

| | Environmental Engineering | | | | | | | | | |
|----|---------------------------|---|------|-------------|------|--------------------|------------------|------------------|-----------------|-------|
| | Course Number and Title | | AU | Math+ NS | Math | Natural Science | Comp. Studies | Eng'g Science | Eng'g Design | ES+ED |
| 1A | CHE102 | Chemistry for Engineers | 48.0 | 48.0 | 0.0 | 48.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | CIVE104 | Mechanics 1 | 24.0 | 18.0 | 0.0 | 18.0 | 0.0 | 6.0 | 0.0 | 6.0 |
| | CIVE115 | Linear Algebra | 24.0 | 24.0 | 24.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | ENVE100 | Environmental & Geological Engineering Concepts | 60.0 | 0.0 | 0.0 | 0.0 | 20.0 | 20.0 | 20.0 | 40.0 |
| | MATH116 | Calculus 1 for Engineering | 48.0 | 48.0 | 48.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1B | CIVE105 | Mechanics 2 | 60.0 | 60.0 | 15.0 | 0.0 | 15.0 | 0.0 | 45.0 | 0.0 |
| | CIVE121 | Computational Methods | 48.0 | 48.0 | 12.0 | 12.0 | 0.0 | 0.0 | 36.0 | 0.0 |
| | ENVE153 | Earth Engineering | 54.0 | 21.6 | 0.0 | 21.6 | 0.0 | 21.6 | 10.8 | 32.4 |
| | GENE123 | Electrical Circuits & Instrumentation | 51.0 | 12.8 | 0.0 | 12.8 | 0.0 | 38.3 | 0.0 | 38.3 |
| | MATH118 | Calculus 2 For Engineering | 48.0 | 48.0 | 48.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2A | ENVE223 | Differential Equations & Balance Laws | 42.0 | 31.5 | 31.5 | 0.0 | 0.0 | 10.5 | 0.0 | 10.5 |
| | ENVE224 | Probability and Statistics | 42.0 | 21.0 | 21.0 | 0.0 | 0.0 | 21.0 | 0.0 | 21.0 |
| | ENVE275 | Environmental Chemistry | 48.0 | 16.8 | 0.0 | 16.8 | 0.0 | 31.2 | 0.0 | 31.2 |
| | ENVE280 | Fluid Mechanics | 46.0 | 11.5 | 0.0 | 11.5 | 0.0 | 23.0 | 11.5 | 34.5 |
| | ERS215 | Environmental and Sustainability Assessment 1 | 36.0 | 0.0 | 0.0 | 0.0 | 36.0 | 0.0 | 0.0 | 0.0 |
| 2B | BIOL240 | Fundamentals of Microbiology | 36.0 | 36.0 | 0.0 | 36.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | CIVE382 | Hydrology and Open Channel Flow | 44.0 | 11.0 | 0.0 | 11.0 | 0.0 | 22.0 | 11.0 | 33.0 |
| | ENVE225 | Environmental Modeling | 54.0 | 27.0 | 27.0 | 0.0 | 0.0 | 27.0 | 0.0 | 27.0 |
| | ENVE277 | Air Quality Engineering | 42.0 | 0.0 | 0.0 | 0.0 | 0.0 | 31.5 | 10.5 | 42.0 |
| | ENVE279 | Energy and the Environment | 42.0 | 10.5 | 0.0 | 10.5 | 0.0 | 21.0 | 10.5 | 31.5 |
| | WkRpt200 | Work-term Report | 11.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3A | CIVE353 | Geotechnical Engineering 1 | 54.0 | 0.0 | 0.0 | 0.0 | 0.0 | 54.0 | 0.0 | 54.0 |
| | CIVE392 | Economics and Life Cycle Analysis | 42.0 | 0.0 | 0.0 | 0.0 | 42.0 | 0.0 | 0.0 | 0.0 |
| | EARTH458 | Physical Hydrogeology | 24.0 | 6.0 | 0.0 | 6.0 | 0.0 | 12.0 | 6.0 | 18.0 |
| | EARTH458 L | Physical Hydrogeology Lab | 18.0 | 4.5 | 0.0 | 4.5 | 0.0 | 9.0 | 4.5 | 13.5 |
| | ENVE330 | Lab Analysis and Field Sampling Techniques | 60.0 | 30.0 | 0.0 | 30.0 | 0.0 | 15.0 | 15.0 | 30.0 |
| | ENVE375 | Physico-Chemical Processes | 46.0 | 11.5 | 0.0 | 11.5 | 0.0 | 18.4 | 16.1 | 34.5 |

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| | WkRpt300 | Work-term Report | 11.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3B | ENVE335 | Decision Making for Environmental Engineers | 42.0 | 0.0 | 0.0 | 0.0 | 0.0 | 27.3 | 14.7 | 42.0 |
| | ENVE376 | Biological Processes | 46.0 | 0.0 | 0.0 | 0.0 | 0.0 | 34.5 | 11.5 | 46.0 |
| | ENVE383 | Advanced Hydrology & Hydraulics | 44.0 | 0.0 | 0.0 | 0.0 | 0.0 | 33.0 | 11.0 | 44.0 |
| | ENVE391 | Law & Ethics for Environmental Engineers | 36.0 | 0.0 | 0.0 | 0.0 | 36.0 | 0.0 | 0.0 | 0.0 |
| 4A | ENVE400 | Environmental Engineering Project 1 | 43.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 43.5 | 43.5 |
| | WkRpt400 | Work-term Report | 11.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4B | ENVE401 | Environmental Engineering Project 2 | 43.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 43.5 | 43.5 |
| List A (Engineering Design Intensive Technical Electives) | CHE361 | Bioprocess Engineering* | 42.0 | 10.5 | 0.0 | 10.5 | 0.0 | 10.5 | 21.0 | 31.5 |
| | CHE341 | Introduction to Process Control* | 42.0 | 0.0 | 0.0 | 0.0 | 0.0 | 25.2 | 16.8 | 42.0 |
| | CHE571 | Industrial Ecology | 36.0 | 0.0 | 0.0 | 0.0 | 0.0 | 18.0 | 18.0 | 36.0 |
| | CHE572 | Air Pollution Control | 36.0 | 0.0 | 0.0 | 0.0 | 0.0 | 18.0 | 18.0 | 36.0 |
| | CHE574 | Industrial Wastewater Pollution Control | 36.0 | 0.0 | 0.0 | 0.0 | 0.0 | 18.0 | 18.0 | 36.0 |
| | CIVE241 | Transport Principles & Applications | 42.0 | 0.0 | 0.0 | 0.0 | 0.0 | 21.0 | 21.0 | 42.0 |
| | CIVE343 | Traffic Simulation Modelling & Applications | 42.0 | 0.0 | 0.0 | 0.0 | 0.0 | 21.0 | 21.0 | 42.0 |
| | CIVE354 | Geotechnical Engineering 2 | 42.0 | 0.0 | 0.0 | 0.0 | 0.0 | 10.5 | 31.5 | 42.0 |
| | CIVE440 | Transit Planning and Operations | 42.0 | 0.0 | 0.0 | 0.0 | 10.5 | 21.0 | 10.5 | 31.5 |
| | CIVE554 | Geotechnical Engineering 3 | 42.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 42.0 | 42.0 |
| | CIVE583 | Design of Urban Water Systems | 42.0 | 0.0 | 0.0 | 0.0 | 0.0 | 10.5 | 31.5 | 42.0 |
| | ENVE577 | Engineering for Solid Waste Management | 48.0 | 0.0 | 0.0 | 0.0 | 0.0 | 14.4 | 33.6 | 48.0 |
| | ME571 | Air Pollution | 36.0 | 0.0 | 0.0 | 0.0 | 0.0 | 21.6 | 14.4 | 36.0 |
| | SYDE332 | Societal and Environmental Systems | 42.0 | 10.5 | 10.5 | 0.0 | 0.0 | 21.0 | 10.5 | 31.5 |
| | CHE516 | Energy Systems Engineering** | 36.0 | 0.0 | 0.0 | 0.0 | 0.0 | 25.2 | 10.8 | 36.0 |
| CIVE507 | Building Science and Technology** | 42.0 | 10.5 | 0.0 | 10.5 | 0.0 | 21.0 | 10.5 | 31.5 | |

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| | SYDE533 | Conflict Resolution | 42.0 | 12.6 | 12.6 | 0.0 | 0.0 | 16.8 | 12.6 | 29.4 |
| List B (Technical Electives) | BIOL354 | Environmental Toxicology 1 | 42.0 | 16.8 | 0.0 | 16.8 | 0.0 | 16.8 | 8.4 | 25.2 |
| | BIOL364 | Mathematical Modelling in Biology | 36.0 | 27.0 | 18.0 | 9.0 | 0.0 | 9.0 | 0.0 | 9.0 |
| | BIOL447 | Environmental Microbiology | 42.0 | 29.4 | 0.0 | 29.4 | 0.0 | 12.6 | 0.0 | 12.6 |
| | BIOL455 | Environmental Toxicology 2 | 30.0 | 12.0 | 0.0 | 12.0 | 0.0 | 12.0 | 6.0 | 18.0 |
| | BIOL462 | Applied Wetland Science | 36.0 | 16.2 | 0.0 | 16.2 | 0.0 | 10.8 | 9.0 | 19.8 |
| | BIOL470 | Methods of Aquatic Ecology | 36.0 | 27.0 | 0.0 | 27.0 | 0.0 | 9.0 | 0.0 | 9.0 |
| | CIVE497 | Special topics: GIS applications | 36.0 | 0.0 | 0.0 | 0.0 | 0.0 | 9.0 | 9.0 | 18.0 |
| | BIOL488 | Ecotoxicology & Watershed Mgmt | 36.0 | 18.0 | 0.0 | 18.0 | 0.0 | 18.0 | 0.0 | 18.0 |
| | CHE514 | Fundamentals of Petroleum Production | 36.0 | 0.0 | 0.0 | 0.0 | 0.0 | 25.2 | 10.8 | 36.0 |
| | CIVE422 | Finite Element Analysis | 42.0 | 21.0 | 10.5 | 10.5 | 0.0 | 21.0 | 0.0 | 21.0 |
| | EARTH342 | Applied Geomorphology | 36.0 | 14.4 | 0.0 | 14.4 | 0.0 | 10.8 | 10.8 | 21.6 |
| | EARTH359 | Flow Through Porous Media | 42.0 | 21.0 | 0.0 | 21.0 | 0.0 | 21.0 | 0.0 | 21.0 |
| | EARTH421 | Geochemistry 2 | 54.0 | 27.0 | 0.0 | 27.0 | 0.0 | 27.0 | 0.0 | 27.0 |
| | EARTH440 | Quaternary Geology | 42.0 | 21.0 | 0.0 | 21.0 | 0.0 | 21.0 | 0.0 | 21.0 |
| | EARTH444 | Applied Wetland Science | 36.0 | 18.0 | 0.0 | 18.0 | 0.0 | 18.0 | 0.0 | 18.0 |
| | EARTH456 | Groundwater Modelling | 42.0 | 10.5 | 0.0 | 10.5 | 0.0 | 21.0 | 10.5 | 31.5 |
| | EARTH459 | Chemical Hydrogeology | 42.0 | 21.0 | 0.0 | 21.0 | 0.0 | 21.0 | 0.0 | 21.0 |
| | ENVE573 | Contaminant Transport | 42.0 | 0.0 | 0.0 | 0.0 | 0.0 | 42.0 | 0.0 | 42.0 |
| | GEOG459 | Energy & Sustainability | 36.0 | 12.0 | 0.0 | 12.0 | 12.0 | 12.0 | 0.0 | 12.0 |
| | GEOG471 | Remote Sensing Profect | 36.0 | 0.0 | 0.0 | 0.0 | 0.0 | 36.0 | 0.0 | 36.0 |
| | ME459 | Energy Conversion | 36.0 | 0.0 | 0.0 | 0.0 | 9.0 | 27.0 | 0.0 | 27.0 |
| | ME559 | Finite Element Methods | 36.0 | 0.0 | 0.0 | 0.0 | 0.0 | 27.0 | 9.0 | 36.0 |
| | SYDE411 | Optimization and Numerical Methods | 42.0 | 31.5 | 31.5 | 0.0 | 0.0 | 10.5 | 0.0 | 10.5 |
| | SYDE533 | Conflict Resolution | 42.0 | 12.6 | 12.6 | 0.0 | 0.0 | 16.8 | 12.6 | 29.4 |
| | SYDE531 | Design Optimization Under Probabilistic Uncertainty | 42.0 | 16.8 | 16.8 | 0.0 | 0.0 | 14.7 | 10.5 | 25.2 |
| | SYDE575 | Image Processing | 60.0 | 36.0 | 21.0 | 15.0 | 0.0 | 24.0 | 0.0 | 24.0 |
| | CHEM233 | Fundamentals of Biochemistry | 36.0 | 36.0 | 0.0 | 36.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | EARTH221 | Geochemistry 1 | 42.0 | 31.5 | 0.0 | 31.5 | 0.0 | 10.5 | 0.0 | 10.5 |
| CHEM262 | Organic Chemistry for Engineering and Bioninformatics Students | 42.0 | 42.0 | 0.0 | 42.0 | 0.0 | 0.0 | 0.0 | 0.0 | |