CIVIL ENGINEERING TRANSFER, AS
OIT ADVISING GUIDE

Prerequisites and Course Availability per Term

(for complete information, see 2017-2018 UCC Catalog) **REVISED 01/02/17**

	UCC Course No.	UCC Course Name	Term Offered F	W	S	S	Credits	Prerequisites/Notes		OIT Course No.	Credits
Term 1	CH 221	General Chemistry I /Lec/Lab/Rec	x				5	MTH 111		CH 201+CH 204 Lab	5
	DRF 112	Computer Aided Drafting (CAD) I	x				3	MTH 65		CE 203	3
	ENGR 111	Engineering Orientation I	x				3	MTH 65		UCC ENGR 111 + ENGR 112 = OIT ENGR 101+ ENGR 102 + CE 205	6
	MTH 251	Calculus I	x	x			5	MTH 112		MTH 251	4
									16		
Term 2	CH 222	General Chemistry II		x			5	CH 221		CH 202+CH 205 Lab	5
	GIS 234	Intro to Geographic Information Systems (GIS)		x			4	DRF 112		GIS 134	3
	ENGR 112	Engineering Orientation II		x			3	ENGR 111		UCC ENGR 111 + ENGR 112 = OIT ENGR 101+ ENGR 102 + CE 205 - See note above	0
	MTH 252	Calculus II		x	x		4	MTH 251		MTH 252	4
									16		
Term 3	Arts & Letters[1]	Arts & Letters Elective - See Advisor	x	x	x	x	3			Humanities Elective	3
	SUR 161	Plane Surveying I			x		4			SUR 161	4
	MTH 253[2]	Calculus III			x		4	DRF 112 CAD I		OIT Math Elective[2]	3
											0
	SP 111	Public Speaking	x	x	x		4	WR 095	15	SP 111	3
Summer											
Term 4											
	ENGR 211	Statics	x				4	MTH 112		ENGR 211	4
	MTH 254	Vector Calculus I	x				4	MTH 252		MTH 254	4
	PH 211	Physics I w/Calculus	x				5	MTH 251 Co-requisite		PH 221	4
	WR 121	English Composition: Intro to Argument	x	x	x	x	4	WR 115 or Placement Test	17	WR 121	3
Term 5	Social Science[1]	Social Science Elective	x	x	x	x	3			Social Science Elective	3
	MTH 256	Differential Equations		x			4	MTH 252		OIT MTH 321	4
	PH 212	Physics II w/Calculus		x			5	PH 211		PH 222	4
	WR 122	English Composition: Style and Argument	x	x	x	x	4	WR 121		WR 122	3
									16		
Term 6	ENGR 213	Strength of Materials			x		4	ENGR 211		ENGR 213	4
	Arts & Letters[1]	Arts & Letters Elective - See Advisor	x	x	x		3			Humanities Elective	3
	MTH 265	Statistics for Engineers & Scientists			x		4			OIT MTH 361	4
	WR 227	Technical Report Writing	x	x	x	x	4	WR 222		WR 227	3
									15		
	TOTAL DEGREE CREDITS						95				86

Program Advisor:

NOTES:
1. One of the Arts & Letters or Social Science Electives must also meet UCC criteria for Cultural Diversity
2. Either MTH 253 or PH 213 can be taken as OIT Math Elective

ADDITIONAL CLASSES THAT CAN BE TAKEN AT UCC

UCC Course No.	UCC Course Name	Term Offered F	W	S	S	Credits	Prerequisites/Notes	OIT Course No.	Credits
G 201	General Geology	x				4	MTH 111	GEOL 201	4
Humanities	Humanitites Elective - See Advisor	x	x	x		3		Humanities Elective	3
Social Science	Social Science Elective	x	x	x	x	3		Social Science Elective	3
	ADDITIONAL CREDITS					**10**			10
	TOTAL ARTICULATED CREDITS					**105**			96

Last updated 1/2/2017

Umpqua Community College
Engineering Transfer Program

to

Oregon Institute of Technology
Bachelor of Science in Civil Engineering

Articulation Agreement
2016 - 2017 Catalog

It is agreed that students transferring from Umpqua Community College's (UCC) Engineering Transfer program to Oregon Institute of Technology's (Oregon Tech) Bachelor of Science in Civil Engineering (BSCE) will be given credit for courses as specified below. This agreement is based on the evaluation of the rigor and content of the general education and technical courses at both UCC and Oregon Tech and is subject to a yearly reevaluation by both schools for continuance. This agreement is dated December 6, 2016.

Baccalaureate students must complete a minimum of 60 credits of upper-division work before a degree will be awarded. Upper-division is defined as 300-and 400-level classes at a bachelor's degree granting institution. Baccalaureate students at Oregon Tech must complete 45 credits from Oregon Tech before a degree will be awarded.

Students are responsible for notifying the Oregon Tech Admissions and Registrar's Office when operating under an articulation agreement to ensure their credits transfer as outlined in this agreement. In order to utilize this agreement students must be attending Umpqua Community College during the above catalog year. All civil engineering students must graduate at Oregon Tech within three years of this approval.

By_____
Clay Baumgartner
Department Chair
Umpqua Community College

By_____
Marla R. Edge
Director, Academic Agreements
Oregon Institute of Technology

By_____
Jesse Morrow
Dean, Career and Technology Education
Umpqua Community College

By_____
Wendy Ivie
University Registrar
Oregon Institute of Technology

By_____
David Farrington
Director of Enrollment Services/Registrar
Umpqua Community College

By_____
Sean St. Clair
Civil Engineering, Department Chair
Oregon Institute of Technology

Courses Required for Oregon Tech's Civil Engineering Degree to be taken at UCC.

Umpqua Community College Course Number & Title	Qtr. Units	Oregon Institute of Technology Course Number & Title	Qtr. Units
CH 221 General Chemistry	5	CHE 221 General Chemistry with Lab	5
CH 222 General Chemistry	5	CHE 222 General Chemistry with Lab	5
DRF 112 CAD I	3	CE 203 Engineering Graphics	3
ENGR 111 Engineering Orientation ENGR 112 Problem Solving & Technology	3 3	ENGR 101 Introduction to Engineering I ENGR 102 Introduction to Engineering II CE 205 Computational Methods	2 2 2
ENGR 211 Statics	4	ENGR 211 Statics	4
ENGR 213 Strength of Materials	4	ENGR 213 Strength of Materials	4
GIS 234 GIS I Intro to GIS	4	GIS 134 Geographic Information Systems	3
Humanities electives [1]	6	Humanities electives [1]	6
Social Science electives[2]	6	Social Science electives[2]	6
MTH 251 Calculus I	5	MATH 251 Differential Calculus	4
MTH 252 Calculus II	4	MATH 252 Integral Calculus	4
MTH 253 Calculus III OR PH 213 General Physics w/Calculus[4]	4 5	Math/Science Elective (BSCE only)	3
MTH 254 Vector Calculus I	4	MATH 254N Vector Calculus I	4
MTH 256 Differential Equations	4	MATH 321 Applied Differential Equations I [3]	4
PH 211 General Physics w/Calculus	5	PHY 221 General Physics with Calculus	4
PH 212 General Physics w/Calculus	5	PHY 222 General Physics with Calculus	4
SP 111 Fundamentals of Public Speaking	4	SPE 111 Public Speaking	3
SUR 161 Plane Surveying I	4	GME 161 Plane Surveying I	4
WR 121 English Composition: Intro to Argument	4	WRI 121 English Composition	3
WR 122 English Composition: Style and Argument	4	WRI 122 Argumentative Writing	3
WR 227 Technical Report Writing	4	WRI 227 Technical Report Writing	3
Total UCC Credits [4]	**94-95**	**Total Articulated Degree Credits**	**85**

Courses required for Oregon Tech's Bachelor of Science in Civil Engineering and can be taken at either UCC or Oregon Tech.

Umpqua Community College Course Number & Title	Qtr. Units	Oregon Institute of Technology Course Number & Title	Qtr. Units
G 201 General Geology	4	GEOL 201 Physical Geology	4
MTH 265 Statistics for Engineers & Scientists	4	MTH 361 Statistical Methods I [3]	4
Humanities Elective [1]	3	Humanities Elective [1]	3
Additional UCC Credits [5]	**11**	**Additional Oregon Tech Credits**	**11**
Total Articulated Credits [5]	**105-106**	**Total Articulated Degree Credits**	**96**

In addition to the above courses, the courses listed below are also required for the Bachelor of Science in Civil Engineering and are offered only by Oregon Tech.

Oregon Institute of Technology Course Number & Title	Qtr. Units
CE 212 Civil Engineering Materials	4
CE 308 Principles of Professional Practice	4
CE 311 Intro to Geotechnical Engineering	5
CE 312 Earth Pressures & Foundations	3
CE 331 Structural Analysis	4
CE 341 Elementary Structural Design	5
CE 351 Intro to Transportation Engineering	4
CE 354 Traffic Engineering	3
CE 371 Closed Conduit System	4
CE 374 Hydrology	4
CE 401/COM 401Civil Engineering Project I	5
CE 402/COM 402Civil Engineering Project 2	7
CE 405 Sustainability & Infrastructure	3
CE 442/444 Intermediate Structures Course	4
CE 4XX Civil Engineering Electives [5]	15
ENGR 318 Engineering Mechanics Fluids	4
ANTH/HIST 335 Social Science Elective [2]	3
ANTH 452 Globalization (SS Elective) [2]	3
Additional Oregon Tech Credits [6]	**84**
Total Degree Credits [7]	**180**

1. Students must take 9 credits of Humanities Electives. Transferable Humanities courses may be skill or performance based, but only up to (no more than) 3 credits. Choose from ART, ENG, FA, MUS, PHL, and R prefixes or other courses. One Humanities course must study literature (typically LIT prefix).
2. Six credits of lower division Social Science Electives are required. Choose from ANTH, ECON, HST, PS, PSY, and SOC prefixes or other courses designated as Social Science Electives by the Oregon Tech Registrar's Office. An additional 6 credits of specified 300- and 400- level classes (combined total of 12 credits of Social Science Electives) will be taken at OIT.
3. Does not count toward 60 upper-division credit requirement
4. Excess credits will transfer to Oregon Tech as general elective credit; these credits will not be used toward the Bachelor of Science in Civil Engineering Degree.
5. OIT requires a total of at least 15 credits of Civil Electives (CE 4xx Civil Engineering Elective), of which at least 9 credits must be CE 400 or 500 level. Allowable non-CE electives include only ENV 314, ENV 435, GME 351 or GME 372, GME 425, MATH 341, MATH 425, MATH 451, MATH 465.
6. Baccalaureate students must complete a minimum of 60 credits of upper-division work before a degree will be awarded. Upper-division is defined as 300- and 400-level classes at a bachelor's degree granting institution and 45 credits must be from Oregon Tech.
7. Oregon Tech's Bachelor of Science in Civil Engineering requires 180 total credits.

science in high school. Two years of algebra and one year each of geometry, trigonometry, chemistry and physics are preferred. Additional courses in mathematics and computer-aided drafting are desirable.

Accreditation

The Civil Engineering Program is accredited by the Engineering Accreditation Commission (EAC) of ABET, Inc., 111 Market Place, Suite 1050, Baltimore, MD 21202-4012, telephone: (410) 347-7700. ABET is a specialized accrediting board recognized by the Council for Higher Education and/or the Secretary of the U.S. Department of Education.

Graduation Requirements

All courses listed in the curriculum for the current catalog year must be completed to be eligible for graduation, unless a student has already completed the requirements for a category that has changed. When changes are made to the curriculum, students who entered the program under a previous catalog will work with their academic advisors to transition to meet the requirements of the current catalog.

For the concurrent bachelor's and master's degrees in Civil Engineering, a minimum of 225 credits must be completed. Students must maintain a 3.0 GPA for progression to the fourth and fifth years of study. In addition, a final grade of "C" or better must be earned in all math and science courses and those with CE or CIV, ENGR, and GME prefixes, as well as all courses listed as prerequisites for these courses. At least 45 credits of graduate work must be completed.

For the bachelor's degree in Civil Engineering, a minimum of 180 credits must be completed and students must maintain a 2.0 GPA to be eligible for graduation. In addition, a final grade of "C" or better must be earned in all math and science courses and those with CE or CIV, ENGR, and GME prefixes as well as all listed prerequisites for these courses with a minimum GPA of 3.0 earned in 500-level courses.

The Master of Science in Civil Engineering requires completing 45 credits of graduate work with a final grade of "C" or better in all graduate courses.

Bachelor of Science in Civil Engineering

Curriculum

Required courses and recommended terms during which they should be taken:

Freshman Year		Fall
CHE 221	General Chemistry I	5
ENGR 101	Introduction to Engineering I	2
SPE 111	Public Speaking	3
WRI 121	English Composition	3
	Humanities Elective*	3
Total		**16**

Freshman Year		Winter
CHE 222	General Chemistry II	5
ENGR 102	Introduction to Engineering II	2
WRI 122	Argumentative Writing	3
	Humanities Elective*	3
	Social Science Elective	3
Total		**16**

Freshman Year		Spring
CE 203	Engineering Graphics	3
GEOL 201	Physical Geology	4
MATH 251	Differential Calculus	4
	Humanities Elective*	3
Total		**14**

Sophomore Year		Fall
CE 212	Civil Engineering Materials	4
GME 161	Plane Surveying I	4
MATH 252	Integral Calculus	4
PHY 221	General Physics with Calculus	4
Total		**16**

Sophomore Year		Winter
CE 205	Computational Methods	2
ENGR 211	Engineering Mechanics: Statics	4
MATH 254	N Vector Calculus I	4
PHY 222	General Physics with Calculus	4
Total		**14**

Sophomore Year		Spring
CE 208	Principles of Professional Practice	4
ENGR 213	Engineering Mechanics: Strength of Materials	4
GIS 134	Geographic Information systems	3
WRI 227	Technical Report Writing	3
Total		**14**

Junior Year		Fall
CE 311	Intro to Geotechnical Engineering	5
CE 331	Structural Analysis	4
ENGR 318	Engineering Mechanics: Fluids	4
MATH 361	Statistical Methods I	4
Total		**17**

Junior Year		Winter
ANTH/HIST 335	Social Science Elective	3
CE 341	Elementary Structural Design	5
CE 351	Intro to Transportation Engineering	4
CE 371	Closed Conduit System	4
Total		**16**

Junior Year		Spring
CE 312	Earth Pressures & Foundations	3
CE 354	Traffic Engineering	3
CE 374	Hydrology	4
MATH 321	Applied Differential Equations I	4
Total		**14**

Senior Year		Fall
CE 401/ COM 401	Civil Engineering Project I	5
CE 405	Sustainability & Infrastructure	3
CE 442/444	(Intermediate Structures Course)	4
CE 4XX	Civil Engineering Elective	3
Total		**15**

Senior Year		Winter
CE 402/ COM 402	Civil Engineering Project II	7
CE 4XX	Civil Engineering Elective	3
CE 4XX	Civil Engineering Elective	3
Total		**13**

Senior Year		Spring
ANTH 452	Globalization (SS)	3
CE 4XX	Civil Engineering Elective	3
CE 4XX	Civil Engineering Elective	3
	Math/Science Elective	3
	Social Science Elective	3
Total		**15**

* Humanities courses may not be skill or performance based. One Humanities course must study literature (typically LIT prefix).

Civil electives must total to at least 15 credits (of which at least 9 credits must be CE 400 or 500 level electives).

Total Credits Required for B.S. in Civil Engineering: 180