

BVM Engineering College (An Autonomous Institution)**Civil Engineering Department****B. Tech.(Civil 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	ES103	Basic Electrical Engineering	3	0	2	5	4
3	ES110	Basic Mechanical Engineering	3	0	2	5	4
4	ES111	Workshop	0	0	4	4	2
5	HS112 \$	Environmental Science #	2	0	0	2	0
Total			11	1	8	20	14

*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	BS103	Physics	3	0	2	5	4
3	ES106	Programming for Engineers	1	0	4	5	3
4	ES109	Engineering Graphics and Design	2	0	4	6	4
5	ES115	Basic Civil Engineering	3	0	2	5	4
6	HS101	English	2	0	2	4	3
Total			14	1	14	29	22

#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	2SE01	Construction Material and Concrete Technology	3	0	2	5	4
3	2ES01	Mechanics of Solids	3	0	2	5	4
4	2CE01	Fluid Mechanics	3	0	2	5	4
5	2HS01	Professional Soft Skills	1	0	2	2	2
6	2CE02	Engineering Surveying	3	0	2	5	4
Total			16	1	10	26	22

Semester 4

Sr. No.	Course Code	Name of Course	L	T	P	H	C
1	2BS03	Numerical Methods in Civil Engineering	1	0	2	3	2
2	2CE03	Hydraulic Engineering	3	0	2	5	4
3	2SE02	Geotechnical Engineering	2	0	1	3	2.5
4	2SE03	Structural Analysis I	2	0	1	3	2.5
5	2CE04	Engineering Geology	3	0	1	4	3.5
6	2CE05	Construction Technology	3	0	0	3	3
Total			14	0	7	21	17.5

CEIS1	Internship – I (Two Weeks) #	-	-	-	-	0
-----------------------	--	---	---	---	---	----------

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	3SE01	Advanced Geotechnical Engineering	3	0	1	4	3.5
3	3SE02	Structural Analysis II	3	1	0	4	4
4	3CE01	Water and Waste Water Engineering	3	0	2	5	4
5	3CE02	Highway and Traffic Engineering	3	0	2	5	4
6	3SE03	Design of Steel Structures	3	1	0	4	4
Total			18	2	5	25	22.5

Open Elective - I

1	3CP81	Fundamentals of Computer Networks and Security	3	0	0	3	3
2	3CP82	Fundamentals of Operating Systems	3	0	0	3	3
3	3IT81	Cyber security	3	0	0	3	3
4	3IT82	Internet Technology	3	0	0	3	3
5	3IT83	Software Project Management	3	0	0	3	3
6	3IT84	Enterprise Resource Planning	3	0	0	3	3
7	3EE81	Energy Audit & Conservation	3	0	0	3	3
8	3EE83	Installation and Commissioning of Electrical Equipments	3	0	0	3	3
9	3EL81	Electronic Communication System	3	0	0	3	3
10	3EC81	Introduction to Cellular Communication	3	0	0	3	3
11	3EC82	Applied Electronics	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

Semester 6

Sr. No.	Course Code	Name of Course	L	T	P	H	C
1		Open Elective - II	3	0	2	5	4
2	3CE03	Building Planning, Costing and Valuation	3	0	2	5	4
3	3HS01	Ethics and Constitution of India#	2	0	0	2	0
4	3CE04	Railway and Bridge Engineering	2	1	0	3	3
5	3SE04	Design of RC Structures	3	1	0	4	4
6	3CE05	Hydrology and Water Resources Engineering	3	1	0	4	4
Total			16	3	4	23	19

Non-Credit Mandatory course

Open Elective - II

1	3CP85	Object Oriented Concepts and Programming	3	0	2	5	4
2	3CP84	Information Technology Essentials	3	0	2	5	4

3	3CP83	Programming with Python	3	0	2	5	4
4	3IT85	Web Application and Development	3	0	2	5	4
5	3IT86	Java Programing	3	0	2	5	4
6	3IT87	Object Oriented Programming with C++	3	0	2	5	4
7	3IT88	Mobile Application Development	3	0	2	5	4
8	3EE82	Renewable Energy Technology	3	0	2	5	4
9	3EE84	Industrial Automation	3	0	2	5	4
10	3EL82	Basics of Embedded and IoT Systems	3	0	2	5	4
11	3EL83	Sensor Technology	3	0	2	5	4
12	3EC83	Embedded Systems and IOT	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
	CEIS2	Internship – II (Two Weeks)#	-	-	-	-	0

Non-Credit Mandatory course

Semester 7

Sr. No.	Course Code	Name of Course	L	T	P	H	C
1	4SE01	Earthquake Engineering	2	0	2	4	3
2	4CE01	Project Management and Equipments	3	1	0	4	4
3	4CE02	Construction Safety and Quality Management	2	0	0	2	2
4		Program Elective - I	3	0	2	5	4
5		Program Elective – II	3	1	0	4	4
6	4CE31	Project I	0	6	0	6	6
Total			13	8	4	25	23

Program Elective - I

1	4SE51	Ground Improvement Techniques	3	0	2	5	4
2	4CE42	Air Pollution and Control	3	0	2	5	4
3	4CE43	Geomatics Engineering	3	0	2	5	4
4	4CE44	Hydraulic Machines	3	0	2	5	4

Program Elective - II							
1	4SE41	Advanced Design of Steel Structures	3	1	0	4	4
2	4SE42	Advanced Structural Analysis	3	1	0	4	4
3	4CE45	Irrigation and Hydraulic Structures	3	1	0	4	4
4	4CE46	Urban Transportation System	3	1	0	4	4
Semester 8							
Sr. No.	Course Code	Name of Course	L	T	P	H	C
1		Program Elective – III	2	0	2	4	3
2		Program Elective – IV	1	0	4	5	3
3		Program Elective – V	3	0	0	3	3
4		Program Elective - VI	3	0	0	3	3
5		Program Elective - VII	0	0	4	4	2
6	4CE32	Project II	0	6	0	6	6
OR							
	4CE33	Industrial Project	0	6	0	6	6
Total			9	6	10	25	20
Total Credits Distribution			111	23	60	194	160
Program Elective - III							
1	4SE43	Advanced Design of Concrete Structures	2	0	2	4	3
2	4SE44	Computer aided Structural Analysis	2	0	2	4	3
	4CE47	Green Building Materials and Techniques	2	0	2	4	3
3	4CE48	Pavement Analysis and Design	2	0	2	4	3
Program Elective - IV							
1	4SE45	Structural Design Practices	1	0	4	5	3
2	4CE49	Digital Survey Project	1	0	4	5	3
3	4CE50	Traffic Engineering Field Study	1	0	4	5	3
4	4CE51	Building Construction Project	1	0	4	5	3
Program Elective - V							
1	4SE46	Design of Special Structures	3	0	0	3	3
2	4SE47	Repairs and Rehabilitation of Structures	3	0	0	3	3
3	4CE52	Building Services and Treatments	3	0	0	3	3
4	4CE53	Solid Waste Management	3	0	0	3	3

Program Elective - VI

1	4SE48	Prestressed Concrete	3	0	0	3	3
2	4SE49	Foundation Engineering	3	0	0	3	3
3	4CE54	Irrigation Water Management	3	0	0	3	3
4	4CE55	Dock, Harbour and Airport Engineering	3	0	0	3	3

Program Elective - VII

1	4SE50	Software Training in Structural Engineering	0	0	4	4	2
2	4CE56	Software Training in Civil Engineering	0	0	4	4	2
