SCHEME OF INSTRUCTION
BE (COMPUTER SCIENCE & ENGINEERING)
Proposed from the Academic year 2015-16

SEMESTER – I

S. No	Course Code	Course Title	Scheme of Instruction			Contact Hrs/Wk	Scheme of Examination		Credits
			L	T	P/Dg		CIE	SEE	
Theory									
1.	BS101MT	Mathematics- I	3	1	0	4	30	70	3
2.	BS102PH	Engineering Physics- I	3	0	0	3	30	70	3
3.	BS103CH	Engineering Chemistry- I	3	0	0	3	30	70	3
4.	ES101CE	Engineering Mechanics - I	3	0	0	3	30	70	3
5.	ES102CS	Computer Programming and Problem Solving	3	0	0	3	30	70	3
6.	MC101EG	Engineering English	3	0	0	3	30	70	1
Practicals									
7.	BS151PH	Engineering Physics Lab-I	0	0	2	2	25	50	1
8.	BS152CH	Engineering Chemistry Lab-I	0	0	2	2	25	50	1
9.	ES151CS	Computer Programming Lab	0	0	2	2	25	50	1
10.	ES152ME	Workshop Practice-I	0	0	2	2	25	50	1
11.	ES153CE	Engineering Graphics- I	0	0	2*2	4	50	50	2
12.	MC151EG	Engineering English Lab	0	0	2	2	25	50	1
Total			18	1	14	33	355	720	23

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SEMESTER – II

S.No	Course Code	Course Title	Scheme of Instruction			Contact Hrs/Wk	Scheme of Examination		Credits
			L	T	P		CIE	SEE	
Theory									
1.	BS201MT	Mathematics -II	3	1	0	4	30	70	3
2.	BS202PH	Engineering Physics- II	3	0	0	3	30	70	3
3.	BS203CH	Engineering Chemistry-II	3	0	0	3	30	70	3
4.	HS201EG	Business Communication and Presentation Skills	3	0	0	3	30	70	3
5.	ES221EE	Basic Electrical Engineering	3	0	0	3	30	70	3
6.	PC201CS	Object Oriented Programming using C++	3	1	0	4	30	70	3
Practicals									
7.	BS251PH	Engineering Physics Lab-II	0	0	2	2	25	50	1
8.	BS252CH	Engineering Chemistry Lab-II	0	0	2	2	25	50	1
9.	ES251CS	Computer Skills Lab	0	0	2	2	25	50	1
10.	HS251EG	Communication Skills Lab	0	0	2	2	25	50	1
11.	PC251CS	C++ Programming Lab	0	0	2*2	4	25	50	2
		Total	18	2	12	32	305	670	24

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SCHEME OF INSTRUCTION
BE (COMPUTER SCIENCE & ENGINEERING)
Proposed from the Academic year 2016-17

SEMESTER – III

S.No	Course Code	Course Title	Scheme of Instruction			Contact Hrs/Wk	Scheme of Examination		Credits
			L	T	P		CIE	SEE	
Theory									
1.	BS901MT	Mathematics-III	3	1	0	4	30	70	3
2.	PC301CS	Data Structures	3	1	0	4	30	70	3
3.	PC302CS	Discrete Mathematics	3	2	0	5	30	70	4
4.	PC303CS	Logic and Switching Theory	3	1	0	4	30	70	3
5.	ES321EC	Basic Electronics Engineering	3	1	0	4	30	70	3
6.	HS901BT	Environmental Sciences	3	0	0	3	30	70	3
Practicals									
7.	PC351CS	Data Structures Lab	0	0	2	2	25	50	1
8.	ES342EC	Basic Electronics Lab	0	0	2	2	25	50	1
9.	ES341EE	Electrical Engineering Lab	0	0	2	2	25	50	1
		Total	**18**	**6**	**06**	**30**	**255**	**570**	**22**

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SCHEME OF INSTRUCTION
BE (COMPUTER SCIENCE & ENGINEERING)
Proposed from the Academic year 2016-17

SEMESTER – IV

S.No	Course Code	Course Title	Scheme of Instruction			Contact Hrs/Wk	Scheme of Examination		Credits
			L	T	P		CIE	SEE	
Theory									
1.	PC401CS	Computer Organization	3	1	0	4	30	70	3
2.	PC402CS	Object Oriented Programming using JAVA	3	1	0	4	30	70	3
3.	PC403CS	Programming Languages	3	1	0	4	30	70	3
4.	PC404CS	Microprocessors and Interfacing	3	1	0	4	30	70	3
5.	BS402MT	Mathematics and Statistics	3	1	0	4	30	70	3
6.	ES421EC	Signals and Systems	3	0	0	3	30	70	3
Practicals									
7.	PC451CS	Java Programming Lab	0	0	2	2	25	50	1
8.	PC452CS	Microprocessors Lab	0	0	2	2	25	50	1
9.	MC461HS	Society-Out Reach Program	0	0	2	2	50	..	2 Units
10.	PW461CS	Mini Project	0	0	2	2	25	50	2
		Total	18	5	08	31	305	570	22

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SEMESTER – V

S.No	Course Code	Course Title	Scheme of Instruction			Contact Hrs/Wk	Scheme of Examination		Credits
			L	T	P		CIE	SEE	
Theory									
1.	PC501CS	Database Management Systems	3	1	0	4	30	70	3
2.	PC502CS	Data Communications	3	1	0	4	30	70	3
3.	PC503CS	Automata, Languages & Computation	3	1	0	4	30	70	3
4.	PC504CS	Operating Systems	3	1	0	4	30	70	3
5.	PC505CS	Computer Graphics	3	1	0	4	30	70	3
6.	HS901MB	Managerial Economics and Accountancy	3	0	0	3	30	70	3
7.	# PE – I	Professional Elective-I	3	0	0	3	30	70	3
Practicals									
8.	PC551CS	Database Management Systems Lab	0	0	2	2	25	50	1
9.	PC552CS	Operating Systems Lab	0	0	2	2	25	50	1
10.	PC553CS	Computer Graphics Lab	0	0	2	2	25	50	1
		Total	21	05	06	32	285	640	24

	# Professional Elective-I
PE 501 CS	Advanced Computer Architecture
PE 502 CS	Artificial Intelligence
PE 503 CS	Simulation and Modeling

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SEMESTER – VI

S. No	Course Code	Course Title	Scheme of Instruction			Contact Hrs/Wk	Scheme of Examination		Credits
			L	T	P		CIE	SEE	
Theory									
1.	PC 601CS	Design and Analysis of Algorithms	3	1	0	4	30	70	3
2.	PC 602 CS	Software Engineering	3	1	0	4	30	70	3
3.	PC 603CS	Web Programming	3	1	0	4	30	70	3
4.	PC 604 CS	Computer Networks & Programming	3	1	0	4	30	70	3
5.	# PE-II	Professional Elective-II	3	1	0	4	30	70	3
6.	$ OE-I	Open Elective-I	3	0	0	3	30	70	3
Practicals									
7.	PC 651 CS	Software Engineering Lab	0	0	2	2	25	50	1
8.	PC 652 CS	Web Programming Lab	0	0	2	2	25	50	1
9.	PC 653 CS	Computer Networks & Programming Lab	0	0	2	2	25	50	1
10.	PW961CS	Summer Internship* Duration: 6-8 Weeks	-	-	-	-	-	-	-
		Total	18	05	08	31	280	620	21

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	#Professional Elective-II
PE601CS	Graph Theory and Its Applications
PE602CS	Advanced Computer Graphics
PE603CS	Advanced Databases

	$Open Elective-I
OE 601 BM	Micro Electro- Mechanical Systems
OE 601 CE	Disaster Management
OE602CE	Geo Spatial Techniques
*OE 601 CS	Operating Systems
*OE 602 CS	Object Oriented Programming using JAVA
OE 601 EC	Embedded Systems
OE 602 EC	Signal Analysis and Transform Techniques
OE 601 EE	Reliability Engineering
OE 601 ME	Robotics
OE 602 ME	Material Handling
OE 601 LA	Intellectual Property Rights

*CS Electives offered for BME/CE/EC/EE/ME Branches only

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SCHEME OF INSTRUCTION
BE (COMPUTER SCIENCE & ENGINEERING)

SEMESTER – VII

S.No	Course Code	Course Title	Scheme of Instruction			Contact Hrs/Wk	Scheme of Examination		Credits
			L	T	P		CIE	SEE	
Theory									
1.	PC 701 CS	Compiler Construction	3	1	0	4	30	70	3
2.	PC 702 CS	Distributed Systems	3	1	0	4	30	70	3
3.	PC 703CS	Information Security	3	1	0	4	30	70	3
4.	# PE-III	Professional Elective-III	3	1	0	4	30	70	3
5.	# PE-IV	Professional Elective-IV	3	1	0	4	30	70	3
6.	$ OE-II	Open Elective-II	3	0	0	3	30	70	3
7.	MC901EG	Gender Sensitization	3	0	0	3	30	70	3 U nits
Practicals									
8.	PC 751 CS	Compiler Construction Lab	0	0	2	2	25	50	1
9.	PC 752 CS	Distributed Systems Lab	0	0	2	2	25	50	1
10.	PW761CS	Project Work-I	0	0	2	2	50	--	4
11.	PW961CS	Summer Internship	0	0	0	0	50	--	2
		Total	21	05	06	32	360	590	26

	#Professional Elective-III
PE701CS	Data Mining
PE702CS	Information Retrieval Systems
PE703CS	Mobile Computing
PE704CS	Soft Computing
PE705CS	Image Processing

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	#Professional Elective-IV
PE706CS	Machine Learning
PE707CS	Natural Language Processing
PE708CS	Software Quality and Testing
PE709CS	Web Services & Architecture

	$ Open Elective-II
OE 701 BE	Image Processing
OE 701 CE	Optimization Techniques
*OE 701 CS	Database Systems
*OE 702 CS	Information Security
OE 701 EC	Neural Networks
OE 701 EE	Renewable Energy Sources
OE 701 ME	Entrepreneurship
OE 702 ME	Finite Element Methods

*CS Electives offered for BME/CE/EC/EE/ME branches only

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SCHEME OF INSTRUCTION

BE (COMPUTER SCIENCE & ENGINEERING)

SEMESTER – VIII

S.No	Course Code	Course Title	Scheme of Instruction			Contact Hrs/Wk	Scheme of Examination		Credits
			L	T	P		CIE	SEE	
Theory									
1.	PC 801 CS	Embedded Systems Design	3	1	0	4	30	70	3
2.	# PE-V	Professional Elective-V	3	1	0	4	30	70	3
3.	$ OE-III	Open Elective-III	3	1	0	4	30	70	3
Practicals									
4.	PC 851 CS	Embedded Systems Lab	0	0	2	2	25	50	1
5.	PW861CS	Project Work –II	0	0	4	4	50	100	8
6.	@MC	Mandatory Course	0	0	3	3	50	-	3Units
		Total	**09**	**03**	**09**	**21**	**215**	**370**	**18**

	# Professional Elective-V
PE 801 CS	Parallel programming
PE 802 CS	Cloud Computing
PE 803 CS	Human Computer Interaction

	@Mandatory Course
MC 951 SP	Yoga Practice
MC 952 SP	NSS
MC 953 SP	Sports

	$ Open Elective-III
OE 801 MT	Statistical Applications in Engineering
OE801CS	Software Engineering
OE802EC	Pattern Recognition
OE801BM	Human Factor Engineering
OE801CE	Road Safety Engineering
OE802CE	Green Building Technology
OE801EE	Utilization of Electrical Energy

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S. No.	Course Work-Subject Area	Credits/Semester of B.E(CSE) program								Total Credits
		I	II	III	IV	V	VI	VII	VIII	
1.	Humanities and Social Sciences (HS) **5%-10%**	-	**4** (1+1)	**03** **(1)**	-	**3** (1)	-	-	-	**10** **(5.55%)**
2.	Basic Sciences (BS) **15%-20%**	**11** (3+2)	**11** (3+2)	03 (1)	**03** **(1)**	-	-	-	-	**28** **(15.5%)**
3.	Engineering Sciences (ES) **15%-20%**	**10** (2+4)	**4** (1+1)	**5** (1+2)	03 (1)	-	-	-	-	**22** **(12.29%)**
4.	Professional Subjects- Core (PC) **30%- 40%**	-	**4** (1+1)	**10** (3+1)	**14** (4+2)	**18** (5+3)	**15** (4+3)	**11** (3+2)	**4** (1+1)	**77** **(42.7%)**
5.	Professional Electives- (PE) **10% - 15%**	-	-	-	-	3 (1)	**3** (1)	**6** (2)	**3** (2)	**15** **(8.37%)**
6.	Open Electives (OE)**5%-10%**	-	-	-	-	-	**3** (1)	**3** (1)	**3** **(1)**	**09** **(5.02%)**
7.	Mini project, Project Work-I and II and Internship **10% - 15%**	-	-	-	**02**	-	-	**06** **(1+1)**	**8**	**16** **(8.83%)**
8.	Mandatory Courses (MC) (*Non-Credit*) **8 Units**	**2** (1+1)			**2U**		**3U**		**3U**	**08 U + 2**
	TOTAL	**23**	**24**	**22**	**22**	**24**	**21**	**26**	**18**	**180**

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