

DAV UNIVERSITY, JALANDHAR

DAV UNIVERSITY JALANDHAR



Course Scheme & Syllabus

**Master of Technology
(Part Time)**

In

Structural Engineering

Session 2016–2017 (Onwards)

DAV UNIVERSITY, JALANDHAR

M Tech (Structural Engineering)-Part Time

Semester	Course Code	Course Title	L	T	P	Cr	Nature of Course
1	MGT551	Research Methodology	4	0	0	4	Core
1	CES 501	Dynamics of Structure	4	-	-	4	Core
1	CES 507	Structural Engineering Laboratory-I	-	-	4	2	Core (Lab)
			8	0	4	10	
Semester	Course Code	Course Title	L	T	P	Cr	Nature of Course
2	MTH551A	Numerical Analysis	4	0	0	4	Core
2	CES 502	Theory and Design of plates and Grids	4	-	-	4	Core
2	CES 510	Structural Engineering Laboratory-II	-	-	4	2	Core (Lab)
			8	0	4	10	
Semester	Course Code	Course Title	L	T	P	Cr	Nature of Course
3	CES 503	Analysis and Design of Foundations	4	-	-	4	Core
3	CES 505	Bridge Engineering	4	-	-	4	Core
3	CESXXX	Discipline Specific Elective -1	4	0	0	4	DSE-1
			12	0	0	12	
Semester	Course Code	Course Title	L	T	P	Cr	Nature of Course
4	CESXXX	Discipline Specific Elective -2	4	0	0	4	DSE-2
4	CESXXX	Discipline Specific Elective -3	4	0	0	4	DSE-3
4	CESXXX	Generic Elective -1	4	0	0	4	GE-2
4	CES 512	Seminar	0	0	4	2	Seminar
			12	0	3	14	
Semester	Course Code	Course Title	L	T	P	Cr	Nature of Course
5		Discipline Specific Elective -4	4	0	0	4	DSE-4
5		Generic Elective -2	4	0	0	4	GE-2
5	CES513	Dissertation Part - 1	0	0	0	8	Dissertation Part - 1
			8	0	0	16	
Semester	Course Code	Course Title	L	T	P	Cr	Nature of Course
6	CES514	Dissertation Part - 2	0	0	0	12	Dissertation Part - 2
			0	0	0	12	

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Discipline Specific Electives

DSE-1	Course Code	Course Title	L	T	P	Cr.	Area of Specialization
	CES521	Pre-stressed Concrete	4	0	0	4	Structures
	CES 523	Finite element analysis	4	0	0	4	Structures
	CES 525	Tall Structures	4	0	0	4	Structures
	CES 527	Ground Improvement	4	0	0	4	Geotechnical
	CES 529	Soil Structure interaction	4	0	0	4	Soil Mechanics

DSE-2	Course Code	Course Title	L	T	P	Cr.	Area of Specialization
	CES 522	Advanced Structural Design and Detailing	4	0	0	4	Structures
	CES 524	Advanced Solid Mechanics	4	0	0	4	Structures
	CES 526	Disaster Reduction and Management	4	0	0	4	Structures
	CES 528	Design of Steel and Steel-Concrete composites	4	0	0	4	Structures
	CES 530	Site investigations	4	0	0	4	Soil Mechanics

DSE-3	Course Code	Course Title	L	T	P	Cr.	Area of Specialization
	CES531	Design of Industrial Structures	4	0	0	4	Structures
	CES 533	Earthquake resistant design of Masonry and RC Buildings	4	0	0	4	Structures
	CES 535	Hydraulic Structures	4	0	0	4	Water Resources
	CES 537	Advanced Concrete Technology	4	0	0	4	Structures
	CES 539	Building Services	4	0	0	4	Structures

DSE-4	Course Code	Course Title	L	T	P	Cr.	Area of Specialization
	CES 532	Construction Techniques And Management	4	0	0	4	Structures
	CES 534	Reliability Analysis of Structure	4	0	0	4	Structures
	CES 536	Wind Effect on Structures	4	0	0	4	Structures
	CES 538	Infrastructure Planning And Management	4	0	0	4	Planning
	CES 540	Rehabilitation of Structures	4	0	0	4	Structures

L: Lectures T: Tutorial P: Practical Cr: Credits

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Generic Electives

S. No	Course Code	Course Title	L	T	P	Cr.
1	ELE901	Renewable Energy Sources	4	0	0	4
2	ELE902	Energy Audit and Management	4	0	0	4
3	CHL901	Analytical Techniques	4	0	0	4
4	CHL902	Pollution Abatement and Control Equipment's	4	0	0	4
5	MEC901	Methods Engineering and Ergonomics	4	0	0	4
6	MEC902	Power Plant Engineering	4	0	0	4
7	CSE901	Soft Computing	4	0	0	4
8	CSE902	Mobile Communications	4	0	0	4
9	ECE901	Smart Sensors	4	0	0	4
10	ECE902	Silicon Chip Technology	4	0	0	4
11	CIV901	Transportation Engineering	4	0	0	4
12	CIV902	Water Resource Engineering	4	0	0	4
13	MGT051	Business Strategy	4	0	0	4
14	MGT052	Principles of Marketing	4	0	0	4