



## COMMUNITY COLLEGE ASSOCIATE OF SCIENCE AREA OF EMPHASIS AMENDMENT FORM

This form should be completed electronically and the boxes will expand to accommodate text.

<b>College:</b> Clackamas Community College	<b>Date:</b>
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CAREER LEARNING AREA	
<input type="checkbox"/> Ag, Food & Natural Resource Systems	<input type="checkbox"/> Health Services
<input type="checkbox"/> Arts, Information & Communications	<input type="checkbox"/> Human Resources
<input type="checkbox"/> Business & Management	<input checked="" type="checkbox"/> Industrial & Engineering Systems


PROGRAM INFORMATION					
APPROVED Program Title	APPROVED CIP Code <small>(Include 7<sup>th</sup> &amp; 8<sup>th</sup> digits used for OCCURS reporting.)</small>			APPROVED Recognition Award	Curren t Credits
	6-digit CIP	7 <sup>th</sup> digit	8 <sup>th</sup> digit		
AS Area of Emphasis Title: Engineering – Environmental Engineering				Associate of Applied Science Area of Emphasis	105
Partnering Institution Name Oregon State University					

TYPE OF PROGRAM AMENDMENT <small>(Check ALL That Apply)</small>			
<input type="checkbox"/> New Agreement	<input checked="" type="checkbox"/> Curriculum Revision	<input checked="" type="checkbox"/> Revision in Program Credits	
		<i>Proposed Total Credits:</i>	<b>110</b>
<input type="checkbox"/> <b>SUSPENSION</b> of Program	<i>Reason for Suspension:</i>		
<b>Suspension Effective Date:</b>			

## CURRICULUM AMENDMENT

[List in a Defined Sequence of Courses Format, e.g., Quarter-to-quarter mapping.  
For a New Program, complete the Proposed Curriculum section only.]

<b>CURRENT CURRICULUM 2016-17</b> [List entire curriculum as last approved]				<b>PROPOSED CURRICULUM 2017-18</b> [List only course(s) to be amended]			
Course Number	Course Title	Clock Hours	Credits	Course Number	Course Title	Clock Hours	Credits
<b>Program Requirements – First Year</b>							
<b>Fall Term</b>							
ENGR-111	Introduction to Engineering	33	3				
MTH-251	Calculus I	55	5				
WR-121	English Composition	44	4				
--	Social Processes elective		4				
<b>Winter Term</b>							
CH-221	General Chemistry	77	5				
ENGR-112	Engineering Programming	33	3				
MTH-252	Calculus II	55	5				
WR-227	Technical Report Writing	44	4				
<b>Spring Term</b>							
CH-222	General Chemistry	77	5				
ENGR-115	Engineering Graphics	33	3				
MTH-254	Vector Calculus	55	5				
--	Western Culture elective		4				
<b>Summer Term</b>							
CH-223	General Chemistry	77	5				
COMM-111	Public Speaking	44	4				
MTH-256	Differential Equations	44	4				
<b>Program Requirements -- Second Year</b>							
<b>Fall Term</b>							
CH-241	Organic Chemistry I	77	5				
ENGR-211	Statics	44	4				
PH-211	General Physics with Calculus	70	5				
<b>Winter Term</b>							
CH-242	Organic Chemistry II	77	5				
ENGR-212	Dynamics	44	4				
PH-212	General Physics with Calculus	70	5				
<b>Spring Term</b>							
				CH-243	Organic Chemistry III	77	5
ENGR-213	Strength of Materials	44	4				
MTH-253	Calculus III	55	5				
PH-213	General Physics with Calculus	44	5				
<b>Social Processes Elective</b>							
ANT-103; EC-201, 202, 230; HST-101, 102, 103; PS-201, 202, 204, 205, 225; PSY-110, 200, 205, 219, 231; SOC-204, 205, 206							
<b>Western Culture Elective</b>							
ART-204, 205, 206; ENG-107, 108, 109, 201, 202, 203, 204, 205, 250, 251, 253, 254, 255, 275; GEO-122, 208, 230; HST-101, 102, 103, 201, 202, 203; PHL-102, 215; PS-206; R-204							
<b>Optional:</b> While not required for the A.S. degree, students may complete additional coursework at CCC that will meet requirements for the Bachelor of Science degree at Oregon State University. The Bachelor of Science degree requires the completion of one course from each category below.							
<b>Cultural Diversity Elective</b>							

ANT-230, 231, 232; ENG-210, 213, 252; GEO-110, 121, 230; R-101, 102, 103, 210			
<b>Literature and the Arts Elective</b>			
ART-101, 102, 103, 204, 205, 206, 211, 212, 213; DMC-194; ENG-104, 105, 106, 107, 108, 109, 194, 195, 201, 202, 203, 204, 205, 213, 250, 251, 252, 253, 254, 255, 260, 275; MUS-105, 205, 206			
<b>Difference, Power, and Discrimination Elective</b>			
HST-201, 202, 203; SOC-225			
<b>Biological Science Elective</b>			
ASC-200, 201, 202; BI-101, 102, 103, 204, 211, 212, 213, 234; ESR-171, 172, 173; Z-201, 202, 203			
<b>Physical Education Elective</b>			
HPE-295			
<b>TOTAL CURRENT CREDITS:</b>		105	<b>TOTAL PROPOSED CREDITS:</b> 110
<b>College Contact</b>	Kristin Rorrer	<b>Telephone No.</b>	541-737-7255
<b>E-Mail Address</b>	Kristin.rorrer@oregonstate.edu	<b>Fax No.</b>	
<b>Chief Academic Officer or CTE Dean Signature</b>			<b>Date</b> 1/19/17

