

VISVESVARAYA TECHNOLOGICAL UNIVERSITY
BELAGAVI



Scheme of Teaching and Examinations
M.Tech., in Civil Engineering
(Specialization: Water Resources and Environmental Engineering (WREE))
Choice Based Credit System (CBCS) and Outcome Based Education (OBE)

Specialization in –(WREE)											
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/PEC/ MDC/PCC(PB) /IPCC	MCWE201	Remote Sensing and Geographical Information System (GIS)	02	02	00	03	50	50	100	4
2		MCWE202	Surface Water Hydrology	02	00	02	03	50	50	100	3
3		MCWE203	Water Pollution and Control	02	00	02	03	50	50	100	3
4		MCWE204	Irrigation Engineering and Hydraulic Structures	02	00	02	03	50	50	100	3
5		MCWE215X	Professional Elective-3	02	00	02	03	50	50	100	3
6		MCWE216X	Professional Elective-4	02	00	02	03	50	50	100	3
7	PCCL	MCWEL207	Hydro-Soil Engineering Laboratory	01	02	00	03	50	50	100	2
8	AEC/SEC	MCWE258	Skill Enhancement For Research Excellence	00	02	---	02	50	50	100	1
				01	00	----	01				
TOTAL								400	400	800	22
<p>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) L-Lecture, P-Practical, T/SDA-Tutorial / Skill Development Activities (Hours are for Interaction between faculty and students) PBLC: Project Based Learning Course, Note: xxx means specialization code for example MDE- DesignEngineering, 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</p>											
Ability / Skill Enhancement Courses											

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](http://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)

Professional Elective-3		Professional Elective-4	
Course Code	Course Title	Course Code	Course Title
MCWE215A	Groundwater Hydrology	MCWE216A	Industrial Safety, Health and Environmental Management
MCWE215B	Urban Flood Management	MCWE216B	Integrated Solid Waste Management
MCWE215C	Advanced remote Sensing	MCWE216C	Waste water reclamation and Reuse
MCWE215D	Open Channel Hydraulics	MCWE216D	Renewable Energy and Alternative Fuels

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