

**CHEMICAL ENGINEERING TRANSFER, AS
OSU ADVISING GUIDE**

Prerequisites and Course Availability per Term
(for complete information, see 2016-2017 UCC Catalog)

REVISED 11/20/16

	UCC Course No. and Course Name	Term Offered				Credits	Prerequisites/Notes		OSU	
		F	W	S	S				Course No.	Credits
Term 1	CH 221 ^{E,1}	General Chemistry I /Lec/Lab/Rec	x				5	MTH 111	CH 201 / CH 231 Lec & CH 261 Lab	4
	ENGR 111 ^{E,1}	Engineering Orientation I	x				3	MTH 65	CCE 101	2
	MTH 251 ^{E,1}	Calculus I	x	x			5	MTH 112	MTH 251	4
	WR 121 ^{E,1}	English Composition: Intro to Argument	x	x	x	x	4	WR 115 or Placement Test	WR 121	3
Term 2	CH 222 ^{E,1}	General Chemistry II		x			5	CH 221	CH 202+CH 205 Lab / CH 232 Lec & CH 262 Lab	4
	HPE 295	Wellness & Health	x	x	x	x	3		HHS 231 & HHS 241	3
	ENGR 112 ^{E,1}	Engineering Orientation II		x			3	ENGR 111	CCE 102	3
	MTH 252 ^{E,1}	Calculus II		x	x		4	MTH 251	MTH 252	4
	Perspectives ²	General Ed Req - See Advisor	x	x	x	x	3	Perspectives Elective	Perspectives Elective - See OSU General Ed Req	3
Term 3	Perspectives ³	Biological Science With Lab - See Advisor	x	x	x	x	4	Perspectives Elective	Biological Sci Elective - See OSU General Ed Req	3
	CH 223 ^{E,1}	General Chemistry III		x			5	CH 221	CH 233 Lec & CH 263 Lab	4
	MTH 253 ^{E,1}	Calculus III			x		4	DRF 112 CAD I	UCC MTH 253 & MTH 261 = OSU MTH 306	4
	MTH 261 ^{E,1}	Linear Algebra			x		2	MTH 111 Algebra	See note above for MTH 306	0
Summer										
Term 4	ENGR 201	Electrical Fundamentals	x				4	MTH 251 Co-requisite	ENGR 201	3
	ENGR 211 ^{E,1}	Statics	x				4	MTH 112	ENGR 211	3
	MTH 254 ^{E,1}	Vector Calculus I	x				4	MTH 252	MTH 254	4
	PH 211 ^{E,1}	Physics I w/Calculus	x				5	MTH 251 Co-requisite	PH 211 & PH 221 Rec	4
	CH 241	Organic Chemistry	x				4	CH 223	UCC CH 241 & 242 & 243 = OSU CH 331 & 332	
Term 5	CH 242	Organic Chemistry		x			4	CH 242	UCC CH 241 & 242 & 243 = OSU CH 331 & 332	
	MTH 256 ^{E,1}	Differential Equations		x			4	MTH 252	MTH 256	4
	PH 212 ^{E,1}	Physics II w/Calculus		x			5	PH 211	PH 212 & PH 222 Rec	4
	Perspectives ²	General Ed Req - See Advisor	x	x	x	x	3	Perspectives Elective	Perspectives Elective - See OSU General Ed Req	3
Term 6	CH 243	Organic Chemistry		x			4	CH 242	UCC CH 241 & 242 & 243 = OSU CH 331 & 332	
	SP 111 ^{E,1}	Public Speaking	x	x	x		4	WR 095	COMM 111	3
	PH 213 ^{E,1}	Physics III w/Calculus			x		5	PH 212	PH 213 & PH 223 Rec	4
	WR 227	Technical Report Writing	x	x	x	x	4	WR 222	WR 327	3
TOTAL DEGREE CREDITS							104			

*A grade of "C" or better is required in all courses.

Program Advisor:

- NOTES:**
- ^ERequired by OSU College of Engineering for entry into the Pro Program
 - Students can take 5 Perspective Electives for Humanities/Social Science that transfer to OSU as General Ed requirements. Two courses are required to complete UCC AS degree. See Advisor. Link to OSU/UCC General Ed Transfer for Bac Core Courses is <http://admissions.oregonstate.edu/baccalaureate-core-course-equivalencies-umpqua-community-college>
 - Consider SOILS 205/206 as the Biological Elective

CHEMICAL ENGINEERING CURRICULUM (192 credits) - Revised 5/24/2016

Cr.	First Year = 47 credits			Second Year = 50 credits			Third Year = 47 credits			Fourth Year = 48 credits		
	Fall	Winter	Spring	Fall	Winter	Spring	Fall	Winter	Spring	Fall	Winter	Spring
1	Chemistry CH 231 (4FW)	Chemistry CH 232 (4WS)	Chemistry CH 233 (4S)	O Chem CH 331 (4FW)	O Chem CH 332 (4WS)	Tec Rpts WR 327 (3EWS)	P Chem CH 440 (3F)	P Chem CH 441 (3W)	P Chem CH 442 (3S)	CHE Lab CBEE 414 (3F)	CHE Lab CHE 415 (3W)	CHE Lab CBEE 416 or ENGR Topics 3 (3S)
2												
3												
4												
5	CH Lab 261 (1)	CH Lab 262 (1)	CH Lab 263 (1)			EE Fund ENGR 201 (3EWS)	ENGR Topics 1 (3)	Proc Dyn CHE 361 (3W)	Proc Ctrl CHE 461 (3S)	Rxn Engr CHE 443 (4F)	Design CHE 431 (3W)	Design CHE 432 (3S)
6												
7	Dif MTH 251 (4FWS)	Integral MTH 252 (4FWS)	Vector Calc MTH 254 (4FWS)	Dif Egs MTH 256 (4FWS)	Mtrx & Pwr MTH 306 (4FWS)	HHS 231 (2EWS) Life Fit	Transport I Fluids CHE 331 (4F)	Transport II Heat CHE 332 (3W)	Transport III Mass CHE 333 (3S)		Persp 5 (3)	Synth 1 (3)
8						HHS 24* (1)						
9												
10												
11	Orient CBEE 101 (3F)	Prob Solv CBEE 102 (3W)	Physics PH 211 (4FWS)	Physics PH 212 (4FWS)	Physics PH 213 (4WS)	Statics ENGR 211 (3EWS)	Thermo I CHE 311 (3F)	Thermo II CHE 312 (3W)	Transport Lab CHE 334 (2S)	Unit Ops CHE 411 (4F)	ENGR Topics 2 (3)	Synth 2 (3)
12												
13												
14	Eng Comp WR 121 (3FWS)	BioSlab ^c (4)	COMM 111/114 (3FWS)	Mat Bal CBEE 211 (3F)	Energy Bal CBEE 212 (3W)	Process Data Anal CBEE 213 (4S)	Engr Ethics CHE 320 ^d (3F)	Persp 3 (3)	Adv Chem 1 w/ lab (3)	Persp 4 (3)	ENGR Topics 3 (3)	Free Electives (4)
15												
16												
17												
18												

Notes:

- Only Persp, Syn, HHS 231, HHS 24* or PAC, and FREE can be taken with S/U grading (# of S/U credits are limited to 3X # of terms at OSU, up to 36 max).**
- "Gray shaded" courses required for admission to professional program and contribute to "core" GPA used for admission (also 80 credits minimum completed).
- Must satisfy the OSU-BAC "Biological Science (with lab)" requirement - see list of acceptable courses in current Schedule of Classes.
- CHE 320 satisfies the department Ethics Requirement.

Technical Electives



Univ & College Core



Curriculum Check List Chemical Engineering

Student's Name: _____

Form completed by: _____

Declared Option: _____

Date: _____

Required ChE Courses (63 credits)

CBEE 101 (3) _____
 CBEE 102 (3) _____
 CBEE 211 (3) _____
 CBEE 212 (3) _____
 CBEE 213 (4) _____
 ChE 311 (3) _____
 ChE 312 (3) _____
 ChE 331 (4) _____
 ChE 332 (3) _____
 ChE 333 (3) _____
 ChE 361 (3) _____
 ChE 411 (4) _____

CBEE 414 (3) _____
 ChE 415 (3) _____
 ChE 431 (3) _____
 ChE 432 (3) _____
 ChE 443 (4) _____
 ChE 461 (3) _____
ChE 334 (2) _____

Required ENGR Courses (6 credits)

ENGR 201 (3) _____
 ENGR 211 (3) _____

Advanced Chemistry (17 credits)

*CH 331 (4) _____
 *CH 332 (4) _____
 CH 440 (3) _____
 CH 441 (3) _____
 CH 442 (3) _____

**Restricted Electives (19 credits)

() _____
 () _____
 () _____
 () _____
 () _____

CBEE 416 optional (3) _____

Free Electives (4 credits)

() _____

Mathematics (20 credits)

MTH 251 (4) _____
 MTH 252 (4) _____
 MTH 306 (4) _____
 MTH 254 (4) _____
 MTH 256 (4) _____

Basic Science (27 credits)

CH 231/261 (5) _____
 CH 232/262 (5) _____
 CH 233/263 (5) _____
 PH 211 (4) _____
 PH 212 (4) _____
 PH 213 (4) _____

Basic Sci./Math, Biological Science Elective (4 credits) (might be constrained by OPTION)

() _____

Communication Skills (9 credits)

WR 121 (3) _____
 WR 327 (3) _____
 COMM 111/ 114 (3) _____

Fitness (3 credits)

HHS 231 (2) _____
 HHS 24 x (1) _____

Humanities and Social Sciences (24 credits)

Perspectives

Western Culture () _____
 Cultural Diversity () _____
 Literature & Arts () _____
 Soc. Proc. & Inst. () _____
 Diff., Power, Disc. () _____
 Persp. Elective () _____
 CHE 320 (3) _____

Synthesis

Cont. Global Issues

Sci., Tech. & Soc. _____

*The entire organic chemistry sequence CH 334, 335, 336 can be used in place of the entire sequence CH 331, 332.

**12 credits must be upper division engineering topics; 7 credits must be Advanced Chemistry /one chemistry class with a lab

Our Mission is to graduate students immediately prepared for professional practice.