

BVM Engineering College (An Autonomous Institution)
Electronics & Communication Engineering Department
B. Tech.(Electronics & Communication 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	BS104	Semiconductor Physics	3	0	2	5	4
3	ES102	Electronics Workshop	0	0	2	2	1
4	ES101	Basic Electronics	3	0	2	5	4
5	HS101	English	2	0	2	4	3
6	HS112\$	Environmental Science#	2	0	0	2	0
7	HS103	Introduction to EC Department	0	0	2	2	1
Total			13	01	10	24	17

*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 and Fourier Series	3	1	0	4	4
2	ES103	Basic Electrical Engineering	3	0	2	5	4
3	ES105	Programming for Problem Solving	3	0	2	5	4
4	ES109	Engineering Graphics & Design	2	0	4	6	4
5	ES112	Basics of Manufacturing Practices	0	0	2	2	1
6	ES117	Introduction to Digital Electronics	1	0	2	3	2
Total			12	01	12	25	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	2BS01	Ordinary Differential Equations and Statistics	3	1	0	4	4
2	2EC01	Network Theory	3	1	0	4	4
3	2EC02	Electronic Devices and Circuits	3	0	0	3	3
4	2EC03	Electronic Devices and Circuits Laboratory	0	0	2	2	1
5	2EC04	Digital System Design	3	0	0	3	3
6	2EC05	Digital System Design Laboratory	0	0	2	2	1
7	2EC06	Object Oriented Programming	3	0	0	3	3
8	2EC07	Object Oriented Programming Laboratory	0	0	2	2	1
9	2EC08	Simulation and Design Tools	0	0	2	2	1
10	2HS01	Professional Soft Skills	1	0	2	3	2
Total			16	2	10	28	23

Semester 4

Sr. No.	Course Code	Name of Course	L	T	P	H	C
1	2HS02	Economics and Management	3	0	0	3	3
2	2EC09	Signals and Systems	3	0	0	3	3
3	2EC10	Signals and Systems Laboratory	0	0	2	2	1
4	2EC11	Control Systems	3	0	0	3	3
5	2EC12	Control Systems Laboratory	0	0	2	2	1
6	2EC13	Analog Communication	3	0	0	3	3
7	2EC14	Analog Communication Laboratory	0	0	2	2	1
8	2EC15	Microprocessor and Computer Architecture	3	0	0	3	3
9	2EC16	Microprocessor and Interfacing Laboratory	0	0	2	2	1
10	2EC17	Electronic Measurements and Instruments	3	0	0	3	3
11	2EC18	Electronic Measurements and Instruments Laboratory	0	0	2	2	1
12	2EC31	Mini Project	0	0	2	2	1
Total			18	0	12	30	24

ECIS1	Summer 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	3HS01	Ethics and Constitution of India#	2	0	0	2	0
2	3EC01	Electromagnetics Theory	3	0	0	3	3
3	3EC02	Microcontroller and Applications	3	0	0	3	3
4	3EC03	Microcontroller and Applications Laboratory	0	0	2	2	1
5	3EC04	CMOS Digital Integrated Circuits	3	0	0	3	3
6	3EC05	CMOS Digital Integrated Circuits Laboratory	0	0	2	2	1
7		Programme Elective – I	3	0	2	5	4
8		Open Elective – I	3	0	2	5	4
Total			17	0	8	25	19

Non-Credit Mandatory course

Program Elective - I

1	3EC41	Power Electronics	3	0	2	5	4
2	3EC42	Digital Design Using HDL	3	0	2	5	4
3	3EC43	Industrial Automation	3	0	2	5	4

Open Elective - I

1	3EC81	Introduction to Cellular Communication	3	0	0	3	3
2	3EC82	Applied Electronics	3	0	0	3	3

Semester 6

Sr. No.	Course Code	Name of Course	L	T	P	H	C
1	3EC06	Digital Communication	3	0	0	3	3
2	3EC07	Digital Communication Laboratory	0	0	2	2	1
3	3EC08	Antennas and Wave Propagation	3	0	0	3	3
4	3EC09	Antennas and Wave Propagation Laboratory	0	0	2	2	1
5	3EC10	Advance Microcontroller	2	0	0	2	2
6	3EC11	Advance Microcontroller Laboratory	0	0	2	2	1

7	3EC12	Digital Signal Processing	3	0	0	3	3
8	3EC13	Digital Signal Processing Laboratory	0	0	2	2	1
9	3EC14	Scripting Languages	0	0	2	2	1
10		Programme Elective – II	3	0	0	3	3
11		Open Elective – II	3	0	0	3	3
Total			17	0	10	27	22

Program Elective - II

1	3EC44	Introduction to Real Time Operating System	3	0	0	3	3
2	3EC45	Optical Fiber Communication	3	0	0	3	3
3	3EC46	Satellite Communication	3	0	0	3	3

Open Elective - II

1	3EC83	Embedded Systems and IOT	3	0	2	5	4
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ECIS2	Summer Internship – II (Two 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	4EC01	Computer Networks	3	0	0	3	3
2	4EC02	Computer Networks Laboratory	0	0	2	2	1
3	4EC03	Wireless Communication	3	0	0	3	3
4	4EC04	Wireless Communication Laboratory	0	0	2	2	1
5	4EC05	Embedded System Design with IOT	3	0	0	3	3
6	4EC06	Embedded System Design with IOT Laboratory	0	0	2	2	1
7	4EC07	Electronic Product Design	0	0	2	2	1
8	4EC08	Guided Research	0	0	4	4	2
9		Programme Elective – III	3	0	2	5	4
Total			12	0	14	26	19

Program Elective - III

1	4EC41	Digital Image Processing	3	0	2	5	4
2	4EC42	Bio Medical Instrumentation	3	0	2	5	4
3	4EC43	RF and Microwave Engineering	3	0	2	5	4

Semester 8 [Scheme A]

Sr. No.	Course Code	Name of Course	L	T	P	H	C
1	4EC31	Project	0	0	18	18	9
2		Programme Elective – IV	3	0	2	5	4
3		Programme Elective – V	1	0	2	3	2
Total			4	0	22	26	15

Program Elective - IV

1	4EC44	Radar & Navigational Aids	3	0	2	5	4
2	4EC45	Machine Learning	3	0	2	5	4
3	4EC46	Advance Communication Systems	3	0	2	5	4

Program Elective - V

1	4EC47	Virtual Instrumentation	1	0	2	3	2
2	4EC48	Device Driver Development	1	0	2	3	2
3	4EC49	Android Programming	1	0	2	3	2

OR

Semester 8 [Scheme B]

Sr. No.	Course Code	Name of Course	L	T	P	H	C
1	4EC32	Industry Project	0	0	30	30	15
Total Credits Distribution			105	4	106	211	158
