

BVM Engineering College (An Autonomous Institution)**Production Engineering Department****B. Tech.(Production 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	BS103	Physics	3	0	2	5	4
3	ES102	Electronics Workshop	0	0	2	2	1
4	ES103	Basic Electrical Engineering	3	0	2	5	4
5	ES113	Workshop Practices - I	0	0	4	4	2
6	HS112\$	Environmental Science#	2	0	0	2	0
Total			11	1	10	22	15

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

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

#Non-Credit Mandatory course

Semester 2

Sr. No.	Course Code	Name of Course	L	T	P	H	C
1	BS112#	Linear Algebra & Fourier Series	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	ES110	Basic Mechanical Engineering	3	0	2	5	4
5	ES114	Workshop Practices - II	0	0	2	2	1
6	HS101	English	2	0	2	4	3
Total			11	1	14	26	19

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

Semester 3

Sr. No.	Course Code	Name of Course	L	T	P	H	C
1	2BS02	Differential Equations and Statistics	3	1	0	4	4
2	2PE01	Materials Science & Physical Metallurgy	3	0	2	5	4
3	2ES03	Mechanics of Solids	3	0	2	5	4
4	2HS02	Economics & Management	3	0	0	3	3
5	2PE02	Engineering Thermodynamics and Heat Transfer	3	1	0	4	4
6	2PE03	Dimensional Metrology	2	0	4	6	4
Total			17	2	8	27	23

Semester 4

Sr. No.	Course Code	Name of Course	L	T	P	H	C
1	2PE04	Machining Processes	3	0	2	5	4
2	2PE05	Kinematics and Dynamics of Machines	3	0	2	5	4
3	2BS05	Numerical Methods in Manufacturing	3	0	2	5	4
4	2PE06	Fluid Mechanics	3	0	2	5	4
5	2PE07	Casting Technology	2	0	2	4	3
6	2HS01	Professional Soft Skills	1	0	2	3	2
Total			15	0	12	27	21
	PEIS1	Internship - I (Three Weeks)#	-	-	-	-	0

#Non-Credit Mandatory course

Semester 5

Sr. No.	Course Code	Name of Course	L	T	P	H	C
1	3PE01	Design of Machine Elements	3	0	2	5	4
2	3PE02	Welding Technology	2	0	2	4	3
3	3PE03	Computer Aided Design	3	0	2	5	4
4	3PE04	Metal Forming Processes	3	0	2	5	4
5		Open Elective - I	3	0	0	3	3
6		Program Elective -I	3	0	2	5	4
Total			17	0	10	27	22

Open Elective - I

1.	3CE81	Environment And Health	3	0	0	3	3
2.	3CE83	Earth System and Geo-environment	3	0	0	3	3
3.	3SE81	Disaster Management and Mitigation	3	0	0	3	3
4.	3CP81	Fundamentals of Computer Networks and Security	3	0	0	3	3
5.	3CP82	Fundamentals of Operating Systems	3	0	0	3	3
6.	3IT81	Cyber security	3	0	0	3	3
7.	3IT82	Internet Technology	3	0	0	3	3
8.	3IT83	Software Project Management	3	0	0	3	3
9.	3IT84	Enterprise Resource Planning	3	0	0	3	3
10.	3EE81	Energy Audit & Conservation	3	0	0	3	3
11.	3EE83	Installation and Commissioning of Electrical Equipments	3	0	0	3	3
12.	3EL81	Electronic Communication System	3	0	0	3	3
13.	3EC81	Introduction to Cellular Communication	3	0	0	3	3
14.	3EC82	Applied Electronics	3	0	0	3	3

Program Elective - I

1	3PE41	Reliability, Maintenance & Safety Engineering	3	0	2	5	4
2	3PE42	Project Management	3	0	2	5	4
3	3PE43	Mechatronics	3	0	2	5	4

Semester 6

Sr. No.	Course Code	Name of Course	L	T	P	H	C
1	3PE05	Computer Aided Manufacturing	3	0	2	5	4
2	3PE06	Tool Engineering	3	0	2	5	4
3	3HS01	Ethics & Constitution of India#	2	0	0	2	0
4		Open Elective - II	3	0	2	5	4
5		Programme Elective - II	3	0	2	5	4
6		Programme Elective - III	3	0	2	5	4
Total			17	0	10	27	20

#Non-Credit Mandatory course

Open Elective - II							
1.	3CE82	Geo-Informatics	3	0	2	5	4
2.	3SE82	Advanced Strength of Materials	3	0	2	5	4
3.	3SE83	Basic Concepts of Structural Behaviour	3	0	2	5	4
4.	3CP85	Object Oriented Concepts and Programming	3	0	2	5	4
5.	3CP84	Information Technology Essentials	3	0	2	5	4
6.	3CP83	Programming with Python	3	0	2	5	4
7.	3IT85	Web Application and Development	3	0	2	5	4
8.	3IT86	Java Programing	3	0	2	5	4
9.	3IT87	Object Oriented Programming with C++	3	0	2	5	4
10.	3IT88	Mobile Application Development	3	0	2	5	4
11.	3EE82	Renewable Energy Technology	3	0	2	5	4
12.	3EE84	Industrial Automation	3	0	2	5	4
13.	3EL82	Basics of Embedded and IoT Systems	3	0	2	5	4
14.	3EL83	Sensor Technology	3	0	2	5	4
15.	3EC83	Embedded Systems and IOT	3	0	2	5	4

Program Elective - II

1	3PE44	Design of Machine Tools	3	0	2	5	4
2	3PE45	Advances in Manufacturing Processes	3	0	2	5	4
3	3PE46	Finite Element Analysis	3	0	2	5	4

Program Elective -III

1	3PE47	Lean & Agile Manufacturing	3	0	2	5	4
2	3PE48	Industrial Robotics	3	0	2	5	4
3	3PE49	Logistics & Supply Chain Management	3	0	2	5	4

	PEIS2	Internship-II (Three Weeks)#	-	-	-	-	0
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#Non-Credit Mandatory course

Semester 7

Sr. No.	Course Code	Name of Course	L	T	P	H	C
1	4PE01	Operation Research	3	0	2	5	4
2	4PE02	Production & Operations Management	3	1	0	4	4
3	4PE03	Quality Management	3	0	2	5	4
4	4PE04	Industrial Engineering	3	0	2	5	4
5		Program Elective – IV	2	0	2	4	3
6		Program Elective - V	2	0	2	4	3
Total			16	1	10	27	22

Program Elective - IV

1	4PE41	Allied Manufacturing Processes	2	0	2	4	3
2	4PE42	Computational Fluid Dynamics	2	0	2	4	3
3	4PE43	Rapid Prototyping and Additive Manufacturing	2	0	2	4	3

Program Elective - V

1	4PE44	Entrepreneurship Development	2	0	2	4	3
2	4PE45	Product Design & Development	2	0	2	4	3
3	4PE46	Flexible Manufacturing Systems	2	0	2	4	3
4	4PE47	Industry 4.0	2	0	2	4	3

Semester 8

1	4PE31	Project	0	0	30	30	15
Total			0	0	30	30	15
Total Credits Distribution			104	5	104	213	157