

**Scheme and Syllabus of Semesters III to VIII of B.E
(With effect from 2010-2011)**

Information Science and Engineering

VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELGAUM

**SCHEME OF TEACHING AND EXAMINATION
B.E. INFORMATION SCIENCE AND ENGINEERING
(Common to CSE & ISE)**

III SEMESTER

S. No.	Subject Code	Subject	Teaching Dept.	Teaching Hrs / Week		Duration (Hrs)	Examination		
				Theory	Practical		Marks		
							IA	Exam	Total
1	10MAT31	Engineering Mathematics - III	Mathematics	04	-	03	25	100	125
2	10CS32	Electronic Circuits	CSE/ISE	04	-	03	25	100	125
3	10CS33	Logic Design	CSE/ISE	04	-	03	25	100	125
4	10CS34	Discrete Mathematical Structures	CSE/ISE	04	-	03	25	100	125
5	10CS35	Data Structures with C/C++	CSE/ISE	04	-	03	25	100	125
6	10CS36	Object Oriented Programming with C++	CSE/ISE	04	-	03	25	100	125
7	10CSL37	Data Structures with C/C++ Laboratory	CSE/ISE	-	03	03	25	50	75
8	10CSL38	Electronic Circuits & Logic Design Laboratory	CSE/ISE	-	03	03	25	50	75
Total				24	06	-	200	700	900

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IV SEMESTER

S. No.	Subject Code	Subject	Teaching Dept.	Teaching Hrs / Week		Examination			
				Theory	Practical	Duration (Hrs)	Marks		
							IA	Exam	Total
1	10MAT41	Engineering Mathematics - IV	Maths	04	-	03	25	100	125
2	10CS42	Graph Theory and Combinatorics	CSE/ISE	04	-	03	25	100	125
3	10CS43	Design and Analysis of Algorithms	CSE/ISE	04	-	03	25	100	125
4	10CS44	Unix and Shell Programming	CSE/ISE	04	-	03	25	100	125
5	10CS45	Microprocessors	CSE/ISE	04	-	03	25	100	125
6	10CS46	Computer Organization	CSE/ISE	04	-	03	25	100	125
7	10CSL47	Design and Analysis of Algorithms Laboratory	CSE/ISE	-	03	03	25	50	75
8	10CSL48	Microprocessors Laboratory	CSE/ISE	-	03	03	25	50	75
Total				24	06	-	200	700	900

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V SEMESTER

S. No.	Subject Code	Subject	Teaching Dept.	Teaching Hrs / Week		Examination			
				Theory	Practical	Duration (Hrs)	Marks		
							IA	Exam	Total
1	10IS51	Software Engineering	CSE/ISE	04	-	03	25	100	125
2	10CS52	Systems Software	CSE/ISE	04	-	03	25	100	125
3	10CS53	Operating Systems	CSE/ISE	04	-	03	25	100	125
4	10CS54	Database Management Systems	CSE/ISE	04	-	03	25	100	125
5	10CS55	Computer Networks - I	CSE/ISE	04	-	03	25	100	125
6	10CS56	Formal Languages and Automata Theory	CSE/ISE	04	-	03	25	100	125
7	10CSL57	Database Applications Laboratory	CSE/ISE	-	03	03	25	50	75
8	10CSL58	Systems Software & Operating Systems Laboratory	CSE/ISE	-	03	03	25	50	75
Total				24	06	-	200	700	900

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VI SEMESTER

S. No.	Subject Code	Subject	Teaching Dept.	Teaching Hrs /Week		Duration (Hrs)	Examination		
				Theory	Practical		Marks		
							IA	Exam	Total
1	10AL61	Management and Entrepreneurship	CSE/ISE/MB A	04	-	03	25	100	125
2	10CS62	Unix System Programming	CSE/ISE	04	-	03	25	100	125
3	10IS63	File Structures	CSE/ISE	04	-	03	25	100	125
4	10CS64	Computer Networks - II	CSE/ISE	04	-	03	25	100	125
5	10IS65	Software Testing	CSE/ISE	04	-	03	25	100	125
6	10IS66x	Elective I (Group-A)	CSE/ISE	04	-	03	25	100	125
7	10ISL67	File Structures Laboratory	CSE/ISE	-	03	03	25	50	75
8	10ISL68	Software Testing Laboratory	CSE/ISE	-	03	03	25	50	75
Total				24	06	-	200	700	900

Elective I – Group A

10IS661/10CS661	Operations Research
10IS662/10CS63	Compiler Design
10IS663/10CS663	Data Compression
10IS664/10CS664	Pattern Recognition
10IS665/10CS65	Computer Graphics and Visualization
10IS666/10CS666	Programming Languages

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VII SEMESTER

S. No.	Subject Code	Subject	Teaching Dept.	Teaching Hrs / Week		Duration (Hrs)	Examination		
				Theory	Practical		Marks		
							IA	Exam	Total
1	10CS71	Object Oriented Modeling and Design	CSE/ISE	04	-	03	25	100	125
2	10IS72	Information Systems	CSE/ISE	04	-	03	25	100	125
3	10CS73	Programming the Web	CSE/ISE	04	-	03	25	100	125
4	10IS74/ 10CS755	Data Warehousing and Data Mining	CSE/ISE	04	-	03	25	100	125
5	10IS75x	Elective II (Group-B)	CSE/ISE	04	-	03	25	100	125
6	10IS76x	Elective III(Group-C)	CSE/ISE	04	-	03	25	100	125
7	10CSL77	Networks Laboratory	CSE/ISE	-	03	03	25	50	75
8	10CSL78	Web Programming Laboratory	CSE/ISE	-	03	03	25	50	75
Total				24	06	-	200	700	900

Elective II – Group B

10IS751/10CS751	Advanced DBMS
10IS752/10CS72	Embedded Computing Systems
10IS753/10CS753	JAVA and J2EE
10IS754/10CS754	Multimedia Computing
10IS755	Advanced Software Engineering
10IS756/10CS756	Neural Networks

Elective III – Group C

10IS761/10CS761	C# Programming and .Net
10IS762/10CS762	Digital Image Processing
10IS763/10CS763	Game Theory
10IS764/10CS764	Artificial Intelligence
10IS765/10CS765	Storage Area Networks
10IS766/10CS766	Fuzzy Logic

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S. No.	Subject Code	Subject	Teaching Dept.	Teaching Hrs / Week		Duration	Examination		
				Theory	Practical		Marks		
							IA	Exam	Total
1	10IS81	Software Architectures	CSE/ISE	04	-	03	25	100	125
2	10CS82	System Modeling and Simulation	CSE/ISE	04	-	03	25	100	125
3	10IS83x	Elective IV(Group-D)	CSE/ISE	04	-	03	25	100	125
4	10IS84x	Elective V(Group-E)	CSE/ISE	04	-	03	25	100	125
5	10IS85	Project Work	ISE		06	03	100	100	200
6	10IS86	Seminar	ISE		-	-	50	-	50
Total				16	06		250	500	750

Elective IV – Group D

10IS831/10CS831	Wireless Networks and Mobile Computing
10IS832/10CS832	Web 2.0 and Rich Internet Applications
10IS833	User Interface Design
10IS834/10CS834	Network Management Systems
10IS835/10CS835	Information and Network Security
10IS836/10CS836	Microcontroller-Based Systems

Elective V– Group E

10IS841/10CS841	Ad-hoc Networks
10IS842	Information Retrieval
10IS843	Supply Chain Management
10IS844/10CS844	Services Oriented Architecture
10IS845/10CS845	Clouds, Grids and Clusters
10IS846	Decision Support Systems

NOTE: Students have to register for one Elective from each of the five Elective Group

