

INTEGRATED DESIGN ENGINEERING *Environmental Emphasis* – FALL 2023

1

APPM 1350 (4)
Calculus 1 For Engineers

Example

COURSE NUMBER (Cr.)
Course Name
(PR: Pre-Requisites)
(CR: Co-Requisites)
(RPR: Recommended Pre-Requisites)
(Fall or Spring Only Course)

GEEN 1400 (3)
Engineering Projects

PHYS 1110 (4)
General Physics 1
(CR: APPM 1350)

**Humanities &
Social Science (3)**

2

APPM 1360 (4)
Calculus 2 For Engineers
(PR: APPM 1350)

CHEN 1310 (3)
Intro to Engineering
Computing
(CR: APPM 1350)

PHYS 1120 (4)
General Physics 2
(PR: PHYS 1110)
(CR: APPM 1360)

PHYS 1140 (1)
Experimental Physics
(CR: PHYS 1120)

**Writing
Requirement(3)**

3

APPM 2350 (4)
Calculus 3 For Engineers
(PR: APPM 1360)

GEEN 2400 (3)
Engineering Projects for
the Community
(PR: GEEN 1400)

GEEN 2851 (3)
Statics & Structures
(PR: APPM 1360, PHYS 1110)
Fall Only

GEEN 3852 (3)
Thermodynamics
(PR: PHYS 1110)
Fall Only

CHEN 1201 (4)
Gen Chemistry for
Engineers 1
(PR: 1 yr. HS Chemistry or CHEM
1021, HS Algebra)

4

APPM 2360 (4)
Linear Algebra &
Differential Equations
(PR: APPM 1360)

Free Elective (3)

GEEN 3024 (3)
Materials Science for
Engineers
(PR: PHYS 1110)
Spring Only

CVEN 3313 (3)
Theoretical Fluid
Mechanics
(PR: GEEN 2851)
(Spring Only)

CHEN 1203 (2)
Gen Chemistry for
Engineers 2
(PR: CHEN 1201)

CHEM 1221 (1)
Engineering Chemistry
Lab
(CR: CHEN 1203)

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**Concentration
Course (3)**

GEEN 3010 (3)
Circuits for Engineers
(PR: PHYS 1140)
(CR: APPM 2360)
Fall Only

GEEN 3400 (3)
Invention & Innovation
(RPR: GEEN 1400)

CVEN 3323 (3)
Hydraulic Engineering
(PR: CVEN 3313)
Fall Only

CVEN 3414 (3)
Fundamentals of
Environmental Engineering
(PR: CHEN 1201, APPM 1360)

**Humanities &
Social Science (3)**

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**Concentration
Course (3)**

Free Elective (4)

GEEN 3853 (4)
Data Analysis for Engineers
(PR: APPM 2360, CHEN 1310, PHYS
1140)
(CR: GEEN 3010, Writing, GEEN 3024)
Spring Only

EVEN Elective 1 (3)
See page 2 for options

**Humanities &
Social Science (3)**

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**Concentration
Course (3)**

**Free Elective or
Concentration
Course (3)**

EVEN Elective 2 (3)
See page 2 for options

EVEN 4464 (3)
Environmental
Engineering Processes
(PR: CVEN 3313, CVEN 3414)
Fall Only

**Humanities &
Social Science (3)**
Upper Division

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**Concentration
Course (3)**

**Free Elective or
Concentration
Course (3)**

Free Elective (3)

EVEN 4434 (4)
Senior Design Project
See page 2 for requisites
Spring Only

**Humanities &
Social Science (3)**
Upper Division

Integrated Design Engineering Curriculum

Environmental Engineering Emphasis

Standard Course Substitutions

- **APPM 1350:** APPM 1345, MATH 1300
- **APPM 1360:** MATH 2300
- **APPM 2350:** MATH 2400
- **APPM 2360:** MATH 2130 and MATH 3430, MATH 2135 and MATH 3430
- **CHEN 1201:** CHEN 1211, CHEM 1113, MCEN 1024
- **CHEN 1203:** CHEM 1133
- **CHEN 1310:** ASEN 1320, CSCI 1320, CSCI 1300, ECEN 1310
- **CVEN 3313:** CHEN 3200, MCEN 3021
- **EVEN 4434:** CVEN 4434
- **EVEN 4464:** CVEN 4464
- **GEEN 1400:** ASEN 1400, ASEN 1403, ECEN 1400
- **GEEN 1017:** AREN 1027, CVEN 1027, MCEN 1025 or EMEN 4100
- **GEEN 2851:** CVEN 2121, MCEN 2023
- **GEEN 3010:** ECEN 3010
- **GEEN 3024:** MCEN 2024
- **GEEN 3852:** AREN 2110, MCEN 3012, EVEN 3012, CHEN 3320
- **GEEN 3853:** CVEN 3227, MCEN 3047, CHEN 3010

EVEN Electives

- **CVEN 3424:** Water & Wastewater Treatment (Spring Only)
- **CVEN 3434:** Introduction to Applied Ecology (Spring Only)
- **CVEN 4333:** Engineering Hydrology
- **CVEN 4474:** Hazardous & Industrial Waste Management
- **EVEN 4404 or CVEN 4404:** Water Chemistry (Fall Only)
- **EVEN 4484:** Introduction to Environmental Microbiology (Spring Only)
- **MCEN 4131:** Air Pollution Control Engineering (Fall Only)

EVEN 4434 Pre-Requisite Information

- **CVEN 3414**
- **EVEN 4464**
- **GEEN 2400**
- **GEEN 3400**

Humanities & Social Science Electives/Writing Requirements

Visit the college's [Humanities, Social Sciences, and Writing Requirements](#) webpage for options.

Grade Requirements

The minimum passing grade for a prerequisite or co-requisite course within the Environmental Engineering Emphasis is a **C-**. This requirement includes courses completed in another program or department (APPM, PHYS, etc.). The minimum grade for all Concentration courses is also a **C-**. The minimum passing grade for standalone classes is a **D-**. In addition, students need to have a cumulative and major GPA of at least 2.000 in order to graduate from the College of Engineering. **Pass/Fail** is only permitted for up to 6 Free Elective credits.