

Environmental Engineering with MECOP (192 Credits)

Revised 3/20/19

Credits	First Year = 47 credits			Second Year = 49 credits			Third Year			Fourth Year			Fifth Year						
	Fall	Winter	Spring	Fall	Winter	Spring	Fall	Winter	Spring	Fall	Winter	Spring	Fall	Winter	Spring				
1																			
2	Chemistry CH 231 (4FW)	Chemistry CH 232 (4WS)	Chemistry CH 233 (4FS)	Organic Chemistry CH 331 (4FW)	Organic Chemistry CH 332 (4WS)	Dynamics ENGR 212 (3FWS)	Transport I CHE 331 (4F)	Transport II CHE 332 (3W)	MECOP Internship #1	Water & Wastewater ENVE 421 (4F)	ENVE Design ENVE 422 (4W)	Env. Engr. Design ENVE 490 (4S)	MECOP Internship #2	Env. Fate & Transport ENVE 431 (4W)	Sust. Water Resources ENVE 456 (3S)				
3																	Air Pollution Control ENVE 425 (3S)		
4						Strength of Materials ENGR 213 (3FWS)		Transport III CHE 333 (3WS)											
5	CH 261 (1)	CH 262 (1)	CH 263 (1)	Differential Equations MTH 256 (4FWS)	Matrices MTH 264 (2)		Thermo CHE 311 (3F)				Process Laboratory CBEE 414 (3F)	ENVE Laboratory ENVE 415 (3W)		Hydrology CE 412 (4FS)		DPD (3FWS)			
6	Differential Calculus MTH 251 (4FWS)	Integral Calculus MTH 252 (4FWS)	Vector Calculus MTH 254 (4FWS)			Series MTH 265 (2)	Technical Writing WR 327 (3FWS)			Intro to Env Engr ENVE 322 (4W)									
7												Graphics & Design CCE 201 (3FW)							
8																			
9				Physics w/ Calculus PH 212 (4FWS)	Physics w/ Calculus PH 213 (4FWS)	Process Analysis CBEE 213 (4S)					Bioreactors ENVE 457 (3F)	General Microbiology MB 230 (4FWS)		Transport Lab CHE 334 (3S)		Engineering Elective (3-4FWS)			
10	Orientation CBEE 101 (3F)	Engr. Comp. CBEE 102 (3W)	Physics w/ Calculus PH 211 (4FWS)					Engr. Ethics CBEE 320 (3F)		Hydraulic CE 313 (4WS) or Geotechnical CE 372 (4W)								Synthesis (3FWS)	
11				Material Balances CBEE 211 (3F)	Energy Balances CBEE 212 (3W)						Engineering Elective (3-4FWS)	Perspective (3FWS)				Perspective (3FWS)			
12																			
13	English Composition WR 121 (3FWS)	COMM 111/114 (3FWS)	HHS 231 (2FWS)			Perspective (3FWS)	ENGR 407 (1)							Env. Geology GEO 221 (4S)					
14			PAC (1FWS)									Perspective (3FWS)							
15				Statics ENGR 211 (3FWS)															
16																			
17																			
18																			

	Pre-requisites for upper division coursework
	Engineering Electives
	Baccalaureate Core course not covered by major requirements (S/U grading allowed)

This advising guide is intended for scheduling only.
Course offerings and requirements are subject to
change. Please reference the OSU Online catalog for a
complete list of degree requirements.

Environmental Engineering Coursework for MECOP

School of Chemical, Biological, and Environmental Engineering

Oregon State University

Revised 3/20/19

Classes Required for 1st MECOP Internship

Course #	Credit Hours	Description
CBEE 102	3	Engineering Problem Solving and Computation
CBEE 211	3	Material Balances and Stoichiometry
CBEE 212	3	Energy Balances
CBEE 320	3	Professionalism and Engineering Ethics
CH 231/261	5	General Chemistry + Lab
CH 232/262	5	General Chemistry + Lab
CH 233/263	5	General Chemistry + Lab
CCE 201	3	Civil and Construction Engineering Graphics and Design
CE 313 or CE 372	4	Hydraulic Engineering (CE 313) or Geotechnical Engineering (CE 372)
CHE 311	3	Thermodynamics
CHE 331	4	Transport Phenomena I: Fluids
CHE 332	3	Transport Phenomena II: Heat
CHE 333	3	Transport Phenomena III: Mass
COMM 111 or 114	3	Public Speaking (COMM 111) or Argument and Critical Discourse COMM (114)
ENGR 211	3	Statics
ENGR 212	3	Dynamics
ENGR 407	1	MECOP Seminar
ENVE 322	4	Fundamentals of Environmental Engineering
MB 230	4	Introductory Microbiology
MTH 251	4	Differential Calculus
MTH 252	4	Integral Calculus
MTH 254	4	Vector Calculus I
MTH 256	4	Differential Equations
MTH 264	2	Introduction to Matrix Algebra
MTH 265	2	Introduction to Series
PH 211	4	General Physics with Calculus
PH 212	4	General Physics with Calculus
PH 213	4	General Physics with Calculus
WR 121	3	English Composition
WR 327	3	Technical Writing

Classes Required for 2nd MECOP Internship

Course #	Credit Hours	Description
CBEE 213	4	Process Data Analysis
CBEE 414	3	Process Engineering Laboratory
CE 412	4	Hydrology
CHE 334	3	Transport Phenomena Laboratory
ENVE 415	3	Environmental Engineering Laboratory
ENVE 421	4	Water and Wastewater Characterization
ENVE 422	4	Environmental Engineering Design
ENVE 457	3	Bioreactors
ENVE 490	4	Environmental Engineering Design
GEO 221	4	Environmental Geology

Additional Courses Required for Graduation

Course #	Credit Hours	Description
CH 331	4	Organic Chemistry (Series CH334/5/6 can substitute)
CH 332	4	Organic Chemistry (Series CH334/5/6 can substitute)
ENGR 213	3	Strength of Materials
ENVE 425	3	Air Pollution Control
ENVE 431	4	Fate and Transport of Chemicals in Environmental Systems
ENVE 456	3	Sustainable Water Resources Development