

BVM Engineering College (An Autonomous Institution)

Computer Engineering Department

B. Tech. (Computer 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	ES103	Basic Electrical Engineering	3	0	2	5	4
4	ES108	Computer Workshop	0	0	2	2	1
5	ES112	Basics of Manufacturing Practices	0	0	2	2	1
6	HS101	English	2	0	2	4	3
Total			11	1	10	22	17

*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	ES101	Basic Electronics	3	0	2	5	4
3	ES105	Programming for Problem Solving	3	0	2	5	4
4	ES107	Open Source Platforms and Tools	0	0	2	2	1
5	ES109	Engineering Graphics and Design	2	0	4	6	4
6	HS112\$	Environmental Science#	2	0	0	2	0
Total			13	1	10	24	17

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	2CP01	Database Management Systems	3	0	2	5	4
2	2CP02	Object Oriented Programming with C++	3	0	2	5	4
3	2CP03	Digital Logic and Design	3	0	2	5	4
4	2CP04	Discrete Mathematics	3	1	0	4	4
5	2HS02	Economics and Management	3	0	0	3	3
6	2HS01	Professional Soft Skills	1	0	2	3	2
Total			16	1	8	25	21

Semester 4

Sr. No.	Course Code	Name of Course	L	T	P	H	C
1	2CP05	Computer Organization & Architecture	3	0	2	5	4
2	2CP06	Data Structures and Algorithms	3	0	2	5	4
3	2CP07	Computer Networks	3	0	2	5	4
4	2CP08	Web Technologies	3	0	2	5	4
5	2BS01	Ordinary Differential Equations and Statistics	3	1	0	4	4
6	2CP09	Programming Laboratory	0	0	2	2	1
Total			15	1	10	26	21

CPIS1	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	3CP01	Information Security	3	0	2	5	4
2	3CP02	Design and Analysis of Algorithms	3	0	2	5	4
3	3CP03	Object Oriented Programming using JAVA	3	0	2	5	4
4	3CP04	Operating Systems	3	0	2	5	4
5	3CP05	Advanced Programming Laboratory	0	0	2	2	1
6		Open elective - I	3	0	0	3	3
Total			15	0	10	25	20

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.	3EE81	Energy Audit & Conservation	3	0	0	3	3
5.	3EE83	Installation and Commissioning of Electrical Equipments	3	0	0	3	3
6.	3EL81	Electronic Communication System	3	0	0	3	3
7.	3EC81	Introduction to Cellular Communication	3	0	0	3	3
8.	3EC82	Applied Electronics	3	0	0	3	3
9.	3ME81	Industrial Engineering and Quality Assurance	3	0	0	3	3
10.	3ME82	Project Management	3	0	0	3	3
11.	3PE81	Principles Of Supply Chain Management	3	0	0	3	3
12.	3PE82	Industrial Internet Of Things	3	0	0	3	3

Semester 6

Sr. No.	Course Code	Name of Course	L	T	P	H	C
1	3CP06	Theory of Computation	3	0	0	3	3
2	3CP07	Software Engineering	3	1	0	4	4
3	3CP08	Design Engineering	0	0	2	2	1

4	3CP09	Capstone Course	0	0	2	2	1
5	3CP10	Machine Learning	3	0	2	5	4
6	3HS01	Ethics and Constitution of India#	2	0	0	2	0
7		Program Elective - I	3	0	2	5	4
8		Open Elective - II	3	0	2	5	4
Total			17	1	10	28	21

Non-Credit Mandatory course

Program Elective - I

1	3CP41	.NET Technology	3	0	2	5	4
2	3CP42	Advanced Java Technology	3	0	2	5	4
	CPIS2	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.	3EE82	Renewable Energy Technology	3	0	2	5	4
5.	3EE84	Industrial Automation	3	0	2	5	4
6.	3EL82	Basics of Embedded and IoT Systems	3	0	2	5	4
7.	3EL83	Sensor Technology	3	0	2	5	4
8.	3EC83	Embedded Systems and IOT	3	0	2	5	4
9.	3ME83	Renewable Energy Sources	3	0	2	5	4
10.	3ME84	Energy Conservation and Management	3	0	2	5	4
11.	3PE83	Managing Projects	3	0	2	5	4
12.	3PE84	Additive Manufacturing	3	0	2	5	4

Semester 7

Sr. No.	Course Code	Name of Course	L	T	P	H	C
1	4CP01	Compiler Design	3	0	2	5	4
2	4CP02	Data Analytics and Visualization	3	0	2	5	4
3	4CP31	Project - I	0	0	6	6	3

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

4	Program Elective – II	3	0	2	5	4
5	Program Elective – III	3	0	2	5	4
Total		12	0	14	26	19

Semester 8 [Scheme A]

Sr. No.	Course Code	Name of Course	L	T	P	H	C
1	4CP32	Project - II	0	0	14	14	7
2		Program Elective –IV	3	0	2	5	4
3		Program Elective – V	3	0	2	5	4
4		Program Elective – VI	3	0	2	5	4
Total		9	0	20	29	19	
Total Credits Distribution			108	5	92	205	155

OR

Semester 8 [Scheme B]

Sr. No.	Course Code	Name of Course	L	T	P	H	C
1	4CP33	Full Semester External Project	0	0	38	38	19
Total Credits Distribution			108	5	110	214	155

Program Electives – II, III, IV, V, VI

1	4CP41	Advanced Operating Systems	3	0	2	5	4
2	4CP42	Internet of Things	3	0	2	5	4
3	4CP43	Digital Image Processing	3	0	2	5	4
4	4CP44	Multimedia Systems	3	0	2	5	4
5	4CP45	Parallel Processing	3	0	2	5	4
6	4CP46	Cloud Computing	3	0	2	5	4
7	4CP47	Advanced Web Programming	3	0	2	5	4
8	4CP48	Artificial Intelligence	3	0	2	5	4
9	4CP49	Android Programming	3	0	2	5	4
10	4CP50	Python Programming	3	0	2	5	4
11	4CP51	Distributed Systems	3	0	2	5	4
12	4CP52	Wireless and Mobile Communications	3	0	2	5	4
13	4CP53	Block chain Technology	3	0	2	5	4