

1.2.1 List of programs in which Choice Based Credit System (CBCS)/elective course system has been implemented

Programme Name : Civil Engineering			
Programme Code: 1-1408968331			
Sr. No.	Class Name	Status of implementation of CBCS / elective course system (Yes/No)	Year of implementation of CBCS / elective course system
1	F.E. Civil Engineering	Yes (CBCS)	2016-17
2	S.E. Civil Engineering	Yes (CBCS)	2017-18
3	T.E. Civil Engineering	Yes (CBCS & Elective)	2018-19
4	B.E. Civil Engineering	Yes (CBCS & Elective)	2019-2020
5	F. Y. B.Tech. Civil Engineering	Yes (CBCS)	2018-19
6	S. Y. B.Tech. Civil Engineering	Yes (CBCS & Elective)	2019-2020



B. Range
PRINCIPAL,
College of Engineering,
PANDHARPUR



SOLAPUR UNIVERSITY, SOLAPUR

FACULTY OF ENGINEERING & TECHNOLOGY

ALL BRANCHES

CBCS Syllabus for

F.E. (All Branches) w.e.f. Academic Year 2016-17





SOLAPUR UNIVERSITY, SOLAPUR
FACULTY OF ENGINEERING & TECHNOLOGY
CBCS Curriculum for First Year (All Branches)
WEF 2016-17

- Semester I : Theory Courses

Course Code	Name of the Course	Engagement Hours			Credits	FA		SA		Total
		L	T	P		ESE	ISE	ICA		
C011/ C012	Engineering Physics / Engineering Chemistry\$	4			4	70	30			100
C112	Engineering Mathematics I	3			3	70	30			100
C113	Applied Mechanics	4			4	70	30			100
C114	Basic Electrical Engineering	3			3	70	30			100
C115	Basic Mechanical Engineering	3			3	70	30			100
C116	Communication Skills	1			1		25			25
Total		18			18	350	175			525

- Semester I : Laboratory / Tutorial Courses

Course Code	Name of the Course	Engagement Hours			Credits	FA		SA		Total
		L	T	P		ESE	ISE	ICA		
C011/ C012	Engineering Physics / Engineering Chemistry\$			2	1			25		25
C112	Engineering Mathematics I		1		1			25		25
C113	Applied Mechanics			2	1			25		25
C114	Basic Electrical Engineering			2	1			25		25
C115	Basic Mechanical Engineering			2	1			25		25
C116	Communication Skills			2	1			25		25
C117	Workshop Practice			2	1			25		25
Total			1	12	7			175		175
Grand Total		18	1	12	25	350	175	175		700

- Semester II : Theory Courses

Course Code	Name of the Course	Engagement Hours			Credits	FA	SA		Total
		L	T	P		ESE	ISE	ICA	
C011/ C012	Engineering Physics / Engineering Chemistry\$	4			4	70	30		100
C122	Engineering Mathematics II	3			3	70	30		100
C123	Engineering Graphics	3			3	70	30		100
C124	Basic Civil Engineering	3			3	70	30		100
C125	Computer Programming	2			2		25		25
C126	Basic Electronics	2			2	35	15		50
C127	Professional Communication	1			1		25		25
Total		18			18	315	185		500

- Semester II : Laboratory / Tutorial Courses

Course Code	Name of the Course	Engagement Hours			Credits	FA	SA		Total
		L	T	P		ESE	ISE	ICA	
C011/ C012	Engineering Physics / Engineering Chemistry\$			2	1			25	25
C122	Engineering Mathematics II		1		1			25	25
C123	Engineering Graphics			4	2			25	25
C124	Basic Civil Engineering			2	1			25	25
C125	Computer Programming			2	1	25#		25	50
C126	Basic Electronics			2*	1			25	25
C127	Professional Communication			2	1			25	25
C128	Audit Course- Workshop for Skill Development			@	AU	Audit Course			
Total			1	13	8	25		175	200
Grand Total		18	1	13	26	340	185	175	700

- Legends used –

L	Lecture	FA	Formative Assessment
T	Tutorial	SA	Summative Assessment
P	Lab Session	ESE	End Semester Examination
		ISE	In Semester Evaluation
		ICA	Internal Continuous Assessment

- **Notes-**

1. \$ - Indicates approximately half of the total students at FE will enroll under Group A and remaining will enroll under Group B.

Group A will take up course of Engineering Physics (theory & laboratory) in Semester I and will take up course of Engineering Chemistry (theory & laboratory) in semester II.

Group B will take up course of Engineering Chemistry (theory & laboratory) in Semester I and will take up course of Engineering Physics (theory & laboratory) in semester II

2. * - Indicates the subject 'Basic Electronics' shall have lab session every alternate week
3. # - Indicates the subject 'Computer Programming' shall have a University 'Practical and Oral Examination' at the end of the semester assessing student's programming skills.
4. In Semester Evaluation (ISE) marks shall be based upon student's performance in minimum two tests & mid-term written test conducted & evaluated at institute level

Internal Continuous Assessment Marks (ICA) are calculated based upon student's performance during laboratory sessions / tutorial sessions

5. Audit Course 'Workshop for Skill Development' intends to develop few basic skills amongst student related to any one engineering discipline of student's choice (irrespective of his discipline of admission). There is no separate laboratory hours specified for this course. Student can use some of the respective laboratory sessions in the semester for this course as indicated below. If required, student can work beyond regular engagement hours under supervision of the concerned teacher to complete this course.

<i>Sr.</i>	<i>Skill Development in</i>	<i>Course of which some laboratory hours can be used</i>
1	Electronics, Electronics & Telecommunication, Electrical, Electrical & Electronics, Biomedical Engineering	Basic Electronics
2	Computer Science & Engineering, Information Technology	Computer Programming
3	Mechanical Engineering, Biomedical Engineering	Engineering Graphics
4	Civil Engineering	Basic Civil Engineering

Each institute is at liberty to decide content to be delivered under this course by an apt teacher. However it is desirable that this course shall nurture individual and team working skills of the student. Some of the exemplary skills (but not limited to) are listed in curriculum of this course.

The summative assessment of this course shall be carried out at institute level and the institute shall certify successful completion of this audit course by student.

6. @- indicates there is no separate laboratory hours for Audit Course- Workshop for Skill Development





SOLAPUR UNIVERSITY, SOLAPUR

FACULTY OF ENGINEERING & TECHNOLOGY

CIVIL ENGINEERING

Syllabus Structure for

S.E. (Civil Engineering) w. e. f. Academic Year 2017-18

T.E. (Civil Engineering) w. e. f. Academic Year 2018-19

B.E. (Civil Engineering) w. e. f. Academic Year 2019-20

Choice Based Credit System

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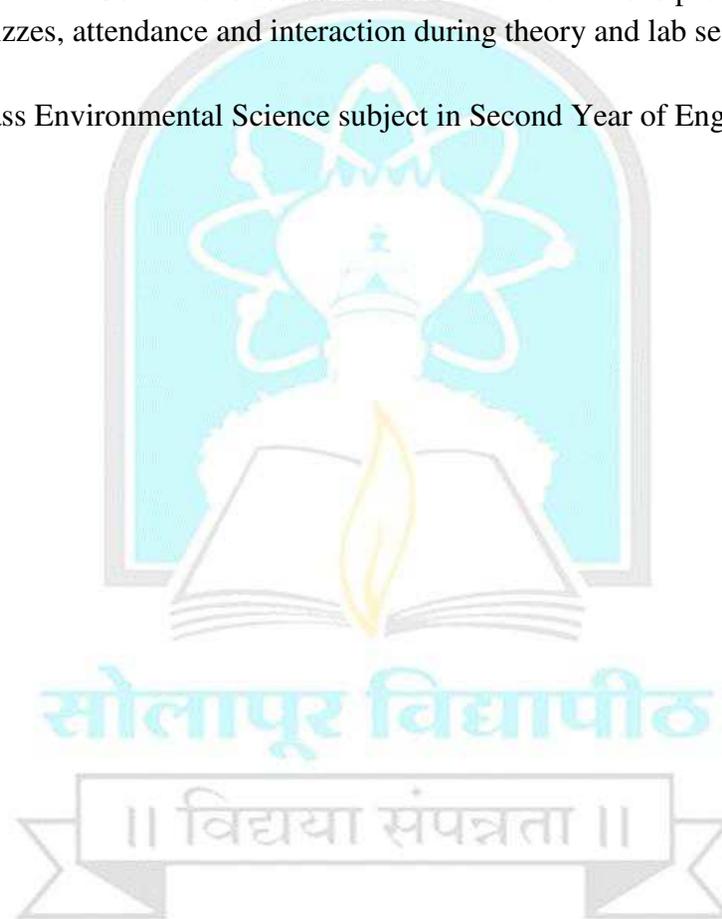
SOLAPUR UNIVERSITY, SOLAPUR
Faculty of Engineering & Technology
Credit System structure of S. E. Civil- I, Semester- I, (W.E.F. 2017-2018)

Course Code	Theory Course Name	Hrs./week				Credits	Examination Scheme				
		L	T	P	D		ISE	ESE	ICA	Total	
CV211	Concrete Technology	3	-	-	-	3	30	70	-	100	
CV212	Structural Mechanics-I	3	1	-	-	4	30	70	25	125	
CV213	Surveying –I	3	-	-	-	3	30	70	-	100	
CV214	Building Construction & Drawing	3	-	-	-	3	30	70	-	100	
CV215	Fluid Mechanics-I	3	-	-	-	3	30	70	-	100	
CV216	Engineering Geology	2	-	-	-	2	30	70	-	100	
	Total	17	1	-	-	18	180	420	25	625	
	Laboratory/Drawings							POE	OE		
CV211	Concrete Technology	-	-	2	-	1	-	-	-	25	25
CV213	Surveying –I	-	-	2	-	1	-	25	-	25	50
CV214	Building Construction & Drawing	-	-	-	2	1	-	-	-	25	25
CV215	Fluid Mechanics-I	-	-	2	-	1	-	25	-	25	50
CV216	Engineering Geology	-	-	2	-	1	-	25	-	25	50
CV217	Laboratory Practice	-	-	2	-	1	-	-	-	25	25
	Total	-	-	10	2	7	-	75	150	225	
	Grand Total	17	1	10	2	25	180	495	175	850	
ENV21	Environmental Studies	1	-	-	-	-	-	-	-	-	

Abbreviations: L- Lectures, P –Practical, T- Tutorial, D- Drawing, ISE -Internal Tests, ESE - University Examination (Theory &/ POE &/Oral examination), ICA- Internal Continuous Assessment.

Note:

- (1) The number of students in a practical/Tutorial batch shall be 20. New batch shall be formed if the number of remaining students (after forming batches of 20) exceeds 9.
- (2) Internal Continuous Assessment: Internal Continuous assessment shall be a continuous process based on the performance of the student in assignments, class tests, quizzes, attendance and interaction during theory and lab sessions, journal writing, report presentation etc., as applicable.
- (3) Student is required to study and pass Environmental Science subject in Second Year of Engineering to become eligible for award of degree.





SOLAPUR UNIVERSITY, SOLAPUR
Faculty of Engineering & Technology

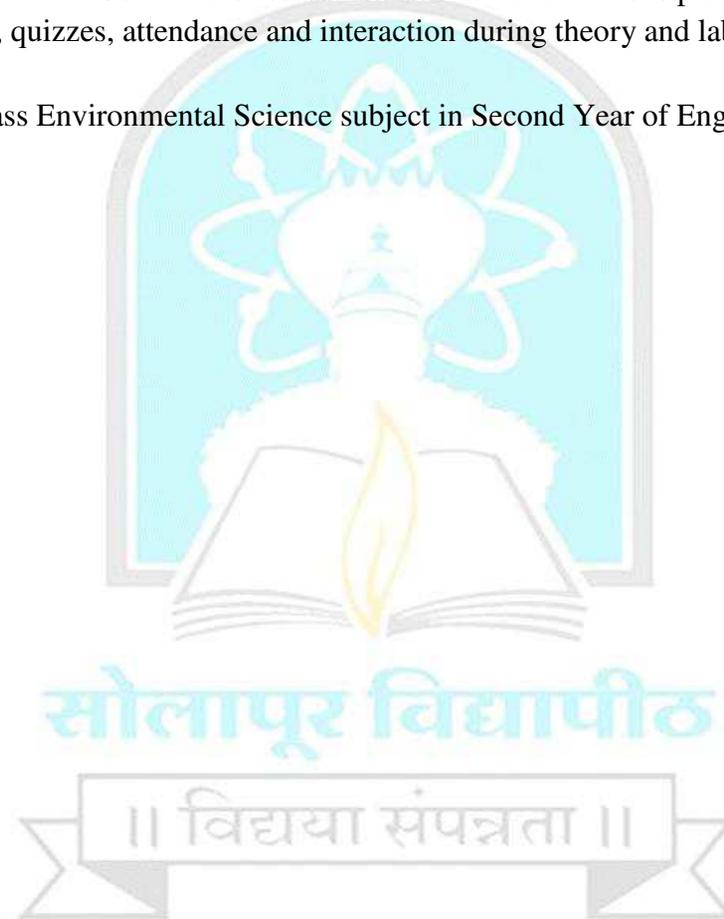
Credit System structure of S. E. Civil Engineering; Semester – II, W. E.F. 2017-2018

Course Code	Theory Course Name	Hrs./week				Credits	Examination Scheme				
		L	T	P	D		ISE	ESE	ICA	Total	
CV221	Structural Mechanics-II	3	1	-	-	4	30	70	25	125	
CV222	Surveying –II	3	-	-	-	3	30	70	-	100	
CV223	Building Planning & Design	3	-	-	-	3	30	70	-	100	
CV224	Fluid Mechanics-II	3	-	-	-	3	30	70	-	100	
CV225	Water Resources Engineering- I	3	-	-	-	3	30	70	25	125	
CV226	Engineering Mathematics-III	3	1	-	-	4	30	70	25	125	
	Total	18	2	-	-	20	180	420	75	675	
	Laboratory/Drawings:							POE	OE		
CV222	Surveying –II	-	-	2	-	1	-	-	--	25	25
CV223	Building Planning & Design	-	-	-	2	1	-	-	25	25	50
CV224	Fluid Mechanics-II	-	-	2	-	1	-	-	-	25	25
CV227	Computer Programming & Numerical Methods	2	-	2	-	3	-	50	-	25	75
	Total	2	-	6	2	6	-	50	25	100	175
	Grand Total	20	2	6	2	26	180	495	175	850	
ENV22	Environmental Studies	1	-	-	-	-	-	-	-	-	-

Abbreviations: L- Lectures, P –Practical, T- Tutorial, D- Drawing, ISE -Internal Tests, ESE - University Examination (Theory &/ POE &/Oral examination), ICA- Internal Continuous Assessment.

Note:

- (1) The number of students in a Practical/Tutorial batch shall be 20. New batch shall be formed if the number of remaining students (after forming batches of 20) exceeds 9.
- (2) Internal Continuous Assessment: Internal Continuous assessment shall be a continuous process based on the performance of the student in assignments, class tests, quizzes, attendance and interaction during theory and lab sessions, journal writing, report presentation etc., as applicable.
- (3) Student is required to study and pass Environmental Science subject in Second Year of Engineering to become eligible for award of degree.





SOLAPUR UNIVERSITY, SOLAPUR
**FACULTY OF ENGINEERING &
TECHNOLOGY**

CIVIL ENGINEERING

Syllabus for

T.E. (Civil Engineering) w. e. f. Academic Year 2018-19
Choice Based Credit System (CBCS)



SOLAPUR UNIVERSITY, SOLAPUR
Faculty of Engineering & Technology

Credit System structure of T. E. Civil-I, Semester- V, (Revised from 2018-2019)

Course code	Theory Course Name	Hrs./week				Credits	Examination Scheme				
		L	T	P	D		ISE	ESE	ICA	Total	
CV-311	Design of Steel Structures	3	-	-	-	3	30	70	-	100	
CV-312	Geotechnical Engg.-I	3	-	-	-	3	30	70	-	100	
CV-313	Environmental Engg.-I	3	-	-	-	3	30	70	-	100	
CV-314	Water Resources Engg. II	3	-	-	-	3	30	70	-	100	
CV-315	Transportation Engg.-I	3	-	-	-	3	30	70	-	100	
SLH-31	Self Learning (H.S.S. course)	-	-	-	-	2	-	50	-	50	
	Total	15				17	150	400	-	550	
	Laboratory/Drawings							POE	OE		
CV-311	Design of Steel Structures	-	-	2	-	1	-	-	-	25	25
CV-312	Geotechnical Engg.I	-	-	2	-	1	-	25	-	25	50
CV-316	Building Planning & Design using CADD	1	-	-	4	3	-	-	25	50	75
CV-313	Environmental Engg.I	-	-	2	-	1	-	-	-	25	25
CV-314	Water Resources Engg. II	-	-	2	-	1	-	-	25	25	50
CV-315	Transportation Engg.-I	-	-	2	-	1	-	-	-	25	25
	Total	-	-	10	4	8	-	75	175	250	
	Grand Total	16		10	4	25	150	475	175	800	

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

Note:

- 1) Students shall undergo a field training of total 30 days in two phases including at least 15 days in the winter vacation after T.E. Civil Part -I and at least 15 days in summer vacation after T.E. Civil Part-II. They shall submit the field training report of the first phase to the faculty associated with subject Engineering Management- I in their T.E. Part-II. They shall submit field training report of the second phase to concerned 'Project' guides in B.E. Part-I.
- 2) Internal Continuous Assessment (ICA) shall be a continuous process based on the performance of the student in assignments, class tests, quizzes, attendance and interaction during theory and lab sessions, syllabus, report presentation etc., as applicable.
- 3) The batch size for the practical/tutorial is of 15 students. On forming the batches, if the number of remaining students exceeds 7, then a new batch be formed.
- 4) Curriculum for Humanities and Social Sciences (HSS) Self Learning Courses is common for all under graduate programmes of Faculty of Engineering and Technology.
- 5) For self Learning at T.E. Civil Part I –
 - A. Student shall select a 'Self Learning Course' from Solapur University, Solapur 'HSS Course List' and appear for its examination as and when conducted by Solapur University, Solapur.
Minimum four assignments for Self Learning Modules at T. E. Part I shall be submitted by the students which shall be evaluated by a 'Module Coordinator' assigned by institute / department.

OR

- B. Student with prior approval of the institute shall select and enroll for 'National Programme on Technology Enhanced Learning (NPTEL)' course from HSS domain with minimum eight weeks duration, complete necessary assignments and appear for certificate examination as per the NPTEL schedule during respective semester.
For more details about Self Learning Course (HSS) please refer to separate rule document available from Solapur University, Solapur. More details about NPTEL are available at <http://nptel.ac.in>



SOLAPUR UNIVERSITY, SOLAPUR

Faculty of Engineering & Technology

Credit System structure of T. E. Civil-II, Semester - VI, W. E.F. 2018-2019

Course code	Theory Course Name	Hrs./week				Credits	Examination Scheme				
		L	T	P	D		ISE	ESE	ICA	Total	
CV-321	Structural Mechanics-III	3	-	-	-	3	30	70	-	100	
CV-322	Geotechnical Engg.II	4	-	-	-	4	30	70	-	100	
CV-323	Environmental Engg.II	3	-	-	-	3	30	70	-	100	
CV-324	Engineering Management- I	3	-	-	-	3	30	70	25	125	
CV-325	Elective-I	3	-	-	-	3	30	70	-	100	
CV-326	Self Learning (Technical course)	-	-	-	-	2	-	50	-	50	
	Total	16	0	-	-	18	150	400	25	575	
	Laboratory/Drawings:						-	POE	OE		
CV-321	Structural Mechanics-III	-	-	2	-	1	-	-	-	25	25
CV-322	Geotechnical Engg.II	-	-	2	-	1	-	-	-	25	25
CV-323	Environmental Engg.II	-	-	2	-	1	-	-	25	25	50
CV-325	Elective-I	-	-	2	-	1	-	-	-	25	25
CV-327	Project on Steel Structures	-	-	-	4	2	-	-	25	50	75
CV-328	Mini Project in SM-III/GE-II/EE-II/EM-I using Application Software	-	-	2	-	1				50	50
CV-329	Assessment of field training report	-	-	-	-	1				25	25
	Total	-	-	10	4	8			50	225	275
	Grand Total	16	0	10	4	26	150	450	250	850	

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

Note:

- 1) Student/s shall carry out 'Mini Project' in any one of the following subjects: Structural Mechanics-III, Geotechnical Engg. II, Environmental Engg. II or Engineering Management-I by preferably employing relevant application software. The Mini project shall be assessed by the domain subject teachers for ICA.
 - 2) Students shall undergo a field training of total 30 days in two phases including at least 15 days in the winter vacation after T.E. Civil Part I and at least 15 days in summer vacation after T.E. Civil Part-II. They shall submit the field training report of the first phase to the faculty associated with subject Engineering Management- I in their T.E. Part-II. They shall submit field training report of the second phase to concerned 'Project' guides in B.E. Part-I.
 - 3) Internal Continuous Assessment (ICA) shall be a continuous process based on the performance of the student in assignments, class tests, quizzes, attendance and interaction during theory and lab sessions, syllabus, report presentation etc., as applicable.
 - 4) The batch size for the practical/tutorial is of 15 students. On forming the batches, if the number of remaining students exceeds 7, then a new batch be formed.
 - 5) For Self Learning at T.E. Civil Part II -
 - A. Student shall select a 'Self Learning Technical Course' from Solapur University, Solapur Technical Course List (Civil Engineering) and appear for its examination, as and when conducted by Solapur University, Solapur. Minimum four assignments for Self Learning Modules at T.E. Part II shall be submitted by the students which shall be evaluated by a Module Coordinator assigned by institute / department.
- OR**
- B. Student with prior approval of the institute shall select and enroll for any 'National Programme on Technology Enhanced Learning (NPTEL)' course from Civil Engineering domain/Interdisciplinary course, with minimum eight weeks duration, complete necessary assignments and appear for certificate examination as per the NPTEL schedule during respective semester.

More details about NPTEL are available at <http://nptel.ac.in>

LIST OF ELECTIVE SUBJECTS (CV-325)

T. E. Civil Part-II	
ELECTIVE I	
1	Advanced Design of Steel Structures
2	Industrial Waste Treatment
3	Water Power Engineering
4	Advanced Concrete Technology
5	Reliability Engineering
6	Finite Element Method
7	Experimental Stress Analysis
8	Optimization Techniques
9	Disaster Management



Punyashlok Ahilyadevi Holkar Solapur University, Solapur



Name of the Faculty: Science & Technology

CHOICE BASED CREDIT SYSTEM

Syllabus: CIVIL ENGINEERING

Name of the Course: B.E.- IV (Sem. VII & VIII)

(Syllabus to be implemented from w.e.f. June 2019)

w. e. f. Academic Year 2019-20



PUNYASHLOK AHILYADEVI HOLKAR SOLAPUR UNIVERSITY, SOLAPUR

Faculty of Science & Technology

Choice Based Credit System structure of B. E. Civil –I; Semester – VII, W. E.F. 2019-2020

Theory Course Name	Hrs./week				Credits	Examination Scheme				
	L	T	P	D		ISE	ESE	ICA	Total	
Design of Concrete Structures-I	3	1	-	-	4	30	70	25	125	
Quantity Surveying & Valuation	3	-	-	-	3	30	70	-	100	
Earthquake Engg.	3	-	-	-	3	30	70	-	100	
Engineering Management- II	3	-	-	-	3	30	70	-	100	
Elective - II	3	-	-	-	3	30	70	-	100	
Total	15	1	-	-	16	150	350	25	525	
Laboratory/Drawings:							POE	OE		
Quantity Surveying & Valuation	-	-	4	-	2	-	50	-	50	100
Earthquake Engg.	-	-	2	-	1	-	-	-	50	50
Engineering Management- II	-	-	2	-	1	-	-	25	-	25
Elective - II	-	-	2	-	1	-	-	25	25	50
Seminar	-	-	2	-	1	-	-	-	50	50
a) Project work	-	-	2	-	1	-	-	-	25	25
b) Assessment of report on field training-II	-	-	-	-	1	-	-	-	25	25
Total	-	-	14	-	8	-	100	225	325	
Grand Total	15	1	14	-	24	150	450	250	850	

Abbreviations: L- Lectures, P –Practical, T- Tutorial, D- Drawing, ISE -Internal Tests, ESE - University Examination (Theory &/ POE &/Oral examination), ICA- Internal Continuous Assessment.

w. e. f. Academic Year 2019-20



PUNYASHLOK AHILYADEVI HOLKAR SOLAPUR UNIVERSITY, SOLAPUR
Faculty of Science & Technology

Choice Based Credit System structure of B. E. Civil –II, Semester – VIII, W. E.F. 2019-2020

Theory Course Name	Hrs./week				Credits	Examination Scheme				
	L	T	P	D		ISE	ESE	ICA	Total	
Design of Concrete Structures-II	4	-	-	-	4	30	70	-	100	
Construction Practices and Town Planning	4	-	-	-	4	30	70	25	125	
Transportation Engineering-II	4	-	-	-	4	30	70	25	125	
Elective - III	4	-	-	-	4	30	70	-	100	
Total	16	-	-	-	16	120	280	50	450	
Laboratory/Drawings							POE	OE		
Design of Concrete Structures-II	-	-	2	-	1	-	-	-	50	50
Elective - III	-	-	2	-	1	-	-	25	25	50
Project on R. C. C. Structures	-	-	-	4	2	-	-	50	50	100
Project work	-	-	6	-	3	-	-	100	100	200
Total	-	-	10	4	7	-	175	225	400	
Grand Total	16	-	10	4	23	120	455	275	850	

Abbreviations: L- Lectures, P–Practical, T- Tutorial, D- Drawing, ISE -Internal Tests, ESE - University Examination (Theory &/ POE &/Oral examination), ICA- Internal Continuous Assessment.

.Note:

- (1) Project group be of @ 7 students.
- (2) Elective subject can be offered from the following list, if minimum 15 students opt for that subject.
- (3) Term work assessment: Term Work assessment shall be a continuous process based on the performance of the student in assignments, class tests, quizzes, attendance and interaction during theory and lab sessions, journal writing, report presentation etc., as applicable.

w. e. f. Academic Year 2019-20



LIST OF ELECTIVE SUBJECTS

B. E. Civil Part-I		B. E. Civil Part-II	
ELECTIVE II		ELECTIVE III	
1	Open Channel & River Hydraulics	1	Advanced Engg. Geology
2	Air Pollution & Control	2	Ground Improvement Techniques
3	Design of Foundations	3	Traffic Engg. & Control
4	Advanced Design of Concrete Structures	4	Infrastructural Engineering
5	Managerial Techniques	5	Project Appraisal
6	Computer Applications in Civil Engg.	6	Solid and Hazardous & Waste Management
7	Advanced structures	7	Dynamics of Structures
8	Entrepreneurship	8	Environmental Management
9	Remote Sensing and GIS Applications	9	Design of Bridges

w. e. f. Academic Year 2019-20



SOLAPUR UNIVERSITY, SOLAPUR

FACULTY OF ENGINEERING & TECHNOLOGY

ALL BRANCHES

CBCS Syllabus for

First Year B.Tech. (All Branches)

w.e.f. Academic Year 2018-19



SOLAPUR UNIVERSITY, SOLAPUR
FACULTY OF ENGINEERING & TECHNOLOGY
CBCS Curriculum for First Year B.Tech. (All Branches)
WEF 2018-19

• Semester I : Theory Courses

Course Code	Name of the Course	Engagement Hours			Credits	FA			Total
		L	T	P		ESE	ISE	ICA	
C011/ C012	Engineering Physics / Engineering Chemistry\$	3			3	70	30		100
C112	Engineering Mathematics I	3			3	70	30		100
C113	Basic Electrical & Electronics Engineering	4			4	70	30		100
C114	Engineering Mechanics	3			3	70	30		100
C115	Basic Mechanical Engineering	3			3	70	30		100
C116	Communication Skills	1			1		25		25
Total		17			17	350	175		525

• Semester I : Laboratory / Tutorial Courses

Course Code	Name of the Course	Engagement Hours			Credits	FA			Total
		L	T	P		ESE	ISE	ICA	
C011/ C012	Engineering Physics / Engineering Chemistry\$			2	1			25	25
C112	Engineering Mathematics I		1		1			25	25
C113	Basic Electrical & Electronics Engineering			2	1			25	25
C114	Engineering Mechanics			2	1			25	25
C115	Basic Mechanical Engineering			2	1			25	25
C116	Communication Skills			2	1			25	25
C117	Workshop Practice			2	1			25	25
Total			1	12	7			175	175
Grand Total		17	1	12	24	350	175	175	700
C118	Induction Program	<i># (Please see note below)</i>							

- Semester II : Theory Courses

Course Code	Name of the Course	Engagement Hours			Credits	FA	SA		Total
		L	T	P		ESE	ISE	ICA	
C011/ C012	Engineering Physics / Engineering Chemistry\$	3			3	70	30		100
C122	Engineering Mathematics II	3			3	70	30		100
C123	Engineering Graphics & Design	3			3	70	30		100
C124	Basic Civil Engineering	3			3	70	30		100
C125	Programming for Problem Solving	2			2		25		25
C126	Professional Communication	1			1		25		25
Total		15			15	280	170		450
C127	Democracy, Elections and Good Governance					30			30

- Semester II : Laboratory / Tutorial Courses

Course Code	Name of the Course	Engagement Hours			Credits	FA	SA		Total
		L	T	P		ESE (POE)	ISE	ICA	
C011/ C012	Engineering Physics / Engineering Chemistry\$			2	1			25	25
C122	Engineering Mathematics II		1		1			25	25
C123	Engineering Graphics & Design			4	2			50	50
C124	Basic Civil Engineering			2	1			25	25
C125	Programming for Problem Solving			4	2	50#		50	100
C127	Professional Communication			2	1			25	25
Total			1	14	8	50		200	250
Grand Total		15	1	14	23	330	170	200	700
C128	Democracy, Elections and Good Governance							20	

- Legends used –

L	Lecture	FA	Formative Assessment
T	Tutorial	SA	Summative Assessment
P	Lab Session	ESE	End Semester Examination
		ISE	In Semester Evaluation
		ICA	Internal Continuous Assessment

- Notes-

1. \$ - Indicates approximately half of the total students at FE will enroll under Group A and remaining will enroll under Group B.

Group A will take up course of Engineering Physics (theory & laboratory) in Semester I and will take up course of Engineering Chemistry (theory & laboratory) in semester II.

Group B will take up course of Engineering Chemistry (theory & laboratory) in Semester I and will take up course of Engineering Physics (theory & laboratory) in semester II

2. # - Indicates the subject 'Programming for Problem Solving' shall have a University 'Practical and Oral Examination' at the end of the semester assessing student's programming skills.

3. In Semester Evaluation (ISE) marks shall be based upon student's performance in minimum two tests & mid-term written test conducted & evaluated at institute level

Internal Continuous Assessment Marks (ICA) are calculated based upon student's performance during laboratory sessions / tutorial sessions

4. Democracy, Elections & Good Governance is mandatory course. The marks earned by student with this course shall not be considered for calculation of SGPA/CGPA. However student must complete ICA of 20 marks and End Semester Examination (ESE) of 30 marks (as prescribed by university, time to time) for fulfillment of this course. This course is not considered as a passing head for counting passing heads for ATKT. However, student must pass this subject for award of the degree

5. Student must complete induction program of minimum five days before commencement of the regular academic schedule at the first semester.

GUIDELINES FOR INDUCTION PROGRAM (C128)

New entrants into an Engineering program come with diverse thoughts, mind set and different social, economical, regional and cultural backgrounds. It is important to help them adjust to the new environment and inculcate in them the ethos of the institution with a sense of larger purpose.

A **Five day** induction program for the new UG entrant students is proposed at the commencement of the first semester. It is expected to complete this induction program before commencement of the regular academic schedule.

Its purpose is to make new entrants comfortable in their new environment, open them up, set a healthy daily routine for them, create bonding amongst the peers as well as between faculty and students, develop awareness, sensitivity and understanding of the self, people around them, society at large, and nature.

The Induction Program shall encompass (but not limited to) below activity –

1. Physical Activities
2. Creative Arts
3. Exposure to Universal Human Values
4. Literary Activities
5. Proficiency Modules
6. Lectures by Experts / Eminent Persons
7. Visit to Local Establishments like Hospital / Orphanage
8. Familiarization to Department

Induction Program Course do not have any marks or credits however performance of students for Induction Program is assessed at institute level using below mandatory criteria –

1. Attendance and active participation
2. Report writing

Punyashlok Ahilyadevi Holkar Solapur University, Solapur



Name of the Faculty: Science & Technology

CHOICE BASED CREDIT SYSTEM

Syllabus Structure: B. Tech. (Civil Engineering)

S.Y. B.Tech (Civil Engineering) w.e.f. Academic Year 2019-20

T.Y. B.Tech (Civil Engineering) w.e.f. Academic Year 2020-21

Final Year B.Tech (Civil Engineering) w.e.f. Academic Year 2021-22



PUNYASHLOK AHILYADEVI HOLKAR SOLAPUR UNIVERSITY, SOLAPUR

Faculty of Science & Technology

Credit System structure of S. Y. B. Tech. Civil Engg. - I, Semester- III, (W.E.F. 2019-2020)

Course Code	Theory Course Name	Hrs./week				Credits	Examination Scheme				
		L	T	P	D		ISE	ESE	ICA	Total	
CV211	Concrete Technology, Material Testing & Evaluation	3	-	-	-	3	30	70	-	100	
CV212	Surveying & Geomatics	3	-	-	-	3	30	70	-	100	
CV213	Building Construction & Drawing	2	-	-	-	2	30	70	-	100	
CV214	Introduction to Fluid mechanics	3	-	-	-	3	30	70	-	100	
CV215	Engineering Geology	2	-	-	-	2	30	70	-	100	
CV216	Introduction to Solid Mechanics	3	1	-	-	4	30	70	-	100	
CV217	Energy Science & Engineering	1	-	-	-	1	25	-	-	25	
	Total	17	1	-	-	18	205	420	-	625	
	Laboratory/Drawings							POE	OE		
CV211	Concrete Technology, Material Testing & Evaluation	-	-	2	-	1	-	-	-	25	25
CV212	Surveying & Geomatics	-	-	2	-	1	-	25	-	25	50
CV213	Building Construction & Drawing	-	-	-	2	1	-	-	-	25	25
CV214	Introduction to Fluid mechanics	-	-	2	-	1	-	25	-	25	50
CV215	Engineering Geology	-	-	2	-	1	-	25	-	25	50
CV218	Lab practice	-	-	2	-	1	-	-	-	25	25
	Total	-	-	10	-	6	-	75	150	225	
	Grand Total	17	1	10	2	24	205	495	150	850	
	Environmental Science	1	-	-	-	-	-	-	-	-	

Abbreviations: L- Lectures, P –Practical, T- Tutorial, D- Drawing, ISE -Internal Tests, ESE - University Examination (Theory &/ POE &/Oral examination), ICA- Internal Continuous Assessment.

Note:

- (1) The number of students in a practical/Tutorial batch shall be 20. New batch shall be formed if the number of remaining students (after forming batches of 20) exceeds 9.
- (2) Term work assessment: Term Work assessment shall be a continuous process based on the performance of the student in assignments, class tests, quizzes, attendance and interaction during theory and lab sessions, journal writing, report presentation etc., as applicable.
- (3) Student is required to study and pass Environmental Science subject in Second Year of Engineering to become eligible for award of degree.



PUNYASHLOK AHILYADEVI HOLKAR SOLAPUR UNIVERSITY, SOLAPUR
Faculty of Science & Technology

Credit System structure of S. Y. B. Tech. Civil Engg.-II, Semester – IV, W. E.F. 2019-2020

Course Code	Theory Course Name	Hrs./week				Credits	Examination Scheme			
		L	T	P	D		ISE	ESE	ICA	Total
CV221	Water Supply Engineering	3	-	-	-	3	30	70	-	100
CV222	Building Planning & Design	3	-	-	-	3	15	35	-	50
CV223	Hydraulic Engineering	3	-	-	-	3	30	70	-	100
CV224	Open Elective-I: ICT for development	2	-	-	-	2	50	-	-	50
CV225	Structural Analysis	3	-	-	-	3	30	70	25	125
CV226	Engineering Mathematics-III	3	1	-	-	4	30	70	25	125
	Total	17	1	-	-	18	185	315	50	550
	Laboratory/Drawings:							POE	OE	
CV221	Water Supply Engineering	-	-	2	-	1	-	-	-	25
CV222	Building Planning & Design	-	-	-	2	1	-	75	-	50
CV223	Hydraulic Engineering	-	-	2	-	1	-	-	-	25
CV224	Open Elective- I : ICT for development	-	-	2	-	1	-	-	-	50
CV227	Computer Programming & Numerical Methods	2	-	2	-	3	-	50	-	25
	Total	2	0	8	2	7	-	125	175	300
	Grand Total	19	1	8	2	25	185	440	225	850
	Environmental Science	1	-	-		-	-	-	-	-

Abbreviations: L- Lectures, P –Practical, T- Tutorial, D- Drawing, ISE -Internal Tests, ESE - University Examination (Theory &/ POE &/Oral examination), ICA- Internal Continuous Assessment.

Note:

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