R.V.COLLEGE OF ENGINEERING

(Autonomous Institution Affiliated to VTU, Belagavi)

R.V. Vidyaniketan Post, Mysore Road

Bengaluru – 560 059

Bachelor of Engineering (B.E.)

Scheme and Syllabus for V&VI Semesters

2016 SCHEME

COMPUTER SCIENCE & ENGINEERING

R V COLLEGE OF ENGINEERNG, BENGALURU-560 059
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THIRD SEMESTER CREDIT SCHEME								
Sl. No.	**Course Code**	**Course Title**	**BoS**	**CREDIT ALLOCATION**				
				L	**T**	**P**	**S**	**Total Credits**
1.	16MA31A	Laplace Transforms, Fourier Series and Linear Algebra	Maths	3	1	0	0	4
2.	16EB32	Biology for Engineers	BT	2	0	0	0	2
3.	16CS33	Data Structures Using C	CSE	3	0	1	1	5
4.	16CS34	Logic Design	CSE	3	0	1	1	5
5.	16CS35	Computer Organization	CSE	4	0	0	1	5
6.	16CS36	Discrete Mathematics	CSE	3	1	0	0	4
7.	16DCS37	Bridge Course C Programming	CSE	2	0	0	0	0
Total number of Credits								**25**
Total Number of Hours / Week				**18+2**	**4**	**4**	**12**	

FOURTH SEMESTER CREDIT SCHEME								
Sl. No.	**Course Code**	**Course Title**	**BoS**	**CREDIT ALLOCATION**				
				L	**T**	**P**	**S**	**Total Credits**
1.	16MA41A	Graph Theory and Probability Theory	Maths	3	1	0	0	4
1.	16ET42	Environmental Technology	BT	2	0	0	0	2
2.	16CS43	Design and Analysis of Algorithms	CSE	3	0	1	1	5
3.	16CS44	Object Oriented Programming using JAVA	CSE	3	0	1	1	5
4.	16CS45	Operating Systems	CSE	3	0	1	1	5
5.	16CS46	Theory of Computation	CSE	3	1	0	0	4
6.	16HS47	Professional Practice-II (Communication Skills and Professional Ethics)	HSS	0	0	1	0	1
7.	16DMA48	Bridge Course Mathematics	Maths	2	0	0	0	0
Total number of Credits								**26**
Total Number of Hours / Week				**17+2**	**4**	**6**	**12**	

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FIFTH SEMESTER CREDIT SCHEME								
Sl. No.	**Course Code**	**Course Title**	**BOS**	**Credit Allocation**				**Total Credits**
				L	**T**	**P**	**S**	
1.	16HSI51	Intellectual Property Rights and Entrepreneurship	HSS	3	0	0	0	3
2.	16CS52	Database Design (Theory and Practice)	CSE	3	0	1	1	5
3.	16CS53	Microcontroller & Embedded Systems (Theory and Practice)	CSE	3	0	1	1	5
4.	16CS54	Software Engineering (Theory and Practice)	CSE	3	0	1	0	4
5.	16CS55	Computer Communication & Networks	CSE	3	1	0	0	4
6.	16CS5AX	Elective A (PE)	CSE	3	0	0	1	4
7.	16G5BXX	Elective B (OE)	Resp. BoS	4	0	0	0	4
Total number of Credits								**29**
Total Number of Hours / Week				**21**	**02**	**6**	**16**	

FIFTH SEMESTERPROGRAM ELECTIVES (PE) (Elective A)		
Sl No	**Course Code**	**Course Title**
1.	16CS5A1	Artificial Neural Networks
2.	16CS5A2	Probability, Statistics and Queuing Theory
3.	16CS5A3	Artificial Intelligence
4.	16CS5A4	Advanced Algorithms
5.	16CS5A5	Natural Language Processing

FIFTH SEMESTER GLOBAL ELECTIVES				
Sl. No.	**Course Code**	**Department**	**Course Title**	**Credits**
1.	16G5B01	BT	Bioinformatics	4
2.	16G5B02	CH	Fuel Cell Technology	4
3.	16G5B03	CV	Geoinformatics	4
4.	16G5B04	CSE	Graph Theory	4
5.	16G5B05	ECE	Artificial Neural Networks &Deep Learning	4
6.	16G5B06	EEE	Hybrid Electric Vehicles	4
7.	16G5B07	IEM	Optimization Techniques	4
8.	16G5B08	E&I	Sensors & Applications	4
9.	16G5B09	ISE	Introduction To Management Information Systems	4
10.	16G5B10	ME	Industrial Automation	4
11.	16G5B11	TCE	Telecommunication Systems	4
12.	16G5B12	MAT	Computational advanced numerical methods	4
13.		AE		4

SIXTH SEMESTER CREDIT SCHEME								
Sl. No.	**Course Code**	**Course Title**	**BOS**	**Credit Allocation**				**Total Credits**
				L	**T**	**P**	**S**	
1.	16HEM61	Foundations of Management and Economics	HSS	2	0	0	0	2
2.	16CS62	Compiler Design (Theory and Practice)	CSE	3	0	1	1	5
3.	16CS63	Computer Networks (Theory and Practice)	CSE	3	0	1	1	5
4.	16CS64	Computer Architecture	CSE	3	0	0	0	3
5.	16CS6CX	Elective C (PE)	CSE	3	0	0	1	4
6.	16CS6DX	Elective D (PE)	CSE	4	0	0	0	4
7.	16G6EXX	Elective E(OE)	Resp. BoS	3	0	0	0	3
8.	16HS68	Professional Practice-III (Employability Skills and Professional Development of Engineers)$$	HSS	1	0	0	0	1
Total number of Credits								**27**
Total Number of Hours / Week				**22**	**00**	**4**	**12****	**26**

SIXTH SEMESTERPROGRAM ELECTIVES (PE) (Elective C)		
Sl No	**Course Code**	**Course Title**
1.	16CS6C1	Mobile Computing
2.	16CS6C2	Web Programming
3.	16CS6C3	Cloud Computing
4.	16CS6C4	Network Programming
SIXTH SEMESTER PROGRAM ELECTIVES (PE) (Elective D)		
1.	16CS6D1	Fuzzy Logic & Intelligent Information Systems
2.	16CS6D2	Data Warehousing& Data mining
3.	16CS6D3	Object Oriented Analysis & Design
4.	16CS6D4	Linux Internals
5.	16CS6D5	Introduction to Optimization Techniques

SIXTH SEMESTER GLOBAL ELECTIVES				
Sl. No.	Course Code	Department	Course Title	Credits
1.	16GE6E01	BT	Bioinspired Engineering	3
2.	16GE6E02	CH	Green Technology	3
3.	16GE6E03	CV	Solid Waste Management	3
4.	16GE6E04	CSE	Introduction To Web Programming	3
5.	16GE6E05	ECE	Automotive Electronics	3
6.	16GE6E06	EEE	Industrial Electronics	3
7.	16GE6E07	IEM	Project Management	3
8.	16GE6E08	E&I	Virtual Instrumentation	3
9.	16GE6E09	ISE	Introduction To Mobile Application Development	3
10.	16GE6E10	ME	Automotive Engineering	3
11.	16GE6E11	TCE	Mobile Network System And Standards	3
12.	16GE6E12	MAT	Partial Differential Equations	3
13.		AE		3

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SEVENTH SEMESTER								
Sl. No	**Course Code**	**Course Title**	**BOS**	**Credit Allocation**				**Total Credits**
				Lecture	**Tutorial**	**Practical**	**SS**	
1	16CS71	Parallel Architecture & Distributed Programming	CSE	3	0	1	0	4
2	16CS72	Data Science and Machine Learning Essentials	CSE	3	0	1	0	4
3	16CS73	Computer Graphics	CSE	3	0	1	0	4
4	16CS7FX	Elective F (PE)	CSE	4	0	0	0	4
5	16CS7GX	Elective G (PE)	CSE	4	0	0	0	4
6	16G7HXX	Elective H (OE)	Resp. BoS	3	0	0	0	3
		Total No. of Credits						**23**
		No. Of Hrs.		**20**	**00**	**6**	**00**	**26**

SEVENTH SEMESTERPROGRAM ELECTIVES (PE) Elective F		
Sl No	**Course Code**	**Course Title**
1.	16CS7F1	Big Data Analytics
2.	16CS7F2	Multimedia Computing
3.	16CS7F3	Fuzzy Graphs, Fuzzy Soft Sets and Petrinets
4.	16CS7F4	Internet of Things
5.	16CS7F5	Application Delivery Controller (Industry Offered)
SEVENTH SEMESTER PROGRAM ELECTIVES (PE) Elective G		
1.	16CS7G1	An Introduction to Game Theory
2.	16CS7G2	Storage Area Networks
3.	16CS7G3	Software Defined Networks
4.	16CS7G4	Cryptography and Network Security
5.	16CS7G5	Computer Vision

SEVENTH SEMESTER GLOBAL ELECTIVES			
Sl. No.	Course Code	Department	Course Title
1.	16G7H01	BT	Nanotechnology
2.	16G7H02	CH	Industrial Safety and Risk Management
3.	16G7H03	CV	Intelligent Transportation Systems
4.	16G7H04	CSE	Intelligent Systems
5.	16G7H05	ECE	Image Processing & Machine Learning
6.	16G7H06	EEE	Design Of Renewable Energy Systems
7.	16G7H07	IEM	Systems Engineering
8.	16G7H08	E&I	MEMS and Applications
9.	16G7H09	ISE	Introduction to Internet of Things
10.	16G7H10	ME	Industry 4.0 – Smart Manufacturing For The Future
11.	16G7H11	TCE	Space Technology And Applications
12.	16G7H01	MAT	Nanotechnology

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EIGHTH SEMESTER								
Sl. No.	**Course Code**	**Course Title**	**BOS**	**Credit Allocation**				**Total Credits**
				Lecture	**Tutorial**	**Practical**	**EL**	
1	16CSP81	Major Project	CSE	0	0	16	0	16
2	16CSS82	Technical Seminar	CSE	0	0	2	0	2
3	16HSS83	Innovation and Social Skills	HSS	0	0	2	0	2
		Total No. of Credits						**20**
		No. Of Hrs.		**0**	**0**	**40**	**0**	