

Students Entering Fall 2022 and after

**Environmental Engineering**

**Environmental Engineering and Engineering and Public Policy**

| <b>First Year Fall</b>                                  | <b>Units</b> | <b>First Year Fall</b>                            | <b>Units</b> |
|---|--------------|---|--------------|
| 12-100 Exploring CEE                                    | 12           | Same  | 12           |
| 21-120 Differential and Integral Calculus               | 10           | Same  | 10           |
| 33-141 Physics I for Engineering Students               | 12           | Same  | 12           |
| 99-10x Computing @ Carnegie Mellon                      | 3            | Same  | 3            |
| 76-xxx First-Year Writing Requirement                   | 9            | Same  | 9            |
| <b>First Year Spring</b>                                | <b>Units</b> | <b>First Year Spring</b>                          | <b>Units</b> |
| xx-xxx Second Introductory Engineering Course           | 12           | 19-101 Intro to Engineering and Public Policy     | 12           |
| 21-122 Integration and Approximation                    | 10           | Same  | 10           |
| 33-142 Physics II for Engineering Students              | 12           | Same  | 12           |
| 09-111 Nanolegos or 09-105 Intro. to Mod. Chem. I       | 10           | Same  | 10           |
| 09-101 Introduction to Experimental Chemistry           | 3            | Same  | 3            |
| <b>Second Year Fall</b>                                 | <b>Units</b> | <b>Second Year Fall</b>                           | <b>Units</b> |
| 12-200 CEE Challenges: Design in a Changing World       | 9            | Same  | 9            |
| 12-221 Environmental Chemistry and Thermodynamics       | 9            | Same  | 9            |
| 12-222 Environmental Chemistry Lab                      | 3            | Same  | 3            |
| 15-110 Principles of Computing                          | 10           | Same  | 10           |
| 21-254 Linear Algebra and Vector Calculus for Engineers | 11           | Same  | 11           |
| 39-210 Experiential Learning I                          | 0            | Same  | 0            |
| xx-xxx General Education Course 1                       | 9            | 36-220 Engineering Statistics and Quality Control | 9            |
|   |              | 19-201 EPP Sophomore Seminar                      | 1            |
| <b>Second Year Spring</b>                               | <b>Units</b> | <b>Second Year Spring</b>                         | <b>Units</b> |
| 12-271 Computation and Data Science for CEE             | 9            | Same  | 9            |
| 12-351 Environmental Engineering                        | 9            | Same  | 9            |
| 12-352 Environmental Engineering Lab                    | 3            | Same  | 3            |
| 21-260 Differential Equations                           | 9            | Same  | 9            |
| 39-220 Experiential Learning II                         | 0            | Same  | 0            |
| xx-xxx General Education Course 2                       | 9            | 73-102 Principles of Microeconomics               | 9            |
| xx-xxx Elective 1                                       | *            | xx-xxx EPP Technology Policy Elective 1           | *            |

| <b>Third Year Fall</b>  | <b>Units</b> | <b>Third Year Fall</b>                                | <b>Units</b> |
|---|--------------|---|--------------|
| 12-301 CEE Projects   | 9            | Same  | 9            |
| 12-355 Fluid Mechanics  | 9            | Same  | 9            |
| 12-356 Fluid Mechanics Lab  | 2            | Same  | 2            |
| 03-121 Modern Biology   | 9            | Same  | 9            |
| 36-220 Engineering Statistics and Quality Control                 | 9            | xx-xxx EPP Decision Science Elective                  | 9            |
| 39-310 Experiential Learning III                                  | 0            | Same  | 0            |
| xx-xxx General Education Course 3                                 | 9            | xx-xxx EPP Writing and Communications Requirement     | 9            |
| <b>Third Year Spring</b>  | <b>Units</b> | <b>Third Year Spring</b>                              | <b>Units</b> |
| 12-353 Environmental Biology and Ecology                          | 9            | Same  | 9            |
| 12-371 Advanced Computing and Problem Solving in CEE              | 9            | Same  | 9            |
| 12-201 Geology  | 9            | Same  | 9            |
| xx-xxx General Education Course 4                                 | 9            | 19-351 Applied Methods for Technology Policy Analysis | 9            |
| xx-xxx Elective 2   | *            | xx-xxx EPP Technology Policy Elective 2               | *            |
| xx-xxx Elective 3   | *            | xx-xxx General Education Course 5                     | 9            |
| <b>Fourth Year Fall</b>   | <b>Units</b> | <b>Fourth Year Fall</b>                               | <b>Units</b> |
| 12-401 CEE Design: Imagine, Build, Test                           | 12           | Same  | 12           |
| 12-411 Project Management for Eng. and Construction               | 9            | Same  | 9            |
| 12-451 Advanced Environmental Engineering                         | 6            | Same  | 6            |
| 12-471 Applied Data Analytics for Civil and Environmental Systems | 9            | Same  | 9            |
| xx-xxx General Education Course 5                                 | 9            | 19-451 EPP Projects 1                                 | 12           |
| <b>Fourth Year Spring</b>   | <b>Units</b> | <b>Fourth Year Spring</b>                             | <b>Units</b> |
| xx-xxx Upper Level Environmental Engineering Elective             | 9            | Same  | 9            |
| xx-xxx General Education Course 6                                 | 9            | Same  | 9            |
| xx-xxx General Education Course 7                                 | 9            | Same  | 9            |
| xx-xxx Elective 4   | *            | xx-xxx EPP Technology Policy Elective 3               | *            |
| xx-xxx Elective 5   | *            | 19-452 EPP Projects 2                                 | 12           |
| Minimum Units Required:   | 384          |   | 384          |

\* A minimum of 45 free elective units are required for Environmental Engineering. EPP students take 1 unit of EPP Sophomore Seminar and 24 units of EPP Projects as free elective units. The 24 units of EPP Technology Policy electives may be free electives or may fulfill requirements for general education. This is an example semester-by-semester plan only. Students should discuss course progress with advisors in both EnvE and EPP to ensure all requirements for both departments and for CIT are completed.