

PROGRAM STRUCTURE

I SEMESTER

S. No	Course Code	Name of the Course	Employability	Skill Development	Entrepreneurship	Remarks
1	192ST1T01	Theory of Elasticity	✓			Students are able to acquire skills related to designing of beam to support load enabling them to be employed for constructional sector. . Example , Roof & bridges.
2	192ST1T02	Structural dynamics	✓			Students are able to acquire analyzing skills related to the behaviour of structure subjected to dynamic loading enabling them to be employed as civil engineers.
3	192ST1T03	Advanced Concrete Technology	✓			Students are able to acquire cognitive skills related to advanced concepts of properties of concrete, design and test the concrete useful in constructional activities enabling them to be employed as structural engineers.
4	192ST1E03	Design of RCC Foundations	✓			Students are able to acquire skills related to designing of foundations based on soil properties which further influence the structural elements like beams, columns, slabs and foundations enabling them to be employed as designers and planners
5	192ST1E01	Matrix Analysis of Structures		✓		Students are able to demonstrate analytical skills to solve practical problems of trusses, beams & frames during designing of various constructional elements.
6	192ST1E02	Analytical & Numerical Method for Structural Engineering	✓			Students are able to acquire analytical skills related to designing of the structural elements like beams, columns, slabs and foundations enabling them to be employed as designers and planners

7	1925T1E05	Repair & Rehabilitation of Structures	✓			Students are able to acquire skills related to deterioration of concrete structures and rehabilitation of these using advanced technologies, like preservation of monuments and other deteriorated structures enabling them to be employed as engineers in related field.
8	1925T1E04	Bridge Engineering	✓			Students are able to acquire skills related to force applied by a the flow of water and relating it to design of dynamics/cyclic loads in various types of bridges enabling them to be employed as design engineers.
9	1925T1E06	Advanced Reinforced Concrete Design	✓			Students are able to acquire skills related to designing of structural elements like beams, columns, slabs and foundations using advanced reinforced materials along with concrete enabling them to be employed as designers and planners
10	1925T1L01	Advanced Concrete Technology Laboratory		✓		Students are able to acquire technical skills related to properties of concrete, design and test the concrete useful in constructional activities
11	1925T1L02	Advanced Structural Engineering Laboratory		✓		Students are able to demonstrate technical skill of testing advanced composite materials, light weight structures and engineering optimization.

II SEMESTER

S. No	Course Code	Name of the Course	Employability	Skill Development	Entrepreneurship	Remarks
12	192ST2T04	Finite Element Methods in Structural Engineering		✓		Students are able to demonstrate problem solving skills to analyze structural related problems and developing software development programs
13	192ST2T05	Theory of Plates and Shells	✓			Students are able to acquire skills related to structural action against in stronger, thinner & lighter in structural members enabling them to be employed as civil engineers.
14	192ST2E07	Stability of Structures	✓			Students are able to acquire skills related to various aspects of soil mechanics, to ensure the safety of structures against collapse enabling them to be employed as designers of various constructional elements.
15	192ST2E08	Advanced Steel Design	✓			Students are able to acquire skills related to properties of steel structures and designing of connections between the structural members at industrial, offshore, high rise building enabling them to be employed for designing of building units.
16	192ST2E09	Analysis of offshore Structures	✓			Students are able to acquire skills related to properties of structural members when subjected to seismic loads and designing earthquake resistant structures enabling them to be employed in civil industry.
17	192ST2E10	Earthquake Resistant Design of Buildings	✓			Students are able to acquire skills related to properties of structural members when subjected to seismic loads and designing earthquake resistant structures enabling them to be employed in civil industry.
18	192ST2E11	Precast and Prefabricated Structures	✓			Students are able to acquire skills related to properties of structural members related to precast and prefabricated structures enabling them to be employed

						in civil industry.
19	1925T2E12	Earth Retaining Structures	✓			Students are able to acquire skills related to various aspects of properties of structural members when subjected to seismic loads and designing earthquake resistant structures enabling them to be employed as structural engineers.
20	192ST2L03	Computer Aided Design Laboratory		✓		Students are able to demonstrate technical skill of reducing manual drawing and related problems in designing and planning of constructional activities.
21	192ST2L04	Structural Design Laboratory		✓		Students are able to demonstrate technical skill of designing of various structural elements.
22	192ST2P01	Mini Project With Seminar		✓		Students are able to demonstrate technical skills related to handling real time projects
23	192MC1A01/192MC2A01	English for Research Paper Writing		✓		Students are able to demonstrate writing skills related to various research articles
24	192MC1A02/192MC2A02	Disaster Management	✓			Students are able to acquire skills related to preparedness towards various disasters in the environment.
25	192MC1A03/192MC2A03	Sanskrit for Technical Knowledge				
26	192MC1A04/192MC2A04	Value Education				
27	192MC1A05/192MC2A05	Constitution of India				
28	192MC1A06/192MC2A06	Pedagogy Studies				
29	192MC1A07/192MC2A07	Stress Management by Yoga				
30	192MC1A08/192MC2A08	Personality Development through Life Enlightenment Skills				
31	192MC1A09/192MC2A09	Soft Skills				


III SEMESTER

S. No	Course Code	Name of the Course	Employability	Skill Development	Entrepreneurship	Remarks
32	172SE3C01	Comprehensive Viva-Voce				
33	172SE3R01	Seminar -I				
34	-----	Project Work Part - I				

IV SEMESTER

S. No	Course Code	Name of the Course	Employability	Skill Development	Entrepreneurship	Remarks
35	172SE4R02	Seminar -II				
36	172SE4P01	Project Work Part -II	✓			Students will be able to demonstrate problem identification, analysis, design solutions or applications in structural engineering domain through the acquired technical, cognitive, communication and creative skills to address societal needs.
TOTAL		36	17	8		


 Program Coordinator


 Head of the Department
 Head of the Department
 Dept. of Civil Engineering
 ADITYA ENGINEERING COLLEGE (A9)