

# OVERVIEW OF ENGINEERING SCIENCE CURRICULUM WITH ENVIRONMENTAL STUDIES MINOR

## FIRST YEAR

### FALL SEMESTER

GNED 1300 First Year Seminar  
ENGR 1381 Engineering Analysis and Design I  
MATH 1311 Calculus I  
PHYS 1311 Introductory Physics  
PHYS 1111 Introductory Physics Lab.  
**ANTH 1301 Introduction to Anthropology (CC)**  
**Total: 16 hours**

### SPRING SEMESTER

ENGL 1302 Writing Workshop  
ENGR 1382 Engineering Analysis and Design II  
ENGR 1313 Mechanics I  
MATH 1312 Calculus II  
PHYS 1312 Electricity, Magnetism & Waves  
PHYS 1112 Intermediate Physics Lab.  
**Total: 16 hours**

## SOPHOMORE YEAR

### FALL SEMESTER

ENGR 2314 Mechanics II: Dynamics  
ENGR 2181 Design III  
ENGR 2320 Network Analysis  
ENGR 2120 Network Analysis Lab.  
MATH 2321 Calculus III  
CHEM 1318 Chemistry in the Modern World  
CHEM 1118 Intro. To Analytical Methods Lab.  
**Total: 15 hours**

### SPRING SEMESTER

ENGR 2311 Mass and Energy Balances  
ENGR 2182 Design IV  
ENGR 2364 Electronics I  
ENGR 2164 Electronics I Lab.  
MATH 3336 Differential Eqns & Linear Algebra  
ECON 1311 Principles of Microeconomics  
**\*CMLT 2301 Wrld Lit and the Environment (CC)**  
**Total: 17 Hours**

## JUNIOR YEAR

### FALL SEMESTER

ENGR 3181 Design V  
ENGR 3327 Thermodynamics  
ENGR 3355 Control Systems  
ENGR 3155 Control Systems Lab.  
MATH 3320 Probability & Statistics  
**GEOS 1304 Environmental Geology (Elective)**  
\_\_\_\_ \_3\_ Common Curriculum (CC)  
**Total: 17 Hours**

### SPRING SEMESTER

ENGR 3182 Design VI  
ENGR 3323 Fluid Mechanics  
ENGR 3123 Fluid Mechanics Lab.  
MATH 3357 Partial Differential Equations  
PHIL 1354 Ethics or RELI 1320 Ethical Issues  
**\*\*ENGR 2359 Environmental Engr (Elective)**  
\_\_\_\_ \_3\_ Common Curriculum (CC)  
**Total: 17 Hours**

## SENIOR YEAR

### FALL SEMESTER

ENGR 4381 Design VII  
ENGR 4326 Heat Transfer  
ENGR 4126 Heat Transfer Lab.  
ENGR 4341 Engineering Materials  
**BIOL 1311 Integrative Bio I (Math/Science Elective)**  
\_\_\_\_ \_3\_ Common Curriculum (CC)  
**Total: 16 Hours**

### SPRING SEMESTER

ENGR 4382 Design VIII  
**\*\*\*ECON/URBS 3330 Economics and the Environment (Elective)**  
\_\_\_\_ \_3\_ Elective  
\_\_\_\_ \_3\_ Common Curriculum (CC)  
\_\_\_\_ \_3\_ Common Curriculum (CC)  
**Total: 15 Hours**

**TOTAL CREDIT HOURS = 129**

## COURSES REQUIRED FOR ENVR STUDIES MINOR THAT DO NOT COUNT TOWARD COMMON CURRICULUM or ENGR REQUIREMENT

\* This is only course from the Environmental Studies section IV list (see back of page) that also satisfies the Common Curriculum. However, student could take another course from section IV instead and use it to fulfill an Elective instead of common curriculum

\*\* ENGR 2359 can replace GEOS 3300, with permission of the Environmental Studies Chairman.

\*\*\*ECON 3330 satisfies the ENGR requirement for upper division or sequence in social sciences, but since the ENGR ethics requirement (RELI 1320 or PHIL 1354) already fulfils the common curriculum 3 credit hour requirement in Social Issues and Values, satisfying the ENGR requirement with ECON/URBS 3330 is redundant, so it is counted as an elective instead.