

T.E. (Information Technology) 2015 Course to be implemented from June 2017

SYLLABUS STRUCTURE

SEMESTER – I

Subject Code	Subject	Teaching Scheme			Examination Scheme					Total Marks	Credits
		Lecture	Tutorial	Practical	In-Sem. Paper	End-Sem. Paper	TW	PR	OR		
314441	Theory of Computation	4	--	--	30	70	--	--	--	100	4
314442	Database Management Systems	4	--	--	30	70	--	--	--	100	4
314443	Software Engineering & Project Management	3	--	--	30	70	--	--	--	100	3
314444	Operating System	4	--	--	30	70	--	--	--	100	4
314445	Human-Computer Interaction	3	--	--	30	70	--	--	--	100	3
314446	Software Laboratory-I	--	--	4	--	--	25	50	50	125	2
314447	Software Laboratory-II	--	--	4	--	--	25	50	--	75	2
314448	Software Laboratory-III	--	--	2	--	--	50	--	--	50	1
314449	Audit Course 3	--	--	--	--	--	--	--	--	Grade	
	Total	18	--	10	150	350	100	100	50	750	23
	Total of Part-I	28 Hours				750					

SEMESTER – II

Subject Code	Subject	Teaching Scheme			Examination Scheme					Total Marks	Credits
		Lecture	Tutorial	Practical	In-Sem. Paper	End-Sem. Paper	TW	PR	OR		
314450	Computer Network Technology	3	--	--	30	70	--	--	--	100	3
314451	Systems Programming	4	--	--	30	70	--	--	--	100	4
314452	Design and Analysis of Algorithms	4	--	--	30	70	--	--	--	100	4
314453	Cloud Computing	3	--	--	30	70	--	--	--	100	3
314454	Data Science & Big Data Analytics	4	--	--	30	70	--	--	--	100	4
314455	Software Laboratory-IV	--	--	2	--	--	25	--	25	50	1
314456	Software Laboratory-V	--	--	4	--	--	50	50	--	100	2
314457	Software Laboratory-VI	--	--	2	--	--	25	25	--	50	1
314458	Project Based Seminar	--	01	--	--	--	--	--	50	50	1
314459	Audit Course 4	--	--	--	--	--	--	--	--	Grade	
	Total	18	01	08	150	350	100	75	75	750	23
	Total of Part-II	27 Hours				750					

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SEMESTER-I

Subject Code	Subject	Teaching Scheme			Examination Scheme					Total Marks	Credits
		Lecture	Tutorial	Practical	Theory Paper	Theory Online	TW	PR	OR		
214441	Discrete Structures	4	--	--	50	50	--	--	--	100	4
214442	Computer Organization & Architecture	4	--	--	50	50	--	--	--	100	4
214443	Digital Electronics and Logic Design	4	--	--	50	50	--	--	--	100	4
214444	Fundamentals of Data Structures	4	--	--	50	50	--	--	--	100	4
214445	Problem Solving and Object Oriented programming	4	--	--	50	50	--	--	--	100	4
214446	Digital Laboratory	--	--	2	--	--	25	50	--	75	1
214447	Programming Laboratory	--	--	4	--	--	25	50	--	75	2
214448	Object Oriented programming Lab.	--	--	2	--	--	25	50	--	75	1
214449	Communication Skills	--	--	2	--	--	25	--	--	25	1
	Audit Course	--	--	--	--	--	--	--	--	Grade	
	Total	20	--	10	250	250	100	150	--	750	25
	Total of Part-I	30 Hours			750						

SEMESTER - II

Subject Code	Subject	Teaching Scheme			Examination Scheme					Total Marks	Credits
		Lecture	Tutorial	Practical	Theory Paper	Theory Online	TW	PR	OR		
207003	Engineering Mathematics -III	4	1	--	50	50	25	--	--	125	5
214450	Computer Graphics	3	--	--	50	50	--	--	--	100	3
214451	Processor Architecture and Interfacing	4	--	--	50	50	--	--	--	100	4
214452	Data Structures & Files	4	--	--	50	50	--	--	--	100	4
214453	Foundations of Communication and Computer Network	4	--	--	50	50	--	--	--	100	4
214454	Processor Interfacing Laboratory	--	--	4	--	--	25	50	--	75	2
214455	Data Structure and Files Laboratory	--	--	4	--	--	25	50	--	75	2
214456	Computer Graphics Laboratory	--	--	2	--	--	25	50	--	75	1
	Audit Course	--	--	--	--	--	--	--	--	Grade	
	Total	19	01	10	250	250	100	150	--	750	25
	Total of Part-II	30 Hours			750						

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B.E. (Information Technology) 2012 Course to be implemented from June 2015

SEMESTER- I

Subject Code	Subject	Teaching Scheme			Examination Scheme					Total Marks
		Lecture	Practical	Tutorial	In-Semester Assessment	TW	PR	OR	End Semester Examination	
					Phase - I				Phase - II	
414453	Information and Cyber Security	3			30				70	100
414454	Software Modeling and Design	3			30				70	100
414455	Machine Learning	4			30				70	100
414456	Elective - I	3			30				70	100
414457	Elective - II	3			30				70	100
414458	Software Laboratory - III	--	4	--		50	--	50		100
414459	Software Laboratory - IV	--	4	--		--	50	50		100
414460	Project Phase I	--	--	2		50	--	--		50
Total		16	8	2	150	100	50	100	350	750

Software Laboratory- III: (Information and Cyber Security+ Machine Learning)

Software Laboratory- IV: (Software Modeling and Design + Testing)

Elective- I	Elective - II
414456 A : Soft Computing	414457 A : Business Intelligence
414456 B : Usability Engineering	414457 B : Service Oriented Architecture
414456 C : Modern Compilers	414457 C : E&M Governance
414456 D : Parallel Algorithms and Design	414457 D : Geo Informatics Systems
414456 E : Cloud Computing	414457 E : Natural Language Processing



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SEMESTER – II

Subject Code	Subject	Teaching Scheme			Examination Scheme					Total Marks
		Lecture	Practical	Tutorial	In-Semester Assessment	TW	PR	OR	End Semester Examination	
					Phase - I				Phase - II	
414461	Distributed System	3			30				70	100
414462	Advanced Databases	3			30				70	100
414463	Elective – III	3	2	--	30	25	--	25	70	150
414464	Elective–IV	3			30				70	100
414465	Software Laboratory - V	--	2	--		25	25	--		50
414466	Software Laboratory - VI	--	4	--		--	50	50		100
414467	Project Work	--	--	6		50	--	100		150
Total		12	8	6	120	100	75	175	280	750

Software Laboratory–V: (Distributed Systems)

Software Laboratory –VI: (Advanced Databases)

Elective – III	Elective – IV
414463 A :Mobile Computing	414464 A :Bio Informatics
414463 B :Advanced Graphics and Animation	414464 B :Real Time and Embedded Systems
414463 C :Information Storage and Retrieval	414464 C :Green IT - Principles and Practices
414463 D :IT Enabled Services	414464 D :Internet of Things
414463 E :Advanced Computer Networks	414464 E :Open Elective



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SEMESTER – I

Subject Code	Subject	Teaching Scheme			Examination Scheme					Total Marks
		Lecture	Practical	Tutorial	In-Semester Assessment	TW	PR	OR	End Semester Examination	
					Phase - I				Phase - II	
314441	Computer Network Technology	3			30				70	100
314442	Theory of Computation	4			30				70	100
314443	Database Management Systems	4			30				70	100
314444	Software Engineering	3			30				70	100
314445	Web Engineering and Technology	3			30				70	100
314446	Software Laboratory - I		4			50	50			100
314447	Database Management Systems Laboratory		4				50	50		100
314448	Employability Skill Development Laboratory	1	2			50				50
Total		18	10		150	100	100	50	350	750

Software Lab.-I Part – I : Assignments on Computer Network Technology and
 Part – II : Assignments on Web Engineering and Technology

SEMESTER – II

Subject Code	Subject	Teaching Scheme			Examination Scheme					Total Marks
		Lecture	Practical	Tutorial	In-Semester Assessment	TW	PR	OR	End Semester Examination	
					Phase - I				Phase - II	
314449	Design and Analysis of Algorithms	4			30				70	100
314450	Systems Programming	4			30				70	100
314451	Operating System	4			30				70	100
314452	Multimedia Technologies	3			30				70	100
314453	Information Tech Project Management	5			30				70	100
314454	Operating System Laboratory		4			50	50			100
314455	Software Laboratory - II		4				50	50		100
314456	Seminar & Technical Communication Lab.		2			50				50
Total		18	10		150	100	100	50	350	750

Software Lab.-II Part – I : Assignments on Design and Analysis of Algorithms and
 Part – II : Assignments on Systems Programming

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**Structure of S.E. (Information Technology) 2012 Course
w.e.f. Academic Year 2013 – 14**

Part-I

Subject Code	Subject	Teaching Scheme			Examination Scheme					Total Marks
		Leet	Tuto	Pract	Thoery Paper	Thoery Online	TW	Pract	Oral	
214441	Discrete Structures	4	—	—	50	50	--	--	--	100
214442	Computer Organization	4	—	—	50	50				100
214443	Digital Electronics & Logic Design	3	—	—	50	50	--	--	--	100
214444	Fundamentals of Data Structures	4	—	—	50	50	--	--	--	100
214445	Problem Solving and Object Oriented Programming	4	--	--	50	50	--	--	--	100
214446	Digital Electronics Laboratory	--	—	4	--	--	--	50	50	100
214447	Programming Laboratory	--	—	4	--	--	50	50	--	100
214448	Communication & Language Laboratory	1	—	2	—	--	50	--	--	050
	Total	20	—	10	250	250	100	100	50	750
	Total of Part-I	30 Hrs			750					

Part-II

Subject Code	Subject	Teaching Scheme			Examination Scheme					Total Marks
		Leet	Tuto	Pract	Thoery Paper	Thoery Online	TW	Pract	Oral	
207003	Engineering Maths-III	4	01	--	50	50	25	--	--	125
214449	Computer Graphics	4	—	—	50	50	--	--	--	100
214450	Processor Architecture & Interfacing	4	--	--	50	50	--	--	--	100
214451	Data Structures & Files	4	--	--	50	50	--	--	--	100
214452	Foundations of Computer Network	3	—	--	50	50	--	--	--	100
214453	Processor Interfacing Laboratory	--	--	4	--	--	25	--	50	075
214454	Data Structure & Files Laboratory	--	--	4	--	--	25	50	--	075
214455	Computer Graphics Laboratory	--	--	2	--	--	25	50	--	075
	Total	19	01	10	250	250	100	100	50	750
	Total of Part-II	30 Hrs			750					

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