SOLAPUR UNIVERSITY, SOLAPUR
Faculty of Engineering & Technology
Second Year Computer Science and Engineering

Choice Based Credit System Syllabus Structure of S.E.Computer Science and EngineeringW.E.F. 2017-2018   ***Semester I***

Course Code	Theory Course Name	Hrs./week			Credits	Examination Scheme				
		L	T	P		ISE	ESE		ICA	Total
CS 211	Applied Mathematics - I	3	1	_	4	30	70		25	125
CS 212	Discrete Mathematical Structures	3	1	_	4	30	70		25	125
CS 213	Data Communication	3	-	_	3	30	70		-	100
CS 214	Digital Techniques	3	-	_	3	30	70		-	100
CS 215	Computer Graphics	3	_	_	3	30	70		-	100
CS 216	Advanced C Concepts	3	_	_	3	--	--		-	--
	Sub Total	18	2	_	20	150	350		50	550
ENV 21	Environmental Studies	1								
	Laboratory									
							ESE			
							POE	OE		
CS 213	Data Communication	_	_	2	1	_	50	--	25	75
CS 214	Digital Techniques	_	_	2	1	_	50	_	25	75
CS 215	Computer Graphics	--	--	2	1	--		--	25	25
CS 216	Advanced C Concepts	_	_	4	2	_	50	_	25	75
	Sub Total	--	-	10	5	_	150		100	250
	Grand Total	18	2	10	25	150	500		150	800

- *Abbreviations: L- Lectures, P –Practical, T- Tutorial, ISE- In Semester Exam, ESE End Semester Exam,ICA- Internal Continuous Assessment, ESE - University Examination (Theory &/ POE &/Oral examination)*

SOLAPUR UNIVERSITY, SOLAPUR
Faculty of Engineering & Technology
Second Year Computer Science and Engineering

Choice Based Credit System Structure of S.E. Computer Science and Engineering W.E.F. 2017-2018   ***Semester II***

Course Code	Theory Course Name	Hrs./week			Credits	Examination Scheme				
		L	T	P		ISE	ESE	ICA	Total	
CS 221	Applied Mathematics – II	3	1	_	4	30	70	25	125	
CS 222	Theory of Computation	3	1	_	4	30	70	25	125	
CS 223	Microprocessors	3	_	_	3	30	70	-	100	
CS 224	Data Structures	3	_	_	3	30	70	-	100	
CS 225	Computer Networks	3	_	_	3	30	70	_	100	
CS 226	Object Oriented Programming through C++	3	_	_	3	--	-	--	--	
	Sub Total	18	2	_	20	150	350	50	550	
	Environmental Studies	1								
	Laboratory									
							ESE			
							POE	OE		
CS 223	Microprocessors	_	_	2	1	_	50	_	25	75
CS 224	Data Structures	_	_	4	2	_	50	_	25	75
CS 225	Computer Networks	_	_	2	1	_	-	_	25	25
CS 226	Object Oriented Programming through C++	_	_	2	1	_	50	_	25	75
	Sub Total		_	10	5	_	150		100	250
	Grand Total	**18**	**2**	**10**	**25**	**150**	**500**		**150**	**800**

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Note –

- Batch size for the practical /tutorial shall be of 20 students. On forming the batches, if the strength of remaining student exceeds 9, then a new batch shall be formed.

- Vocational Training (evaluated at B.E. Part-I) of minimum 15   days shall be   completed in any vacation after S.E. Part-II but before B.E. Part-I & the report shall be submitted and evaluated in B.E. Part-I

- Term work assessment shall be a continuous process based on student's performance in – class tests, assignments, homework, subject seminars, quizzes, laboratory books and their interaction and attendance for theory and lab sessions as applicable

SOLAPUR UNIVERSITY, SOLAPUR
Faculty of Engineering & Technology
Third Year Computer Science and Engineering

Choice Based Credit System Syllabus Structure of T.E.Computer Science and Engineering W.E.F. 2017-2018   **Semester I**

Course Code	Theory Course Name	Hrs./week			Credits	Examination Scheme			
		L	T	P		ISE	ESE	ICA	Total
CS 311	Operating System Concepts	3	--	_	3	30	70	--	100
CS 312	System Programming	3	--	_	3	30	70	--	100
CS 313	Database Engineering	3	-	_	3	30	70	-	100
CS 314	Design and Analysis of Algorithms	3	1	_	4	30	70	25	125
CS 315	Computer Organization	3	1	_	4	30	70	25	125
CS 316	Java Programming	3	_	_	3	--	--	--	--
SLH 31	Self Learning Module 1	--	--	--	2	--	50	--	50
	Sub Total	18	2	_	22	150	400	50	600
	Laboratory								
							ESE		
							POE	OE	
CS 311	Operating System Concepts	_	_	2	1	_	50	--	25	75
CS 312	System Programming	_	_	2	1	_	--	_	25	25
CS 313	Database Engineering	--	--	2	1	--	50	--	25	75
CS 316	Java Programming	_	_	4	2	_	50	_	25	75
	Sub Total	--	-	10	5	_	150		100	250
	Grand Total	18	2	10	27	150	550		150	850

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Choice Based Credit System Structure of T.E. Computer Science and Engineering W.E.F. 2017-2018   ***Semester II***

Course Code	Theory Course Name	L	T	P	Credits	ISE	ESE	ICA	Total
		Hrs./week				Examination Scheme			
CS 321	Compiler Construction	4	--	--	4	30	70	--	100
CS 322	Unix Operating System	3	--	_	3	30	70	--	100
CS 323	Mobile Computing	3	1	_	4	30	70	25	125
CS 324	Software Engineering	3	1	_	4	30	70	25	125
CS 325	Mobile Application Development	3	--	_	3	30	70	--	100
CS 326	Programming in C# net	2	_	_	2	--	-	--	--
CS 327	Self Learning Module 2	--	--	--	2	--	50	--	50
	Sub Total	18	2	_	22	150	400	50	600
	Laboratory								
							ESE		
							POE	OE	
CS 321	Compiler Construction	_	_	2	1	_	--	_	25	25
CS 322	Unix Operating System	_	_	2	1	_	--	--	25	25
CS 325	Mobile Application Development	_	_	2	1	_	50	_	25	75
CS 326	Programming in C# net	_	_	2	1	_	50	_	25	75
CS 327	Mini Project	--	--	2	1		50	--	--	50
	Sub Total		_	10	5	_	150		100	250
	Grand Total	18	2	10	25	150	550		150	850

- *Abbreviations: L- Lectures, P –Practical, T- Tutorial, ISE- In Semester Exam, ESE - End Semester Exam,ICA- Internal Continuous Assessment, ESE - University Examination (Theory &/ POE &/Oral examination)*

Note –

- Batch size for the practical /tutorial shall be of 15 students. On forming the batches, if the strength of remaining student exceeds 7, then a new batch shall be formed.

- Vocational Training (evaluated at B.E. Part-I) of minimum 15 days shall be completed in any vacation after S.E. Part-II but before B.E. Part-I & the report shall be submitted and evaluated in B.E. Part-I

- Student shall select one Self Learning Module at T.E. Part I and T.E. Part II each from Technical and Humanities and Social Sciences Group with at least one Self Learning Module from the Humanities and Social Sciences Group

- Curriculum for Humanities and Social Sciences Self Learning Modules is common for all under graduate programmes of faculty of Engineering and Technology

- Minimum four assignments for Self Learning Modules at T.E. Part I and T.E. Part II shall be submitted by the students which shall be evaluated by a Module Coordinator assigned by institute / department

- Project group for T.E.(CSE) Part II Mini Project shall be formed considering 3-5 students per group

- Term work assessment shall be a continuous process based on student's performance in – class tests, assignments, homework, subject seminars, quizzes, laboratory books and their interaction and attendance for theory and lab sessions as applicable

SOLAPUR UNIVERSITY, SOLAPUR
Faculty of Engineering & Technology
Final Year Computer Science and Engineering

Choice Based Credit System Syllabus Structure of B.E.Computer Science and EngineeringW.E.F. 2017-2018   *Semester I*

Course Code	Theory Course Name	L	T	P	Credits	ISE	ESE	ICA	Total
		Hrs./week			**Credits**	**Examination Scheme**			
CS 411	Advanced Computer Architecture	3	1	_	4	30	70	25	125
CS 412	Distributed Systems	3	--	_	3	30	70	--	100
CS 413	Modern Database Systems	3		_	3	30	70	--	100
CS 414	Object Oriented Modeling & Design	3	1	_	4	30	70	25	125
CS 415	Elective –I	3	--	_	3	30	70	--	100
CS 416	Programming with Python	3	--	_	3	--	--	--	--
	Sub Total	18	02	_	20	150	350	50	550
	Laboratory								
							ESE		
							POE	**OE**	
CS 412	Distributed Systems	_	_	2	1	_	50	--	25	75
CS 413	Modern Database Systems	---	--	2	1	--	--	--	25	25
CS 417	Programming with Python	--	_	2	1	_	50	_	25	75
CS 418	Project Phase-I	--	--	4	2	--	50	--	50	100
CS 419	Vocational Training	_	_	--	--	_	--	_	25	25
	Sub Total	--	-	10		_	150		150	300
	Grand Total	**18**	**02**	**10**	**25**	**150**	**500**		**200**	**850**

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SOLAPUR UNIVERSITY, SOLAPUR
Faculty of Engineering & Technology
Final Year Computer Science and Engineering

Choice Based Credit System Structure of B.E. Computer Science and Engineering W.E.F. 2017-2018   *Semester II*

Course Code	Theory Course Name	Hrs./week L	T	P	Credits	ISE	ESE	ICA	Total
CS 421	Management Information System	4	--	--	4	30	70	---	100
CS 422	Information and Cyber Security	4	--	_	4	30	70	--	100
CS 423	Elective –II	3	-	_	3	30	70	---	100
CS 424	Elective –III	3	--	_	3	30	70	---	100
CS 425	Web Technology	2	_	_	2	--	-	---	--
	Sub Total	16	-	_	16	120	280	--	400
	Laboratory								
							ESE POE / OE		
CS 421	Information and Cyber Security	_	_	2	1	_	50 _	25	75
CS 426	Project Phase-II	--	--	8	4	--	100 --	75	175
CS 425	Web Technology	_	_	4	2	_	50 _	--	50
	Sub Total		_	14	7	_	200	100	300
	Grand Total	16	-	14	23	120	480	200	700

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Elective I	Elective II	Elective III
1. Internet of Things 2. Data Mining 3. Artificial Intelligence	1. Wireless Adhoc Networks 2. Big data Analytics 3. Artificial Neural Network	1. Software Testing and Quality Assurance 2 Cloud Computing 3 Machine Learning

Note: Appropriate electives may be added or deleted as and when required.

Note –

- Batch size for the practical /tutorial shall be of 15 students. On forming the batches, if the strength of remaining student exceeds 7, then a new batch shall be formed.

- Vocational Training (evaluated at B.E. Part-I) of minimum 15 days shall be completed in any vacation after S.E. Part-II but before B.E. Part-I & the report shall be submitted and evaluated in B.E. Part-I

- Appropriate Elective I & II Subjects may be added when required.

- Curriculum for Humanities and Social Sciences Self Learning Modules is common for all under graduate programmes of faculty of Engineering and Technology

- Project group for B.E.(CSE) Part I and Part II shall be of size 4 to 5 students

- Term work assessment shall be a continuous process based on student's performance in – class tests, assignments, homework, subject seminars, quizzes, laboratory books and their interaction and attendance for theory and lab sessions as applicable