Sanjivani College of Engineering, Kopargaon

(An Autonomous Institute) Affiliated to Savitribai Phule Pune University. At Sahajanandnagar, Post Shingnapur-423603, Ta;: Kopargaon, Dist.: Ahmednagar (MS) Approved by AICTE, ISO 9001-2015 Certified, Accredited by NBA, Accredited 'A' Grade by NAAC, Website: www.sanjivanicoe.org.in, Email: principalcoe@sanjivani.org.in, Ph.No.: (+91) 9130191301, Fax: (02423)-222682



Department of Structural Engineering

B.Tech. (Structural Engineering) (2021-Pattern_Revised)

Members of Board of Studies (BoS)

Sr.	Designation	Name	Address
No.			
1	Chairman	Dr. A. S. Sayyad	Prof. & Head Department of Structural Engineering
2	Member	All Faculty	Department of Structural Engineering
3	Member (Subject Experts Outside Parent University)	Dr. Y. M. Ghugal	Prof. & Head, Department of Civil Engineering, Govt. COE Karad
4	Member (Subject Experts Outside Parent University)	Dr. S. S. Jamkar	Professor, Applied Mechanics Department, Govt. COE, Aurangabad
5	Co-opt Members (Subject Expert)	Dr. Mrs. S. N. Madhekar	Professor, Department of Applied Mechanics, College of Engineering, Pune (COEP)
6	Subject Expert (Parent University Nominated by VC)	Dr. M. S. Ranadive	Prof. & Head, Department of Civil Engineering, College of Engineering, Pune (COEP)
7	Industry Representative	Er. Ravindra Joshi	Director, PAN GULF Technologies Pvt. Ltd. Mumbai.
8	Industry Representative	Er. Shaikh M. Iqbal	Executive Engineer, PWD Maharashtra, Aurangabad.
9	Meritorious Alumni	Er. Sandhya Unde	Deputy Manager, Technimont Pvt. Ltd., Mumbai

Course Structure w.e.f. 2021-22

	List of Abbreviations										
Abbreviation	Full Form	Abbreviation	Full Form								
ES	Engineering Science	HS	Humanity Science								
PC	Professional Core	CA	Continuous Assessment								
PE	Professional Elective	OR	Oral								
OE	Open Elective	PR	Practical								
ISE	In-Semester Evaluation	TW	Term work								
ESE	End-Semester Evaluation	MLC	Mandatory Learning Course								
BSC	Basic Science Course	PRJ	Project/Seminar/Internship/Online Course								

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Department of Structural Engineering B.Tech. (Structural Engineering) (2021-Pattern-Revised)

Cat	Course Code	Course Title	Teaching Scheme (Hrs./Week)			Credits	Evalı		uation Scheme (Marks)			
			L	Т	Р			Theory				
							CIA	ESE	OR	PR	TW	Total
PC	BS202	Engineering Mathematics-III	3	1	-	4	40	60	-	-	-	100
PC	ST202	Mechanics of Solids	3	1	-	4	40	60	-	-	-	100
PC	ST203	Python for Beginners	3	-	-	3	40	60	-	-	-	100
PC	ST204	Architectural Planning and Drawing	3	-	-	3	40	60	-	-	-	100
HS	HS205	Universal Human Values and Ethics	3	-	-	3	40	60	-	-	-	100
PC	ST206	Mechanics of Solids Lab.	-	-	2	1	-	-	50	-	-	50
PC	ST207	Python for Beginners Lab	-	-	2	1	-	-	-	-	25	25
PC	ST208	Architectural Planning and Drawing Lab	-	-	2	1	-	-	-	-	50	50
PRJ	ST209	Seminar	-	-	4	2	-	-	25	-	-	25
MLC	MLC210	Mandatory learning Course-III- (Constitution of India)	2	-	-	Pass/Fail	-	-	-	-	-	-
		Total	17	2	10	22	200	300	75	-	75	650

Semester-III

Semester-IV

Cat	Course Code	Course Title	Teaching Scheme (Hrs./Week)			Credits	Evaluation Scheme (Marks)			ie		
			L	Т	Р			Theory		DD		
								ESE	OR	PR	TW	Total
PC	ST211	Mechanics of Fluids	3	-	-	3	40	60				100
PC	ST212	Concrete Technology	3	-	-	3	40	60	-	-	-	100
PC	ST213	Geotechnical Engineering	3	-	-	3	40	60	-	-	-	100
PC	ST214	Infrastructure Engineering	3	-	-	3	40	60	-	-	-	100
PC	ST215	Analysis of Determinate Structures	3	1	-	4	40	60	-	-	-	100
HS	HS216	Corporate Readiness-I	1	-	-	1	-	-	-	-	50	50
PC	ST217	Computer Aided Drawings Lab	-	-	2	1	-	-	-	-	25	25
PC	ST218	Geotechnical Engineering Lab	-	-	2	1	-	-	50	-	-	50
PC	ST219	Concrete Technology Lab	-	-	2	1	-	-	50	-	-	50
PC	ST220	Mechanics of Fluids Lab.	-	-	2	1	-	-	50	-	-	50
PRJ	ST221	Sports	-	-	2	1	-	-	-	25	-	25
MLC	MLC222	Mandatory Learning Course-IV	2	-	-	Pass/Fail	-	-	-	-	-	-
		(Innovation)										
		Total	18	1	10	22	200	300	150	25	75	750



Cat	Course	Course Title	Te	achi	ng	Credits						ie
	Code		S	chen	ıe				(Marks)			
			(Hr	s./W	eek)							
			L	Т	Р		The	eory				
							CIA	ESE	OR	PR	TW	Total
PC	ST301	Analysis of Indeterminate Structures	03	-	-	03	40	60	-	-	-	100
PC	ST302	Design of Steel Structures	03	1	-	04	40	60	-	-	-	100
PC	ST303	Foundation Engineering	03	-	-	03	40	60	-	-	-	100
PC	ST304	Construction Planning and	03	-	-	03	40	60	-	-	-	100
		Management										
PE	ST305	Professional Elective-I	03	-	-	03	40	60	-	-	-	100
PC	ST306	Surveying	02	-	-	02	20	30	-	-	-	50
PC	ST307	Surveying Lab	-	-	02	01	-	-	-	50	-	50
PC	ST308	Computer Aided Analysis and	-	-	04	02	-	-	-	50	50	100
		Design -I										
MLC	MLC309	Mandatory Learning Course-V		-	2	Pass/Fail	-	-	-	-	-	-
		(Sports)										
		Total	17	1	08	21	220	330	-	100	50	700

Semester-V

List of Professional Electives

Track	Professional Elective –I	Professional Elective –II	Professional Elective –III	Professional Elective –IV
Competitive	Advanced	Hydrology and	Water Supply	Estimating,
Services	Surveying	Irrigation Engineering	Engineering	Costing and Valuation
Entrepreneur/ Private sector	Design of Formwork	Design of Equipment Foundation	International Design Standards	Structural Audit and Health monitoring
Higher Studies	Matrix Methods of Structural Analysis	Advanced Concrete Technology	Theory of Elasticity	Introduction to Theory of Plates and Shells

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Department of Structural Engineering

B.Tech. Honors

Honors Course -: Building Information Modeling

Semester	Course Code	Course Title	Teaching Scheme (Hrs./Week)			Credits	Evaluation Scheme (Marks)												
			L	Т	Р		1	Theory		Theory		Theory		Theory OF		OR	PR	TW	Total
							CIA	ISE	ESE										
V(I)	ST8101	Revit Architecture	04	-	-	04	40	-	-	-	60	-	100						
VI(II)	ST8102	Revit Structure	04	-	-	04	40	-	-	-	60	-	100						
VII(III)	ST8103	AutoCAD 3D	04	-	-	04	40	-	-	-	60	-	100						
VIII (IV)	ST8104	Open Course	04	-	-	04	40	-	-	-	60	-	100						
VII(III)	ST8105	BIM Lab-I	-	-	02	01	-	-	-	-	-	50	50						
VIII(IV)	ST8106	BIM Lab-II	-	-	02	01	-	-	-	-	-	50	50						
		Total	16	-	04	18	160	-	-	-	240	100	500						

BOS Chairman

Dean Academics

Director