

BVM Engineering College (An Autonomous Institution)
Electronics Engineering Department
B. Tech.(Electronics Engineering)

Semester 1

Sr. No.	Course Code	Name of Course	L	T	P	H	C
1	BS111*	Advance Calculus	3	1	0	4	4
2	ES109	Engineering Graphics & Design	2	0	4	6	4
3	ES103	Basic Electrical Engineering	3	0	2	5	4
4	BS104	Semiconductor Physics	3	0	2	5	4
5	HS101	English	2	0	2	4	3
			13	1	10	24	19

*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	ES105	Programming for Problem Solving	3	0	2	5	4
3	BS105	Electromagnetic Physics	3	0	2	5	4
4	ES101	Basic Electronics	3	0	2	5	4
5	ES112	Basics of Manufacturing Practices	0	0	2	2	1
6	ES102	Electronics Workshop	0	0	2	2	1
7	HS112\$	Environmental Science#	2	0	0	2	0
			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	2BS01	Ordinary Differential Equation and Statistics	3	1	0	4	4
2	2EL01	Signals and Systems	3	0	0	3	3
3	2EL02	Network Theory	3	0	0	3	3
4	2EL03	Analog Electronics	3	0	0	3	3
5	2EL04	Analog Electronics Laboratory	0	0	2	2	1
6	2EL05	Digital Logic Design	3	0	0	3	3
7	2EL06	Digital Logic Design Laboratory	0	0	2	2	1
8	2EL07	Electronic Design and Automation Tools	0	0	2	2	1
9	2HS01	Professional Soft skills	1	0	2	3	2
			16	1	8	25	21

Semester 4

Sr. No.	Course Code	Name of Course	L	T	P	H	C
1	2EL08	Analog and Digital Communication	3	0	0	3	3
2	2EL09	Analog and Digital Communication Laboratory	0	0	2	2	1
3	2EL10	Control Theory	3	0	0	3	3
4	2EL11	Microcontrollers	3	0	0	3	3
5	2EL12	Microcontrollers Laboratory	0	0	2	2	1
6	2EL13	Sensors and Transducers	3	0	0	3	3
7	2EL14	Sensors and Transducers Laboratory	0	0	2	2	1
8	2HS02	Economics and Management	3	0	0	3	3
9	2EL31	Mini Project	0	0	2	2	1
			15	0	8	23	19

ELIS1	Internship – I (Two Weeks)#	-	-	-	-	0
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#Non-Credit Mandatory course

Semester 5

Sr. No.	Course Code	Name of Course	L	T	P	H	C
1		Open Elective - I	3	0	0	3	3
2	3EL01	Probability Theory and Stochastic Processes	3	0	0	3	3
3	3EL02	Analog Circuit Design	3	0	0	3	3
4	3EL03	Analog Circuit Design Laboratory	0	0	2	2	1
5	3EL04	Embedded and IOT system Design	3	0	0	3	3
6	3EL05	Embedded and IOT system Design Laboratory	0	0	2	2	1
7	3EL06	Electromagnetics Wave Theory	3	0	0	3	3
8		Program Elective - I	3	0	2	5	4
Total			18	0	6	24	21
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.	3ME81	Industrial Engineering and Quality Assurance	3	0	0	3	3
13.	3ME82	Project Management	3	0	0	3	3
14.	3PE81	Principles Of Supply Chain Management	3	0	0	3	3
15.	3PE82	Industrial Internet Of Things	3	0	0	3	3
Program Elective - I							
1	3EL41	Process Instrumentation and Control	3	0	2	5	4
2	3EL42	Digital System Design	3	0	2	5	4
3	3EL43	Optical Fiber Communication	3	0	2	5	4

Semester 6

Sr. No.	Course Code	Name of Course	L	T	P	H	C
1		Open Elective - II	3	0	2	5	4
2	3EL07	VLSI Design	3	0	0	3	3
3	3EL08	VLSI Design Laboratory	0	0	2	2	1
4	3EL09	Digital Signal Processing	3	0	0	3	3
5	3EL10	Digital Signal Processing Laboratory	0	0	2	2	1
6	3EL11	Antennas	3	0	0	3	3
7	3EL12	Antennas and Measurement Laboratory	0	0	2	2	1
8	3EL13	Electronics System Design Laboratory	0	0	2	2	1
9	3HS01	Ethics & Constitution of India	2	0	0	2	0
10		Program Elective - II	3	0	0	3	3
Total			17	0	10	27	20
	ELIS2	Internship – II (Two Weeks)#	-	-	-	-	0
#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.	3ME83	Renewable Energy Sources	3	0	2	5	4
14.	3ME84	Energy Conservation and Management	3	0	2	5	4
15.	3PE83	Managing Projects	3	0	2	5	4

16.	3PE84	Additive Manufacturing	3	0	2	5	4
Program Elective - II							
1	3EL44	Programmable Logic Controllers	3	0	0	3	3
2	3EL45	Digital Computer Organization	3	0	0	3	3
3	3EL46	Information Theory and Coding	3	0	0	3	3
Semester 7							
Sr. No.	Course Code	Name of Course	L	T	P	H	C
1	4EL01	Power Electronics	3	0	0	3	3
2	4EL02	Power Electronics Laboratory	0	0	2	2	1
3	4EL03	Wireless Communication	3	0	0	3	3
4	4EL04	Wireless Communication Laboratory	0	0	2	2	1
5	4EL05	Guided Research Reading	0	0	2	2	1
6	4EL31	Project-I	0	0	4	4	2
7		Program Elective - III	3	0	2	5	4
8		Program Elective - IV	3	0	2	5	4
Total			12	0	14	26	19
Program Elective - III							
1	4EL41	Digital Image Processing	3	0	2	5	4
2	4EL42	Data Communication And Networking	3	0	2	5	4
3	4EL43	Radar And Navigational Aids	3	0	2	5	4
Program Elective - IV							
1	4EL44	Mixed Signal Processor	3	0	2	5	4
2	4EL45	Microwave Engineering	3	0	2	5	4
3	4EL46	Digital Control Design	3	0	2	5	4
Semester 8 [Scheme A]							
Sr. No.	Course Code	Name of Course	L	T	P	H	C
1	4EL32	Project-II	0	0	24	24	12
2		Program Elective - V	3	0	2	5	4
3		Program Elective - VI	3	0	2	5	4
Total			6	0	28	34	20

Program Elective - V

1	4EL47	Robotics	3	0	2	5	4
2	4EL48	Mixed Signal Design	3	0	2	5	4
3	4EL49	Antenna Design	3	0	2	5	4
4	4EL50	Industrial IoT	3	0	2	5	4

Program Elective - VI

1	4EL51	Biomedical Instrumentation	3	0	2	5	4
2	4EL52	Machine Learning Techniques	3	0	2	5	4
3	4EL53	Satellite Communication	3	0	2	5	4
4	4EL54	Fundamentals Of Electric Vehicles And Drives	3	0	2	5	4

OR

Semester 8 [Scheme B]

Sr. No.	Course Code	Name of Course	L	T	P	H	C
1	4EL33	Industry Defined Project	0	0	40	40	20
Total Credits Distribution (Scheme-A)			112	3	94	209	157
Total Credits Distribution (Scheme-B)			106	3	106	215	157