

B.S. IN ENVIRONMENTAL ENGINEERING

CATALOG YEAR 2016-2017

Below is the *advised sequence* of courses for this degree program and prerequisites as of 2/10/16. The official degree requirements and prerequisites can be found in the University General Catalog and the prerequisites are subject to change.

COURSE NUMBER AND TITLE	UNITS	PREREQUISITES
1ST SEMESTER		
MATH 122A/B OR MATH 125 Calculus I with Applications	5/3	Appropriate Math Placement
CHEM 151 General Chemistry I OR CHEM 105A/ 106A	4	
ENGL 101 OR 107 OR 109H First-Year Composition	3	
ENGR 102A/B Introduction to Engineering OR ENGR 102	3	Concurrent enrollment or completion of MATH 122B or MATH 125
Tier I General Education	3	
2ND SEMESTER		
MATH 129 Calculus II	3	MATH 122B or 125 with C or better
AME 105 Introduction to MATLAB I	1	Concurrent enrollment or completion of MATH 122B or MATH 125
PHYS 141 Introductory Mechanics OR PHYS 161H	4	MATH 122B or MATH 125; Concurrent enrollment or completion of MATH 129
ENGL 102 OR 108 OR 109H First-Year Composition	3	ENGL 101, ENGL 107
CHEM 152 General Chemistry II OR CHEM 105B/106B or MSE 110	4	CHEM 151 or CHEM 105A/106A
Tier I General Education	3	
3RD SEMESTER		
CHEE 201 Elements of Chemical Engineering I AND CHEE 201L Elements of Chemical Engineering I Computational Lab	3 1	MATH 122B or MATH 125, CHEM 152, ECE 175, AME 105, Concurrent enrollment or completion of AME 205, ENGR102
MATH 223 Vector Calculus	4	MATH 129 with C or better
AME 205 Introduction to MATLAB II	1	AME105
CHEM 241A Lectures in Organic Chemistry OR CHEM 242A OR CHEM 246A	3	CHEM 152 or 105B/106B
CHEM 243A Organic Chemistry Laboratory OR CHEM 247A	1	Concurrent enrollment or completion of CHEM 241A or CHEM 242A or CHEM 246A
4TH SEMESTER		
CHEE 202 Elements of Chemical Engineering II	4	CHEE 201, 201L, MATH 223
CHEE 370R Environmental and Water Engineering	3	
MATH 254 Intro to Ordinary Differential Equations	3	MATH 129 or 223 with C or better
PHYS 241 Introductory Electricity and Magnetism OR PHYS 261H	4	PHYS 141 or PHYS 161H; MATH 129; MATH 223 is recommended not required
CHEE 295E Careers in Environmental Engineering	1	

COURSE NUMBER AND TITLE	UNITS
CURRENT PREREQUISITES FOR UPPER DIVISION COURSES CAN BE FOUND IN THE UA GENERAL CATALOG	
ADVANCED STANDING IS REQUIRED FOR 3XX AND 4XX COURSES (SEE ADVISOR FOR REQUIREMENTS)	
5TH SEMESTER	
CHEE 400R Water Chemistry for Engineers	3
CHEE 476A Water Treatment System Design	3
CE 218 Mechanics of Fluids	3
CHEE 477R Microbiology for Engineers OR BIOC 462A Biochemistry	3
SIE 305 Introduction to Engineering and Probability and Statistics OR MATH 263 Introduction to Statistics and Biostatistics	3
Tier I General Education	3
6TH SEMESTER	
CHEE 476B Wastewater Treatment Design System	3
CHEE 478 Introduction to Hazardous Waste Management	3
CHEM 480A Physical Chemistry	3
Technical Elective – See major advisor for course approval	3
Tier I General Education	3
Tier II General Education	3
7TH SEMESTER	
CHEE 474 Fate and Transport Processes in Environmental Engineering	3
CHEE 400A Environmental Engineering Laboratory I	1
CHEE 400B Environmental Engineering Laboratory II	1
ENGR 498A Senior Capstone (Fall Only)	3
Technical Elective – See major advisor for course approval	3
Tier I General Education	3
8TH SEMESTER	
ENGR 498B Senior Capstone (Spring Only)	3
ATMO 4698 Air Pollution II: Aerosols	3
Engineering Elective – See major advisor for course approval	3
Engineering Elective – See major advisor for course approval	3
Tier II General Education	3

*Tier I and II General Education Courses must meet University general education requirements. One course must be recognized by the university as meeting the Diversity Requirement.