

Below is the TENTATIVE two-year course offering plan

| Course | 2022 Fall | 2023 Spring | 2023 Fall | 2024 Spring |
|------------|---|-------------|------------------------|------------------------|
| CIVL 1100 | Discovering Civil and Environmental Engineering | ✓ | ✓ | ✓ |
| CIVL 1140 | Environmental Quality Control and Improvement | | | |
| CIVL 1150 | Climate Change Impacts and Extreme Weather Events | ✓ | | |
| CIVL 1160 | Civil Engineering and Modern Society | ✓ | ✓ | ✓ |
| CIVL 1170 | Big History, Sustainability and Climate Change | | | |
| CIVL 2020 | Industrial and BIM Training | | ✓ | ✓ |
| CIVL 2110 | Statics | ✓ | ✓ | ✓ |
| CIVL 2120 | Mechanics of Materials | | ✓(Spring) ✓(Summer) | ✓(Spring) ✓(Summer) |
| CIVL 2160 | Modeling Systems with Uncertainties | ✓ | | ✓ |
| CIVL 2170 | Infrastructure Systems Engineering and Management | | ✓ | ✓ |
| CIVL 2410 | Environmental Assessment and Management | | ✓ | ✓ |
| CIVL 2510 | Fluid Mechanics | | ✓ | ✓ |
| CIVL 2810 | Construction Materials | ✓ | | ✓ |
| CIVL 2910 | Fundamental of Green Buildings | ✓ | | ✓ |
| CIVL 3210 | Introduction to Construction Management | | ✓ | ✓ |
| CIVL 3310 | Structural Analysis | ✓ | | ✓ |
| CIVL 3320 | Reinforced Concrete Design | | ✓ | ✓ |
| CIVL 3420 | Water and Wastewater Engineering | | ✓ | ✓ |
| CIVL 3510 | Hydrosystems Engineering | ✓ | | ✓ |
| CIVL 3610 | Traffic and Transportation Engineering | | ✓ | ✓ |
| CIVL 3730 | Fundamentals of Geotechnics | ✓ | | ✓ |
| CIVL 3740 | Geotechnical Analysis and Design | | ✓ | ✓ |
| CIVL 3910 | Smart Infrastructure Sensing and Data Analytics | | ✓ | ✓ |
| CIVL 4100M | Introduction to Hydrometeorology | | | ✓ |
| CIVL 4100N | Energy System Modelling for Buildings and Cities | | ✓ | ✓ |
| CIVL 4100O | Advanced Construction with AI and Robotics | ✓ | | ✓ |
| CIVL 4100P | Wave Loads on Structures | | ✓ | ✓ |
| CIVL 4100Q | Mass Rail Transit Operations and Management | ✓ | | ✓ |
| CIVL 4100R | GIS for Smart City | | ✓ | |
| CIVL 4250 | Project Management and Finance | ✓ | | |
| CIVL 4270 | Construction Law and Contract Administration | | ✓ | ✓ |
| CIVL 4320 | Structural Steel Design | | ✓ | ✓ |
| CIVL 4330 | Introduction to Structural Dynamics | ✓ | | ✓ |
| CIVL 4340 | Prestressed Concrete Design | | ✓ | ✓ |
| CIVL 4370 | Computer Methods of Structural Analysis | | ✓ | ✓ |
| CIVL 4380 | Introduction to Wind Effects on Buildings and Structures | | | ✓ |
| CIVL 4430 | Environmental Impact Assessment | | ✓ | ✓ |
| CIVL 4450 | Carbon Footprint Analysis and Reduction | | ✓ | ✓ |
| CIVL 4460 | Process Design of Environmental Engineering Facilities | ✓ | | |
| CIVL 4470 | Air Quality Control and Management | ✓ | | ✓ |
| CIVL 4480 | Climate Modeling and Risk Assessment | | ✓ | ✓ |
| CIVL 4560 | Urban Hydroclimate and the Built Environment | | ✓ | |
| CIVL 4610 | Introduction to Data Analytics for Smart Transportation Systems | ✓ | | ✓ |
| CIVL 4620 | Transportation System Operations | ✓ | | ✓ |
| CIVL 4630 | Public Transport Planning and Operation | | ✓ | ✓ |
| CIVL 4640 | Introduction to Smart City Economics | ✓ | | ✓ |
| CIVL 4650 | Multi-agent Decision Making in Smart Cities | | ✓ | ✓ |
| CIVL 4700 | Engineering Geology | ✓ | | ✓ |
| CIVL 4710 | Soil Slope Engineering | | ✓ | ✓ |
| CIVL 4750 | Numerical Solutions to Geotechnical Problems | ✓ | | ✓ |
| CIVL 4760 | Introduction to Rock Mechanics | | ✓ | ✓ |
| CIVL 4810 | Construction Materials Technology | ✓ | | ✓ |
| CIVL 4950 | Civil Engineering Capstone Design Project | ✓ | | ✓ |
| CIVL 5110 | Engineering Risk, Reliability and Decision | | ✓ | |
| CIVL 5120 | Stochastic Programming for Civil Engineering | | | ✓ |
| CIVL 5210 | Principles of Project Finance | | ✓ | ✓ |
| CIVL 5220 | BIM and Digital Construction | ✓ | | ✓ |
| CIVL 5230 | Finance and Operations in Civil Engineering | ✓ | | |
| CIVL 5350 | Bridge Engineering | | | ✓ |
| CIVL 5370 | Wind Effects on Buildings and Structures | ✓ | | |
| CIVL 5390 | Finite Element Methods | ✓ | | |
| CIVL 5410 | Physical-Chemical Water/Wastewater Treatment | | | ✓ |
| CIVL 5430 | Aquatic Chemistry | | ✓ | ✓ |
| CIVL 5450 | Hazardous Waste Treatment and Site Remediation | ✓ | | |
| CIVL 5460 | Landfill Engineering and Design | | | ✓ |
| CIVL 5510 | Hydroclimate Data Analysis and Modelling | | ✓ | |
| CIVL 5520 | Water Resources Systems Analysis | | ✓ | |
| CIVL 5530 | Turbulent Processes in Hydrosystems | | | |
| CIVL 5550 | Modeling Fluid Systems | | | ✓ |
| CIVL 5610 | Urban Transportation Networks Analysis | ✓ | | ✓ |
| CIVL 5620 | Travel Demand Analysis | ✓ | | |
| CIVL 5630 | Traffic Control Fundamentals | | | ✓ |
| CIVL 5710 | Advanced Soil Mechanics | ✓ | | ✓ |
| CIVL 5720 | Advanced Foundation Design | | | ✓ |
| CIVL 5730 | Theoretical and Computational Soil Mechanics | | ✓ | ✓ |
| CIVL 5750 | Geotechnical Earthquake Engineering and Soil Dynamics | ✓ | | ✓ |
| CIVL 5760 | Geotechnical Site Characterization | | | ✓ |
| CIVL 5770 | Unsaturated Soil Mechanics and Engineering | ✓ | | ✓ |
| CIVL 5780 | Soils and Waves | ✓ | | |
| CIVL 5830 | Advanced Mechanics of Materials | | | ✓ |
| CIVL 5840 | Advanced Concrete Technology | | ✓ | ✓ |
| CIVL 5850 | Renovation Engineering | | ✓ | |
| CIVL 6100K | Hydroclimate Data Analysis and Modelling | | | |
| CIVL 6100M | Discrete Choice Experiments and Data Analysis | | ✓ | |
| CIVL 6100N | Special Topics in Stochastic Programming in Civil Engineering | | ✓ | |
| CIVL 6100O | Simulation Methods in Construction | | ✓ | |
| CIVL 6100P | Structural Sensing and Health Monitoring | ✓ | | ✓ |
| CIVL 6100Q | Scientific Machine Learning for Civil Infrastructure Systems | ✓ | | ✓ |