	H	C
1	BS112#	Linear Algebra and Fourier Series	3	1	0	4	4
2	BS103	Physics	3	0	2	5	4
3	ES103	Basic Electrical Engineering	3	0	2	5	4
4	ES110	Basic Mechanical Engineering	3	0	2	5	4
5	ES111	Workshop	0	0	4	4	2
6	HS112\$	Environmental Science#	2	0	0	2	0
Total			14	1	10	25	18

For Students admitted in AY 2018-19, [BS102](#) (LTP:3,2,0)

\$ For Students admitted in AY 2018-19, [HS102](#) (LTP:2,2,0)

Non-Credit Mandatory course

Semester 3

Sr. No.	Course Code	Name of Course	L	T	P	H	C
1	2ES02	Mechanics of Solids	3	1	0	4	4
2	2ME01	Numerical Methods and Analysis	3	1	0	4	4
3	2ME02	Engineering Thermodynamics	3	0	0	3	3
4	2ME03	Material Science and Metallurgy	3	0	2	5	4
5	2ME11	Industrial Psychology, sociology and Work ethics	2	0	0	2	2
6	2ME04	Mechanical Measurement and Instrumentation	3	0	2	5	4
7	2ME05	Machine Drawing	0	0	4	4	2
Total			17	2	8	27	23

Semester 4

Sr. No.	Course Code	Name of Course	L	T	P	H	C
1	2ME06	Kinematics of Machines	3	1	0	4	4
2	2ME07	Innovative Practices	0	0	2	2	1
3	2ME08	Fluid Mechanics and Fluid Machines	3	0	2	5	4
4	2ME09	Design of Machine Elements	3	1	0	4	4
5	2ME10	Heat Transfer	3	0	2	5	4
6	2BS02	Differential Equations and Statistics	3	1	0	4	4
7	2HS01	Professional Soft Skills	1	0	2	3	2
Total			16	3	8	27	23
	MEIS1	Summer Internship - I (Two Weeks)#	-	-	-	-	0

Non-Credit Mandatory course

Semester 5

Sr. No.	Course Code	Name of Course	L	T	P	H	C
1	3ME01	Dynamics of Machines	3	0	2	5	4
2	3ME02	Machining Processes	3	0	2	5	4
3	3ME03	I. C. Engines and Thermal Turbines	3	0	2	5	4
4		Open Elective - I	3	0	0	3	3
5	3ME04	Computer Aided Design	3	0	2	5	4
6	3HS01	Ethics and Constitution of India[#]	2	0	0	2	0
Total			17	0	8	25	19

Non-Credit Mandatory course

Open Elective - I

1	3ME81	Industrial Engineering and Quality Assurance	3	0	0	3	3
2	3ME82	Project Management	3	0	0	3	3

Semester 6

Sr. No.	Course Code	Name of Course	L	T	P	H	C
1	3ME05	Control Engineering	3	0	0	3	3
2	3ME06	Entrepreneurship	2	0	0	2	2
3	3ME07	Metal Forming, Joining and Foundry Practices	3	0	2	5	4
4	3ME08	Computer Aided Manufacturing	3	0	2	5	4
5		Program Elective - I	3	1	0	4	4
6		Open Elective - II	3	0	2	5	4
Total			17	1	6	24	21

Program Elective - I

1	3ME41	Energy Conservation and Management	3	1	0	4	4
2	3ME42	Total Productive Maintenance	3	1	0	4	4
3	3ME43	Operation Research	3	1	0	4	4
4	3ME44	Gas Dynamics and Propulsive system	3	1	0	4	4

L=Lecture Hrs./wk; T=Tutorial Hrs./wk; P=Practical Hrs./wk; H=Total Contact Hrs./wk; C=Credits of Course

Sr. No.	Course Code	Name of Course	L	T	P	H	C
5	3ME45	Finite Element Method	3	1	0	4	4
Open Elective - II							
1	3ME83	Renewable Energy Sources	3	0	2	5	4
2	3ME84	Energy Conservation and Management	3	0	2	5	4
	MEIS2	Summer Internship-II (Three Weeks)#	-	-	-	-	0

Non-Credit Mandatory course

Semester 7

Sr. No.	Course Code	Name of Course	L	T	P	H	C
1	4ME01	Refrigeration, Air-conditioning and Compressors	3	0	2	5	4
2	4ME02	Production Technology	3	0	2	5	4
3		Program Elective - II	3	0	0	3	3
4		Program Elective - III	3	1	0	4	4
5		Program Elective - IV	3	0	2	5	4
6		Program Elective - V	3	0	2	5	4
Total			18	1	8	27	23

Program Elective - II

1	4ME41	Design Optimization	3	0	0	3	3
2	4ME42	Design of Material Handling Equipment	3	0	0	3	3
3	4ME43	Power Plant Engineering	3	0	0	3	3
4	4ME44	Design of Heat Exchangers	3	0	0	3	3
5	4ME45	Mechatronics Systems	3	0	0	3	3
6	4ME46	Advanced Fluid Mechanics	3	0	0	3	3
7	4ME47	Industrial Tribology	3	0	0	3	3
8	4ME48	Project Management	3	0	0	3	3

Program Elective - III							
1	4ME49	Design of Transmission system	3	1	0	4	4
2	4ME50	Design of Thermal Systems	3	1	0	4	4
3	4ME51	Production and Operations Management	3	1	0	4	4
4	4ME52	Precision Manufacturing	3	1	0	4	4
Program Elective - IV							
1	4ME53	Product Engineering	3	0	2	5	4
2	4ME54	Machine Tool Design	3	0	2	5	4
3	4ME55	Automobile Engineering	3	0	2	5	4
4	4ME56	Turbomachinery	3	0	2	5	4
5	4ME57	Additives Manufacturing	3	0	2	5	4
6	4ME58	Design of Pressure Vessels	3	0	2	5	4
Program Elective - V							
1	4ME59	Geometric Dimensioning and Tolerancing	3	0	2	5	4
2	4ME60	Industrial Robotics	3	0	2	5	4
3	4ME61	Renewable Energy Engineering	3	0	2	5	4
4	4ME62	Computational fluid dynamics	3	0	2	5	4
5	4ME63	Oil Hydraulics and Pneumatics	3	0	2	5	4
Semester 8							
1	4ME31	Industrial Project	0	0	30	30	15
Total			0	0	30	30	15
Total Credits Distribution			110	9	90	209	160