VISVESVARAYA TECHNOLOGICAL UNIVERSITY

BELAGAVI

Scheme of Teaching and Examinations

M.Tech. in Civil Engineering

(Specialization in Computer Aided Design of Structures-(CCS))

Choice Based Credit System (CBCS) and Outcome Based Education (OBE)

Specialization in –(CCS)

II SEMESTER

Sl. No	Course	Course Code	Course Title	Teaching Hours /Week			Examination				Credits
				Theory	Practical/ Seminar	Tutorial/ Skill Development Activities	Duration in hours	CIE Marks	SEE Marks	Total Marks	
				L	P	T/SDA					
1	PCC	MCCS201	Computational Structural Mechanics – Classical & FE Approach	03	00	00	03	50	50	100	3
2	PCC	MCCS202	Structural Dynamics and Earthquake Resistant Design of Structures	03	00	02	03	50	50	100	4
3	PCC	MCCS203	Action and Response of Structural Elements	03	00	00	03	50	50	100	3
4	PCC	MCCS204	Continuum Mechanics	03	00	00	03	50	50	100	3
5	PEC	MCCS215X	Professional Elective - 3	03	00	00	03	50	50	100	3
6	PEC	MCCS216X	Professional Elective – 4	03	00	00	03	50	50	100	3
7	PCCL	MCCSL207	Computational Lab - 2	01	02	00	03	50	50	100	2
8	AEC/SEC	MCCS258	Skill and Ability enhancement courses	00	02	---	02	50	50	100	1
				01	00	----	01				
TOTAL				**20**	**04**	**02**	**--**	**400**	**400**	**800**	**22**

Note: **PCC**: Professional core. **IPCC**-Integrated Professional Core Courses, **PCC(PB):** Professional Core Courses (Project Based), **PCCL**-Professional Core Course lab**, PEC-** Professional Elective Courses, **MDC-** Multi-Disciplinary Courses

, **L-Lecture, P-Practical, T/SDA-Tutorial / Skill Development Activities** (Hours are for Interaction between faculty and students)

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Note: **xxx** means specialization code for example **MDE- Design**Engineering, **LDN-** Digital Communication and Networking, **SCE**- Computer Engineering, **CCT**- Construction Technology, **AUD**- Urban Design, **MBA**- Master of Business Administration, **MCA**-Master of Computer Application, etc

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Ability Enhancement Courses (AEC):.These courses are designed to help students enhance their skills in communication, language, and personality development. They also promote a deeper understanding of subjects like social sciences and ethics, culture and human behaviour, human rights, and the law. **Skill Enhancement Course (SEC):**Skill Enhancement Course means a course designed to provide value-based or skill-based knowledge and should contain both theory and lab/hands-on/training/fieldwork. The main purpose of these courses is to provide students with life skills in the hands-on mode to increase their employability.
If AEC/SEC courses are ONLINE (MOOCs) courses suggested by the concerned board of studies. These courses will be made available on **www. online.vtu.ac.in**, however online courses are not considered for vertical progression, but qualifying in online courses is mandatory for the award of the degree.

Specializations: Professional Elective

Specialization	Professional Elective - 3	Specialization	Professional Elective - 4
Course Code	Course Title	Course Code	Course Title
MCCS215A	Advanced Mechanics of Materials	MCCS216A	Design of Precast & Composite Structures
MCCS215B	Analysis and Design of Plates and shells	MCCS216B	Geotechnical Aspects of Foundation and Earth Retaining Structures
MCCS215C	Structural Stability Analysis	MCCS216C	Design of Structural Systems for Bridges and flyovers
MCCS215D	Geotechnical Earthquake engineering	MCCS216D	Reliability Analysis and Reliability Based Design of Structures

PCC/PCCL/IPCC/PEC/MDC/PCC(PB): These are the courses which will suit the individual specializations