# VISVESVARAYA TECHNOLOGICAL UNIVERSITY

# BELAGAVI

# Scheme of Teaching and Examinations (2026)

## M.Tech., in Civil Engineering

## (Specialization in Wastewater Management, Health and Safety Engineering)

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

1

| Specialization in –(Wastewater Management, Health and Safety Engineering) | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **II SEMESTER** | | | | | | | | | | | | | |
| **Sl. No** | **Course** | **Course Code** | **Course Title** | **Teaching & Learning Scheme** | | | | | **Examination** | | | | **Credits** |
| | | | | **CI** | | **LI** | **TW & SL** | **Total Hours** | **Duration in hours** | **CIE Marks** | **SEE Marks** | **Total Marks** | |
| | | | | **L** | **T** | **P** | | | | | | | |
| 1 | PCC/ IPCC | 1MCWH201 | Integrated Wastewater Treatment Engineering & Safety Practices | 42 | 0 | 28 | 50 | 120 | 03 | 50 | 50 | 100 | 4 |
| 2 | PCC | 1MCWH202 | Industrial Wastewater Engineering &Pollution Prevention | 42 | 0 | 0 | 48 | 90 | 03 | 50 | 50 | 100 | 3 |
| 3 | PCC | 1MCWH203 | Environmental Health, Toxicology & Occupational Safety | 42 | 0 | 0 | 48 | 90 | 03 | 50 | 50 | 100 | 3 |
| 4 | PCC | 1MCWH204 | Smart Wastewater Systems, Digital Safety & Emergency Response | 42 | 0 | 0 | 48 | 90 | 03 | 50 | 50 | 100 | 3 |
| 5 | PEC | 1MCWH205 X | Professional Elective–III | 42 | 0 | 0 | 48 | 90 | 03 | 50 | 50 | 100 | 3 |
| 6 | PEC | 1MCWH206 X | Professional Elective–IV | 42 | 0 | 0 | 48 | 90 | 03 | 50 | 50 | 100 | 3 |
| 7 | PCC L | 1MCWHL207 | Wastewater & Safety Simulation Lab (AEC) | 0 | 0 | 28 | 02 | 30 | 03 | 50 | 50 | 100 | 1 |
| 8 | PCC | 1MCWHS208 | Minor Project/ Skill Development Project | 0 | 0 | 0 | 60 | 60 | 03 | 50 | 50 | 100 | 2 |
| | | | | | | | | | **Total** | **400** | **400** | **800** | **22** |

| Professional Elective Courses (PECs) | | | | |
|---|---|---|---|---|
| PEC-III | | | PEC-IV | |
| Code | Title of the Course | | Code | Title of the Course |
| 1MCWH205A | Advanced Biological Nutrient Removal | | 1MCWH206A | Waste-to-Energy & Resource Recovery Systems |
| 1MCWH205B | Occupational Health & IndustrialHygiene | | 1MCWH206B | Process Safety Management & HAZOP |
| 1MCWH205C | Hazardous Waste Management &Circular Economy | | 1MCWH206C | Advanced Membrane & Hybrid Treatment Systems |
| 1MCWH205D | DigitalSafetyAnalytics&MachineLearning | | 1MCWH206D | Disaster & Emergency Preparedness for Water Utilities |