

Savitribai Phule Pune University												
Second Year of Computer Engineering (2015 Course)												
(With effect from Academic Year 2016-17)												
Semester I												
Course Code	Course Name	Teaching Scheme			Examination Scheme & Marks						Credit	
		Hours / Week			In-Sem	End-Sem	TW	PR	OR	Total	TH + TUT	PR
210241	<u>Discrete Mathematics</u>	04	--	--	50	50	--	--	--	100	04	--
210242	<u>Digital Electronics and Logic Design</u>	04	--	--	50	50	--	--	--	100	04	--
210243	<u>Data Structures and Algorithms</u>	04	--	--	50	50	--	--	--	100	04	--
210244	<u>Computer Organization and Architecture</u>	04	--	--	50	50	--	--	--	100	04	--
210245	<u>Object Oriented Programming</u>	04	--	--	50	50	--	--	--	100	04	--
210246	<u>Digital Electronics Lab</u>	--	--	02	--	--	25	50	--	75	--	01
210247	<u>Data Structures Lab</u>	--	--	04	--	--	25	50	--	75	--	02
210248	<u>Object Oriented Programming Lab</u>	--	--	02	--	--	25	50	--	75	--	01
210249	<u>Soft Skills</u>	--	--	02	--	--	25	--	--	25	--	01
Total											20	05
210250	<u>Audit Course 1</u>	--	--	--	--	--	--	--	--	--	Grade	
Total		20	--	10	250	250	100	150	--	750	25	

Abbreviations:

TW: Term Work
 OR: Oral
 PR: Practical

TH: Theory
 TUT: Tutorial
 Sem: Semester

Savitribai Phule Pune University
Second Year of Computer Engineering (2015 Course)
 (With effect from Academic Year 2016-17)
Semester II

Course Code	Course Name	Teaching Scheme Hours / Week			Examination Scheme & Marks						Credits	
		Theory	Tutorial	Practical	In-Sem	End-Sem	TW	PR	OR	Total	TH+TUT	PR
207003	Engineering Mathematics III	04	01	--	50	50	25	--	--	125	05	--
210251	Computer Graphics	04	--	--	50	50	--	--	--	100	04	--
210252	Advanced Data Structures	04	--	--	50	50	--	--	--	100	04	--
210253	Microprocessor	04	--	--	50	50	--	--	--	100	04	--
210254	Principles of Programming Languages	03	--	--	50	50	--	--	--	100	03	--
210255	Computer Graphics Lab	--	--	02	--	--	25	50	--	75	--	01
210256	Advanced Data Structures Lab	--	--	04	--	--	25	50	--	75	--	02
210257	Microprocessor Lab	--	--	04	--	--	25	50	--	75	--	02
Total											20	05
210258	Audit Course 2		--	--	--	--	--	--	--	--	Grade	
Total		19	01	10	250	250	100	150	--	750	25	

Abbreviations:

TW: Term Work

OR: Oral

PR: Practical

TH: Theory

TUT: Tutorial

Sem: Semester

University of Pune

Course Structure for TE Computer Engineering

2012 Course (w.e.f. June 2014)

Subject Code	Subject	Teaching Scheme Hrs/Week			Examination Scheme					Mark
		Lect.	Tutorials	Pract	In-Semester Assessment	Tw	Pr	OR	End Semester Exam	Total
SEM – I										
310241	Theory of Computation	4	—	—	30	—	—	—	70	100
310242	Operating Systems Design	4	—	—	30	—	—	—	70	100
310243	Data Communication and Wireless Sensor Networks	4	—	—	30	—	—	—	70	100
310244	Database Management Systems Applications	3	—	—	30	—	—	—	70	100
310245	Computer Forensic and Cyber Applications	3	—	—	30	—	—	—	70	100
310246	Programming Lab-I	—	—	4	—		50	50	—	100
310247	Programming Lab-II	—	—	4	—	50	—	50	—	100
310248	Employability Skills Development Lab	—	—	2	—	50	—	—	—	50
	Total of Semester – I	18	—	10	150	100	50	100	350	750

Course Structure for TE Computer Engineering

2012 Course (w.e.f. June 2014)

SEM – II										
Subject Code	Subject	Teaching Scheme Hrs/Week			Examination Scheme					Mark
		Lect.	Tutorials	Pract	In-Semester Assessment	Tw	Pr	Or	End Semester Assessment	
310249	Principles of Concurrent and Distributed Programming	4	—	—	30	—	—	—	70	100
310250	Embedded Operating Systems	4	—	—	30	—	—	—	70	100
310251	Computer Networks	4	—	—	30	—	—	—	70	100
310252	Software Engineering	3	—	—	30	—	—	—	70	100
310253	Digital Signal Processing Applications	3	—	—	30	—	—	—	70	100
310254	Programming Laboratory-III	—	—	4	—	—	50	50	—	100
310255	Programming Laboratory-IV	—	—	4	—	50	—	50	—	100
310256	Seminar and Technical Communication Laboratory	—	—	2	—	50	—	—	—	50
Total of Semester – II		18	—	10	150	100	50	100	350	750

SAVITRIBAI PHULE PUNE UNIVERSITY
BE (COMPUTER ENGINEERING)- 2012 COURSE STRUCTURE
 Term-I

Subject Code	Subject	Teaching Scheme			Examination Scheme				Total Marks
		Lect	Tut	Pract	In Sem Asmnt	PR/TW	OR/TW	End Sem Asmnt	
410441	Design & Analysis of Algorithms	03	—	—	30	—	—	70	100
410442	Principles of Modern Compiler Design	04	—	—	30	—	—	70	100
410443	Smart System Design and Applications	03	—	—	30	—	—	70	100
410444	Elective-I	03	—	—	30	—	—	70	100
410445	Elective-II	03	—	—	30	—	—	70	100
410446	Computer laboratory-I	—	—	04	—	50	50	—	100
410447	Computer Laboratory-II	—	—	04	—	50	50	—	100
410448	Project	—	02	—	—	50	—	—	50
	Total	16	02	08	150	150	100	350	750
	Term-II								
410449	Software Design Methodologies & Testing	03	—	—	30	—	—	70	100
410450	High Performance Computing	03	—	—	30	—	—	70	100
410451	Elective-III	03	—	—	30	—	—	70	100
410452	Elective-IV Open Elective	03	—	—	30	—	—	70	100
410453	Computer laboratory-III	—	—	04	—	50	50	—	100
410454	Computer Laboratory-IV	—	—	04	—	50	50	—	100
410455	Project	—	06	—	—	50	100	—	150
	Total	12	06	08	120	150	200	280	750

Electives:

Semester-I		Semester-II	
	ELECTIVE-I		ELECTIVE-III
1.	Image Processing	1.	Mobile Computing
2.	Computer Network Design and Modeling	2.	Web Technology
3.	Advanced Computer Programming	3.	Cloud Computing
4.	Data Mining Techniques and Applications	4.	Cyber Security
	ELECTIVE-II		ELECTIVE-IV (Open Elective)
1.	Problem Solving with Gamification	1.	Business Analytic and Intelligence
2.	Pervasive Computing	2.	Operations Research for Algorithms in Scientific Applications
3.	Embedded Security	3.	Mobile Applications
4.	Multidisciplinary NLP	4.	Open Elective

Open Elective: The listed open electives or any other Elective that is being taught in the current semester (semester-II) under the faculty of engineering or individual college and Industry can define new elective with complete (6 units) syllabus using defined framework of Elective IV and GET IT APPROVED FROM THE BOARD OF STUDIES (COMPUTER ENGINEERING) AND OTHER NECESSARY STATUTORY SYSTEMS IN THE SAVITRIBAI PHULE PUNE UNIVERSITY BEFORE 30th DECEMBER.