

AcSIR-M.Tech (Engineering of Structures) - PhD Programmes Courses

S.NO	Subject Title	Course Number
1	Instrumentation and Sensors for Structural Response Measurement	ENG(SERC) 1-906
2	Advanced Mechanics of Materials	ENG(SERC) 1-907
3	Computational Methods	ENG(SERC) 1-908
4	Advanced Engineering Mathematics	ENG(SERC) 1-909
5	Dynamics of Structures	ENG(SERC) 2-906
6	RCC & Pre-stressed Concrete Structures	ENG(SERC) 2-907
7	Finite Element Technology – I	ENG(SERC) 2-908
8	Metal Structure Behaviour & Design	ENG(SERC) 3-906
9	Wind Engineering(Audit Course)	ENG(SERC) 2-920
10	Plates & Shell Structures	ENG(SERC) 2-910
11	Earthquake Engineering	ENG(SERC) 2-911
12	Finite Element Technology - II	ENG(SERC) 3-907
13	Research Methodology & Professional Practice	ENG(SERC) 1-921
14	Thesis Work and Seminar	ENG(SERC) 2-927
15	Dissertation Seminar	ENG(SERC) 2-928
16	Dissertation Report and Viva-voce	ENG(SERC) 2-929
17	Research Methodology & Technical communication	ENG(SERC) 1-920
18	Bridge Engineering	ENG(SERC) 2-909
19	Uncertainty Handling in Engineering decision making	ENG(SERC) 3-908
20	Soft Computing	ENG(SERC) 3-909
21	Repair & Rehabilitation of concrete Structures	ENG(SERC) 3-910
22	New composite materials in Civil Engineering Applications	ENG(SERC) 3-911
23	Engineering for Natural Hazards	ENG(SERC) 2-912
24	Advanced techniques for characterisation of Materials	ENG(SERC) 3-912
25	Molecular Dynamics	ENG(SERC) 3-913
26	Advanced Cementitious composites & characterisation of Materials	ENG(SERC) 3-914
27	Advanced Fatigue and fracture Mechanics	ENG(SERC) 3-915
28	Advanced numerical Methods for Fracture Mechanics	ENG(SERC) 3-916
29	Mechanics of Wave Propagation	ENG(SERC) 3-917
30	Advanced Structural Health Monitoring	ENG(SERC) 3-918
31	Advanced Stability of Structures	ENG(SERC) 3-919
32	Micromechanics of Brittle Materials	ENG(SERC) 3-920
33	Fatigue of Concrete Structures	ENG(SERC) 3-921
34	Non-Destructive Testing & Forensic Engineering	ENG(SERC) 1-910
35	Sustainable Materials	ENG(SERC) 3-922

S.NO	Subject Title	Course Number
36	Shear Thickening Fluids for Engineering Applications	ENG(SERC) 3-923
37	Computational Fluid Dynamics	ENG(SERC) 3-924
38	Advanced Modelling Techniques	ENG(SERC) 3-925
39	Smart Materials and Structures	ENG(SERC) 3-926
40	Advanced Analysis and Design of Steel Structures	ENG(SERC) 3-927
41	Fundamentals of Probability and Statistics	ENG(SERC) 2-913
42	Stochastic Mechanics	ENG(SERC) 2-914
43	Multiscale Modelling of structures	ENG(SERC) 3-928
44	Non-Destructive Testing -Lab	ENG(SERC) 1-910L
45	Characterisation Techniques for Cementitious materials-Lab	ENG(SERC) 3-912L
46	Advanced Course for self-study-I	ENG(SERC) 3-929
47	Advanced Course for self-study-II	ENG(SERC) 3-930

The course syllabus given in the brochure indicates L-T-P-C nomenclature.

L is the number of lecture hours per week.

T is the number of tutorial hours per week.

P is the number of laboratory hours per week.

C is the number of credits for the course.