

# Master of Technology in Structural Engineering

Department of Civil Engineering

## The overall credits structure

Category	PC	PE	OC	Total
Credits	42	12	0	54

### Program Core

CVD757	Major Project Part-I (CES)	0	0	189
CVD758	Major Project Part-II (CES)	0	0	189
CVL756	Advanced Structural Analysis	3	0	0 3
CVL757	Finite Element Methods in Structural Engineering	2	0	2 3
CVL758	Solid Mechanics in Structural Engineering	3	0	0 3
CVL759	Structural Dynamics	3	0	0 3
CVL760	Theory of Concrete Structures	3	0	0 3
CVL761	Theory of Steel Structures	3	0	0 3
CVL762	Earthquake Analysis and Design	3	0	0 3
CVP756	Structural Engineering Laboratory	0	0	6 3
<b>Total Credits</b>				<b>42</b>

CVL767	Design of Fiber Reinforced Composite Structures	3	0	0 3
CVL768	Design of Masonry Structures	3	0	0 3
CVL769	Design of Tall Buildings	3	0	0 3
CVL770	Prestressed and Composite Structures	2	0	2 3
CVL856	Strengthening and Retrofitting of Structures	3	0	0 3
CVL857	Structural Safety and Reliability	3	0	0 3
CVL858	Theory of Plates and Shells	3	0	0 3
CVL859	Theory of Structural Stability	3	0	0 3
CVL860	Advanced Finite Element Method and Programming	2	0	2 3
CVL861	Analysis and Design of Machine Foundations	2	0	2 3
CVL862	Design of Offshore Structures	3	0	0 3
CVL863	General Continuum Mechanics	3	0	0 3
CVL864	Structural Health Monitoring	3	0	0 3
CVL865	Structural Vibration Control	3	0	0 3
CVL866	Wind Resistant Design of Structures	3	0	0 3
CVS756	Independent Study (CES)	0	3	0 3
CVL771	Advance Concrete Technology	3	0	0 3
CVL873	Fire Engineering and Design	3	0	0 3
CVL779	Formwork for Concrete Structures	3	0	0 3

### Program Electives

CVD756	Minor Project in Structural Engineering	0	0	6 3
CVL763	Analytical and Numerical Methods for Structural Engineering	3	0	0 3
CVL764	Blast Resistant Design of Structures	2	0	2 3
CVL765	Concrete Mechanics	3	0	0 3
CVL766	Design of Bridge Structures	3	0	0 3

Sem.	Courses (Number, abbreviated title, L-T-P, credits)						Lecture courses	Contact h/week				Credits
	L	T	P	Total	L	T		P	Total			
I	CVL756 Advanced Structural Analysis (3-0-0) 3	CVL759 Structural Dynamics (3-0-0) 3	CVL757 Finite Element Methods in Structural Engineering (2-0-2) 3	CVL758 Solid Mechanics in Structural Engineering (3-0-0) 3	PE-1 (3-0-0) 3 or (2-0-2) 3		5	(13, 14)	0	(2,4)	(16, 17)	15
II	CVP756 Structural Engineering Laboratory (0-0-6) 3	CVL762 Earthquake Analysis and Design (3-0-0) 3	CVL760 Theory of Concrete Structures (3-0-0) 3	CVL761 Theory of Steel Structures (3-0-0) 3	PE-2 (3-0-0) 3 or (2-0-2) 3		4	(11, 12)	0	(6,8)	(18, 19)	15
Summer												
III	CVD757 Major Project Part I (CES) (0-0-18) 9	PE-3 (3-0-0) 3 or (2-0-2) 3	PE-4 (3-0-0) 3 or (2-0-2) 3				2	(4,6)	0	(18, 22)	(24, 26)	15
IV	CVD758 Major Project Part II (CES) (0-0-18) 9						0	0	0	18	18	9

**Total = 54**