# BVM Engineering College (An Autonomous Institution) Information Technology Department B. Tech.(Information Technology)

### Semester 1

Sr. No.	Course Code	Name of Course	L	T	P	Н	С
1	<u>BS111</u> *	Advanced Calculus	3	1	0	4	4
2	<u>BS104</u>	Semiconductor Physics	3	0	2	5	4
3	<u>ES103</u>	Basic Electrical Engineering	3	0	2	5	4
4	<u>ES105</u>	Programming for Problem Solving	3	0	2	5	4
5	<u>ES108</u>	Computer Workshop	0	0	2	2	1
6	<u>HS112</u> \$	Environmental Science#	2	0	0	2	0
		Total	14	1	8	23	17

<sup>\*</sup>For Students admitted in AY 2018-19, <u>BS101</u> (LTP:3,2,0)

### Semester 2

Sr. No.	Course Code	Name of Course	L	T	P	Н	С
1	BS112#	Linear Algebra and Fourier Series	3	1	0	4	4
2	<u>ES101</u>	Basic Electronics	3	0	2	5	4
3	<u>ES109</u>	Engineering Graphics & Design	2	0	4	6	4
4	<u>ES112</u>	Basics of Manufacturing Practices	0	0	2	2	1
5	<u>ES116</u>	Introduction to Web Programming	0	0	4	4	2
6	<u>HS101</u>	<u>English</u>	2	0	2	4	3
		Total	10	1	14	25	18

<sup>#</sup>For Students admitted in AY 2018-19, <u>BS102</u> (LTP:3,2,0)

<sup>\$</sup>For Students admitted in AY 2018-19, <u>HS102</u> (LTP:2,2,0)

**<sup>#</sup>Non-Credit Mandatory course** 

# **Semester 3**

Sr. No.	Course Code	Name of Course	L	T	P	Н	С
1	<u>2BS01</u>	Ordinary Differential Equations and Statistics	3	1	0	4	4
2	<u>2IT01</u>	<u>Digital Electronics</u>	3	0	2	5	4
3	2HS01	<u>Professional Soft Skills</u>	1	0	2	3	2
4	<u>2IT02</u>	<u>Computer Networks</u>	3	0	2	5	4
5	<u>2IT03</u>	<u>Database Management System</u>	3	0	2	5	4
6	<u>2IT04</u>	Object Oriented Programming with C++	3	0	2	5	4
		Total	16	1	10	27	22

## Semester 4

Sr. No.	Course Code	Name of Course		L	T	P	Н	C
1	<u>2IT05</u>	Computer Oriented Numerical Methods		3	0	2	5	4
2	<u>2HS02</u>	Economics & Management		3	0	0	3	3
3	<u>2IT06</u>	Advanced Web Technology		3	0	2	5	4
4	<u>2IT07</u>	Computer Organization		2	1	0	3	3
5	<u>2IT08</u>	<u>Data Structures</u>		3	0	2	5	4
6	<u>2IT09</u>	Operating System		3	0	2	5	4
			Total	17	1	8	26	22
	ITIS1	<u>Internship – I</u> (Two Weeks)#		-	-	-	-	0

#Non-Credit Mandatory course

# **Semester 5**

Sr. No.	Course Code	Name of Course	L	T	P	Н	С
1		Open Elective - I	3	0	0	3	3
2	<u>3IT01</u>	Design and Analysis of Algorithms	3	0	2	5	4
3	<u>3IT02</u>	Information Security	3	0	2	5	4
4	<u>3IT03</u>	Object Oriented Programming with Java	3	0	2	5	4
5	<u>3IT04</u>	<u>Advanced Programming Practices</u>	0	0	4	4	2
6	<u>3IT05</u>	Management Information System	3	1	0	4	4
7	<u>3HS01</u>	Ethics & Constitution of India#	2	0	0	2	0
		Total	17	1	10	28	21
		#Non-Credit Mandatory course					
		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.	<u>3EE81</u>	<b>Energy Audit &amp; Conservation</b>	3	0	0	3	3
5.	<u>3EE83</u>	Installation and Commissioning of Electrical Equipments	3	0	0	3	3
6.	<u>3EL81</u>	<b>Electronic Communication System</b>	3	0	0	3	3
7.	3EC81	Introduction to Cellular Communication	3	0	0	3	3
8.	<u>3EC82</u>	Applied Electronics	3	0	0	3	3
9.	<u>3ME81</u>	Industrial Engineering and Quality <u>Assurance</u>	3	0	0	3	3
10.	3ME82	<u>Project Management</u>	3	0	0	3	3
11.	<u>3PE81</u>	Principles Of Supply Chain  Management	3	0	0	3	3
12.	<u>3PE82</u>	<u>Industrial Internet Of Things</u>	3	0	0	3	3
		Semester 6					
Sr. No.	Course Code	Name of Course	L	T	P	Н	С
1		Open Elective - II	3	0	2	5	4
2	<u>3IT06</u>	Theory of Computation	3	1	0	4	4
3	<u>3IT07</u>	Data Warehousing and Data Mining	3	0	2	5	4
4		Programme Elective – I	3	0	2	5	4

5		Programme Elective – II	3	0	2	5	4
6	<u>3IT31</u>	Mini Project	0	0	4	4	2
		Total	15	1	12	28	22
	<u>ITIS2</u>	<u>Internship – II</u> (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.	<u>3EE82</u>	Renewable Energy Technology	3	0	2	5	4
5.	<u>3EE84</u>	<u>Industrial Automation</u>	3	0	2	5	4
6.	<u>3EL82</u>	Basics of Embedded and IoT Systems	3	0	2	5	4
7.	<u>3EL83</u>	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.	<u>3PE83</u>	Managing Projects	3	0	2	5	4
12.	<u>3PE84</u>	Additive Manufacturing	3	0	2	5	4
		Programme Elective - I					
1	<u>3IT41</u>	Advanced Java Technology	3	0	2	5	4
2	<u>3IT42</u>	<u>Dot Net Technology</u>	3	0	2	5	4
		Programme Elective - II					
1	<u>3IT43</u>	Mobile Application Development	3	0	2	5	4
2	<u>3IT44</u>	Computer Graphics	3	0	2	5	4
		Semester 7					
Sr. No.	Course Code	Name of Course	L	T	P	Н	С
1	<u>4IT01</u>	Python Programming	3	0	2	5	4
2	<u>4IT02</u>	Big Data Analytics & Visualization	3	0	2	5	4
3		Programme Elective – III	3	0	2	5	4
4		Programme Elective – IV	3	0	2	5	4
5	<u>4IT31</u>	<u>Project-I</u>	0	0	8	8	4
		Total	12	0	16	28	20

<b>Program</b>	Elective	- III
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		Flogram Elective - m						
1	<u>4IT45</u>	Artificial Intelligence	3	0	2	5	4	
2	<u>4IT42</u>	<u>Internet of Things</u>	3	0	2	5	4	
3	<u>4IT43</u>	Image Processing	3	0	2	5	4	
4	<u>4IT44</u>	Cloud Computing	3	0	2	5	4	
		Program Elective - IV						
1	<u>4IT41</u>	Compiler Design	3	0	2	5	4	
2	<u>4IT46</u>	Wireless Technologies and Mobile	3	0	2	5	4	
		Computing						
3	<u>4IT47</u>	Machine Learning	3	0	2	5	4	
4	<u>4IT48</u>	Block chain Technology	3	0	2	5	4	
		Semester 8 [Scheme A]						
Sr. No.	Course Code	Name of Course	L	T	P	H	C	
1		Programme Elective – V	3	0	2	5	4	
2		Programme Elective – VI	3	0	2	5	4	
3	<u>4IT32</u>	Project-II	0	0	16	16	8	
		Total	6	0	20	26	16	
		Program Elective - V						
1	<u>4IT49</u>	<u>Modern Networks</u>	3	0	2	5	4	
2	<u>4IT50</u>	Advanced Database Management	3	0	2	5	4	
3	<u>4IT51</u>	<u>Systems</u> <u>Linux Internals</u>	3	0	2	5	4	
4	4IT52	Cyber Security	3	0	2	5	4	
	11102	Program Elective - VI						
1	4IT53	Data Compression	3	0	2	5	4	
		Modelling Simulation and Operation	3		2			
2	<u>4IT54</u>	Research	3	0	Z	5	4	
3	<u>4IT55</u>	Service Oriented Architecture	3	0	2	5	4	
4	<u>4IT56</u>	<u>Computer Vision</u>	3	0	2	5	4	
5	<u>4IT57</u>	Quantum Computing	3	0	2	5	4	
	OR Semester 8 [Scheme B]							
Sr.	Course	<u> </u>	<b>T</b>	rr.		**		
No.	Code	Name of Course	L	T	P	Н		
1	<u>4IT33</u>	<u>Major Project</u>	0	0	32	32	16	
		Total Credits Distribution	108	6	98	212	158	