

Program Amendments

January 18, 2019 (8-10am, CC127)

Program
Administrative Assistant CC
Administrative Professional AAS
AS Engineering - George Fox
AS Engineering - OIT Electrical
AS Engineering - OIT Mechanical
AS Engineering - OIT Renewable Energy
AS Engineering - OSU Biological
AS Engineering - OSU Chemical
AS Engineering - OSU Civil
AS Engineering - OSU Construction Engineering Management
AS Engineering - OSU Ecological
AS Engineering - OSU Electrical
AS Engineering - OSU Energy Systems
AS Engineering - OSU Environmental
AS Engineering - OSU Industrial Manufacturing
AS Engineering - OSU Mechanical
AS Engineering - PSU Civil Environmental
AS Engineering - PSU Electrical Computer
AS Engineering - PSU Mechanical
Auto Body/Collision Repair and Refinishing Technology AAS
Basic Health Sciences CPCC
Clinical Laboratory Assistant CC
Criminal Justice AAS
Criminal Justice AAS – Corrections Option
Emergency Medical Technology CC
Geographic Information Systems (GIS) Technology CC
Horticulture AAS
Human Resource Management CC
Landscape Management AAS
Landscape Management AAS - Arboriculture Option
Medical Assistant CC
Organic Farming CC
Retail Management CC

Office of Educational Improvement & Innovation

Phone: (503) 378-3600 FAX: (503) 378-5156



COMMUNITY COLLEGE PROGRAM AMENDMENT FORM

(For changes to State Approved Associate of Applied Science degree, AAS option and Certificate of Completion programs)

This form should be completed electronically and the boxes will expand to accommodate text. Current instructions, forms, handouts and other useful resources are located at http://www.ode.state.or.us/search/results/?id=231

College:	Clackamas Community College	Date	

CAREER LEARNING AREA							
Ag, Food & Natural Resource Systems	Health Services						
Arts, Information & Communications	Human Resources						
✓ Business & Management	Industrial & Engineering Systems						

PROGRAM INFORMATION								
<u>APPROVED</u> Program Title	APPROVED CIP Code (Include 7 th & 8 th digits used for OCCURS reporting.)		igits S	<u>APPROVED</u> Recognition Award	Current Credits			
(For Official Program Title, refer to your directory at <u>http://www.ode.state.or.us/search/results/?id=232</u>)	<u>6-digit CIP</u>	<u>Zth digit</u>	<u>8th digit</u>					
Parent AAS Title: Administrative Professional AAS				AAS				
Option Title**				OPTION to AAS Degree				
Certificate Title: <u>Within</u> AAS Degree? √ Yes** □ ^{No} Administrative Assistant	52.0401			✓ CC1R Related Certificate (45-60 credits)	45			

**Enter name of base degree in `AAS Title' box Last amendment approved on 05.18.18

Image: Suspension Effective Date: Title Change for Program Image: Curriculum Revision </

	[list in a Defined Sec			AMENDM	ENT Quarter-to-quarter mapping.			
					riculum section only.]			
CL	IRRENT CURRICULUM .	2018-19		PROPOSED CURRICULUM 2019-20				
Course	[List entire curriculum as last app Title	roved) Hours	Credits	Course	[List only course(s) to be ame Title	Hours	Credits	
Fall Term	Intie	Hours	Creaits	Course	litte	Hours	Creats	
BT-120	Personal Keyboarding	33	2		- 	1		
BT-120 BT-121	Data Entry	11	1					
BT-121 BT-124	Business Editing I	33	3					
BT-160	Word I	55	3		Move to Term 2			
WR-121	English Composition	44	4					
			•	BA-104	Business Math	33	3	
				BA-131	Introduction to Business Computing	44	4	
Winter Term					Comparing			
BA-104	Business Math	33	3					
BA-131	Introduction to Business Computing	44	4	Move to Term 1				
BT-122	Keyboarding Skillbuilding	33	2					
BT-125	Business Editing II	33	3					
BT-161	Word II	55	3	Move to Term 3				
				BA-111 or BA-211	General Accounting I Financial Accounting I	44	4	
				BT-124	Business Editing I	33	3	
				BT-160	Word I	55	3	
					Administrative Assistant program electives		3	
Spring Term						-		
BA-111 or BA-211	General Accounting I Financial Accounting I	44	4		Move to Term 2			
BA-285	Human Relations in Business	44	4					
BT-172	Introduction to Microsoft Outlook	33	2					
BT-216	Office Procedures	44	4					
	Administrative Assistant program electives		3		Move to Term 2			
				BT-125	Business Editing II	33	3	
				BT-161	Word II	55	3	
Program Elec	tives	-						
	Administration (BA) or Busin not included in the Administr							
	RENT CREDITS:		45	TOTAL PR	OPOSED CREDITS:			

College Contact	Bev Forney	Telephone No.	3115	
E-Mail Address	-	Fax No.		
Chief Academic Offic PTE Dean Signature		7	Date	12/3/18

Office of Educational Improvement & Innovation

Phone: (503) 378-3600 FAX: (503) 378-5156



COMMUNITY COLLEGE PROGRAM AMENDMENT FORM

(For changes to State Approved Associate of Applied Science degree, AAS option and Certificate of Completion programs)

This form should be completed electronically and the boxes will expand to accommodate text. Current instructions, forms, handouts and other useful resources are located at http://www.ode.state.or.us/search/results/?id=231

College:	Clackamas Community College	Date	

CAREER LEARNING AREA							
Ag, Food & Natural Resource Systems	Health Services						
Arts, Information & Communications	Human Resources						
✓ Business & Management	Industrial & Engineering Systems						

PROGRAM INFORMATION								
<u>APPROVED</u> Program Title (For Official Program Title, refer to your directory at <u>http://www.ode.state.or.us/search/results/?id=232</u>)	APPROVED CIP Code (Include 7 th & 8 th digits used for OCCURS reporting.) 6-digit CIP Z th digit digit digit		igits S	<u>APPROVED</u> Recognition Award	Current Credits			
AAS Title: Administrative Professional	52.0401			✓ Statewide AAS (90-108 credits)	90			
Option Title**				OPTION to AAS Degree				
Related Certificates: Administrative Assistant Certificate Administrative Assistant Training Certificate				Certificate of Completion				

**Enter name of base degree in `AAS Title' box Last amendment approved on 05.18.18

TYPE OF PROGRAM AMENDMENT

(Check ALL That Apply)

New Program++	Curriculum Revision	Revision in Program Credits
Title Change for Program		Proposed Total Credits:
Proposed AAS Title:		
Proposed OPTION Title:		
Proposed Certificate Title:		
SUSPENSION of Program	Reason for Suspension:	
Suspension Effective Date:		

++If new program is an additional award for an existing degree or certificate, complete 'Program Information' section for existing program.

		quence of	Courses Fo		uarter-to-quarter mapping.			
	For a New Pro CURRENT CURRICULUM		•		riculum section only.]	1 2010 2	20	
	[List entire curriculum as last app		9	PROPOSED CURRICULUM 2019-20 [List only course(s) to be amended]				
Course	Title	Hours	Credits	Course	Title	Hours	Credits	
			1 st Y	'ear		-		
Fall Term	=	-			-		_	
BA-101	Introduction to Business	44	4					
BT-120	Personal Keyboarding	33	2					
BT-121	Data Entry	11	1		Move to Term 2			
BT-124	Business Editing I	33	3		î			
WR-121	English Composition	44	4					
				BA-104	Business Math	33	3	
				BA-131	Introduction to Business Computing	44	4	
Winter Ter	m	_	_					
BA-104	Business Math	33	3					
BA-131	Introduction to Business Computing	44	4	Move to Term 1				
BT-122	Keyboarding Skillbuilding	33	2	Move to Term 6				
BT-125	Business Editing II	33	3	Move to Term 3				
BT-160	Word I	55	3					
				BA-111 or BA-211	General Accounting I Financial Accounting I	44	4	
				BT-120	Personal Keyboarding	33	2	
				BT-121	Data Entry	11	1	
				BT-124	Business Editing I	33	3	
Spring Ter		-		-				
BA-111 or BA-211	General Accounting I Financial Accounting I	44	4		Move to Term 2			
BT-161	Word II	55	3					
BT-172	Introduction to Microsoft Outlook	33	2					
CS-135S	Microsoft Excel	33	3					
	Administrative Professional Program elective		3					
				BT-125	Business Editing II	33	3	
		-	2 nd \	/ear				
Fall Term								
BA-205	Business Communications with Technology	44	4					
BA-226	Business Law I	44	4					
BA-285	Human Relations in Business	44	4					
BT-262	Integrated Projects	66	4					
Winter Ter	m							
BA-206	Management Fundamentals	44	4					
BA-218	Personal Finance	44	4					

BA-224	Human Resource Management	44	4				
	PE/Health/Safety/First Aid requirement		1				
	Administrative Professional program elective		3				
Spring Ter	m			-	-		-
BA-228	Computerized Accounting	33	3				
BT-216	Office Procedures	44	4				
BT-271	Advanced Business Projects	110	4				
	Administrative Professional program elective		3				
				BT-122	Keyboarding Skillbuilding	33	2
Administra	tive Professional Program Elect	ives					
	ess Administration (BA) or Busine not included in the Administration						
	URRENT CREDITS:		90	TOTAL PR	OPOSED CREDITS:	-	

College Contact	Bev Forney	Telephone No.	3115	
E-Mail Address		Fax No.		
Chief Academic Offic PTE Dean Signature			Date	12/3/18

Office of Educational Improvement & Innovation

Phone: (503) 378-3600 FAX: (503) 378-5156



COMMUNITY COLLEGE ASSOCIATE OF SCIENCE AREA OF EMPHASIS AMENDMENT FORM

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

College: Clackamas Community College

Date

CAREER LEARNING AREA					
Ag, Food & Natural Resource Systems	Health Services				
Arts, Information & Communications	Human Resources				
Business & Management	\checkmark Industrial & Engineering Systems				

PROGRAM INFORMATION							
<u>APPROVED</u> Program Title	APPROVED CIP Code (Include 7th & 8th digits used for OCCURS reporting.) 6-digit CIP Zh digit digit digit			<u>APPROVED</u> Recognition Award	Current Credits		
AS Area of Emphasis Title: Engineering				Associate of Applied Science Area of Emphasis	105		
Partnering Institution Name George Fox University							

Last amendment approved on 10.06.17

Check ALL That Apply)								
New Agreement	Curriculum Revision	Revision in Program Credi						
		<i>Proposed</i> Total Credits:	105- 106					
□ SUSPENSION of Program	Reason for Suspension:							
Suspension Effective Date:								

	[List in a D	efined Seque	nce of Courses F	AMENDMI Format, e.g., Quarte	er-to-quarter mapping.			
C	For a CURRENT CURRICULUM [List entire curriculum as last ap	2018-19		Proposed Curriculum section only.] PROPOSED CURRICULUM 2019-20 [List only course(s) to be amended]				
Course	Title	Hours	Credits	Course	Title	Hours	Credits	
	-	Progra	am Requirer	nents – First א	/ear	-	_	
Fall Term								
CH-221	General Chemistry	77	5					
ENGR-111	Introduction to Engineering	33	3					
MTH-251	Calculus I	55	5					
Winter Term	_		1			-		
CH-222	General Chemistry	77	5					
ENGR-112	Engineering Programming	33	3			_		
MTH-252	Calculus II	55	5 4					
 Spring Term	Engineering Elective	<u> </u>	4	<u> </u>	1	_ _		
ENGR-115	Engineering Graphics	33	3	•				
MTH-243	Statistics I	33 44	3					
MTH-253	Calculus III	44 55	4 5			+		
WR-121	English Composition	44	4			+		
Summer Ter		<u> </u>	<u> </u>	<u></u>	<u> </u>			
EC-201	Principles of Economics:	44	4			T		
Or	MICRO							
EC-202	or							
	Principles of Economics: MACRO							
WR-122	English Composition	44	4					
			-	ements – 2 nd Y	ear		<u></u>	
Fall Term								
MTH-254	Vector Calculus	55	5					
PH-211	General Physics with	70	5					
	Calculus							
	Engineering Elective		8					
Winter Term		-	T			-	-	
COMM-111	Public Speaking	44	4					
	Differential Equations	44	4					
PH-212	General Physics with Calculus	70	5					
	Engineering Elective		4		Engineering Elective		3-4	
Spring Term			<u>.</u>				<u> </u>	
HPE-295	Health & Fitness for Life	60	3		REMOVE			
MTH-261	Linear Algebra	44	4					
PH-213	General Physics with Calculus	70	5					
	History elective		4					
					Intercultural Experience Elective		4	
Electives		1	<u>.</u>					
	Computer Engineering majors	5:						
ENGR-171	Digital Logic		4					
ENGR-271	Digital Systems		4					
ENGR-221	Electrical Circuit Analysis I		4					
ENGR-222	Electrical Circuit Analysis I		4					
	& Civil Engineering majors:	I		Biomedical	Civil, and Mechanical Engin	eering mai	ors:	
ENGR-211	Statics	1	4					
			-					

ENGR-212	Dynamics		4	1					
ENGR-231	Properties of	Materials	4	1					
					HPE-295	Health & Fitness for	Life	60	3
Intercultural	Experience E	lective:				-		-	-
		: 6, 201, 202, 203;							
History Elect	ive:							_	-
	of the following 2, 103, 201, 20								
TOTAL CUR	R <i>RENT</i> CREI	DITS:	1	105	TOTAL PF	OPOSED CREDITS:	_		105-106
College Co	ntact	Eric Lee				Telephone No.	6163		
E-Mail Add	ress	elee@clackama	s.edu			Fax No.			
Chief Acad	emic Office	r or CTE Dean S	Signature	$\overline{\mathcal{A}}$	nd	Zan	Date	1/8/19)

Office of Educational Improvement & Innovation

Phone: (503) 378-3600 FAX: (503) 378-5156



COMMUNITY COLLEGE ASSOCIATE OF SCIENCE AREA OF EMPHASIS AMENDMENT FORM

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

College: Clackamas Community College

Date

CAREER LEARNING AREA					
Ag, Food & Natural Resource Systems	Health Services				
Arts, Information & Communications	Human Resources				
Business & Management	\checkmark Industrial & Engineering Systems				

PROGRAM INFORMATION							
<u>APPROVED</u> Program Title	APPROVED CIP Code (Include 7th & 8th digits used for OCCURS reporting.) 6-digit CIP Zh digit digit digit			<u>APPROVED</u> Recognition Award	Current Credits		
AS Area of Emphasis Title: Engineering - Electrical Engineering				Associate of Applied Science Area of Emphasis	104		
Partnering Institution Name Oregon Institute of Technology (Oregon Tech)							

Last amendment approved on 10/06/17

Check ALL That Apply)								
New Agreement	Curriculum Revision	Revision in Program Cred						
		<i>Proposed</i> Total Credits:	102- 104					
□ SUSPENSION of Program	Reason for Suspension:							
Suspension Effective Date:								

	listin o D						
For a New Program, complete the F CURRENT CURRICULUM 2018-19 [List entire curriculum as last approved)		Format, e.g., Quarter-to-quarter mapping. Proposed Curriculum section only.] PROPOSED CURRICULUM 2019-20 [List only course(s) to be amended]					
Course	Title	Hours	Credits	Course	Title	Hours	Credits
	2	Prog	ram Requir	ements – 1 st Y	ear	<u></u>	8
Fall Term							
CH-221	General Chemistry	77	5				
COMM-111	Public Speaking	44	4		Move to Term 3		
MTH-251	Calculus I	55	5				
WR-121	English Composition	44	4				
				ENGR-111	Introduction to Engineering	33	3
Winter Term	_	т	Т-		-	r	1
CH-222	General Chemistry	77	5				
MTH-252	Calculus II	55	5				<u> </u>
WR-122	English Composition	44	4	00.404	Move to Term 6	4.4	4
				CS-161 ENGR-171	Computer Science I Digital Logic	44 66	4 4
Spring Torm				ENGR-1/1		00	4
Spring Term WR-227	Technical Report Writing	44	4	1			
	Social Science Elective	44	4		REMOVE	<u></u>	<u>I</u>
	Track Requirement		8		REMOVE		
	Hack Requirement		0	COMM-111	Public Speaking	44	4
				ENGR-271	Digital Systems	66	4
				MTH-261	Linear Algebra	44	4
Summer Ter	rm	4	<u>.</u>				
	Track Requirement	T	12		REMOVE		
					Social Science Elective		3-4
		Prog	ram Require	ements – 2 nd Y	ear	-	-
Fall Term	-	_	_		-	_	_
ENGR-221	Electrical Circuit Analysis I	33	4				
MTH-254	Vector Calculus	55	5				
PH-211	General Physics with Calculus	70	5				
					Humanities or Social Science Elective		3-4
Winter Term	1				Elective		
ENGR-222	Electrical Circuit Analysis II	33	4				
MTH-256	Differential Equations	44	4				
PH-212	General Physics with Calculus	70	5				
				WR-122	English Composition	44	4
Spring Term		70				-	-
PH-213	General Physics with Calculus	70	5				
	Track Requirement		12		REMOVE		
			ļ	ENGR-223	Electrical Circuit Analysis III	33	4
			<u> </u>	MTH-253	Calculus III	55	5
			I rack Red	quirements			
			1		REMOVE		
		4.4					
COMM-219	Small Group Discussion	44	4				
COMM-219 CS-161	Computer Science I	44	4		Move to Term 2		
COMM-219 CS-161 ENGR-171	Computer Science I Digital Logic	44 66	4		Move to Term 2 Move to Term 2		
COMM-219 CS-161 ENGR-171 ENGR-223	Computer Science I Digital Logic Electrical Circuit Analysis III	44 66 33	4 4 4		Move to Term 2 Move to Term 2 Move to Term 7		
Electrical COMM-219 CS-161 ENGR-171 ENGR-223 ENGR-271 MTH-253	Computer Science I Digital Logic	44 66	4		Move to Term 2 Move to Term 2		

Humanities or Social Science Electives	33	3		REMO	/E	
Social Science Electives			_			
ANT -101, 102, 103, 231, 232; EC -200, 201, 202; GEO -100, 110, 121, 122, 130; HST -101, 102, 103, 130, 131, 132, 136, 137, 1 220; PS -200, 201, 203, 204, 205, 225, 297; PSY -101, 110, 200, 205, 214, 215, 219, 221, 2 SSC -160, 233, 235, 240, 241, 242; SOC -204, 205, 206, 210, 225; WS -101;		urses from the following s SEO, HST, PS, PSY, SO		VS		
Humanities Electives						
ART-101, 102, 103, 115, 116, 117, 131, 195, 2 226, 227, 250, 251, 252, 253, 254, 255, 281, 2 286, 291, 292, 293; ASL-201, 202, 203; BA-130; COMM-126, 140, 212, 218, 219, 227; DMC-195; ENG-104, 105, 106, 107, 108, 109, 116, 121, 1 204, 205, 213, 214, 218, 226, 240, 241, 242, 2 254, 266, 270; FR-201, 202, 203, 211; GER-201, 202, 203, 211; GER-201, 202, 203, 241, 242; J-211; MUS-105, 111, 112, 113, 205, 206, 211, 212, 2 PHL-101, 102, 103, 205, 210, 215; SPN-201, 202, 203; TA-101, 102, 103, 141, 142, 143; WR-220, 241, 242, 243, 244, 245, 248, 262, 26	82, 283, 28 30, 195, 2 50, 251, 25 213;	34, 285, 01, 202, 52, 253, 0;	ART, ASL (HUM, MUS	urses from the following s (200-level), ENG, FR (20 , PHL, R, SPN (200-leve	0-level), (
TOTAL CURRENT CREDITS:		104	TOTAL PI	ROPOSED CREDITS:		102-104
College Contact				Telephone No.		
E-Mail Address	lanoture			Fax No.	Date	1/0/10
Chief Academic Officer or CTE Dean S	iynature	$\Box \bigcirc$	nt	Zan	Date	1/8/19

Office of Educational Improvement & Innovation

Phone: (503) 378-3600 FAX: (503) 378-5156



COMMUNITY COLLEGE ASSOCIATE OF SCIENCE AREA OF EMPHASIS AMENDMENT FORM

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

College: Clackamas Community College

Date

CAREER LEARNING AREA					
Ag, Food & Natural Resource Systems	Health Services				
Arts, Information & Communications	Human Resources				
Business & Management	\checkmark Industrial & Engineering Systems				

PROGRAM INFORMATION							
<u>APPROVED</u> Program Title	APPROVED CIP Code (Include 7th & 8th digits used for OCCURS reporting.) 6-digit CIP Zh digit 8th digit			<u>APPROVED</u> Recognition Award	Current Credits		
AS Area of Emphasis Title: Engineering - Mechanical Engineering				Associate of Applied Science Area of Emphasis	104		
Partnering Institution Name Oregon Institute of Technology (Oregon Tech)							

Last amendment approved on 10/06/17

TYPE OF PROGRAM AMENDMENT (Check ALL That Apply)						
New Agreement	Curriculum Revision	Revision in Program Credits				
		<i>Proposed</i> Total Credits:	103-105			
□ SUSPENSION of Program	Reason for Suspension:					
Suspension Effective Date:						

	[List in a D For a	efined Seque	nce of Courses	Format, e.g., Quarte Proposed Curriculu	er-to-quarter mapping.		
CURRENT CURRICULUM 2018-19 [List entire curriculum as last approved)		[List only course(s) to be amended]					
Course	Title	Hours	Credits	Course	Title	Hours	Credits
		Prog	ram Requir	ements – 1 st Y	ear		
Fall Term			-	-		-	
CH-221	General Chemistry	77	5				
COMM-111	Public Speaking	44	4		Move to Term 3		
MTH-251 WR-121	Calculus I English Composition	55 44	5				
WR-121		44	4	ENGR-111	Introduction to Engineering	33	3
Winter Term		-		ENGR-TTT		33	3
CH-222	General Chemistry	77	5	•		T	T
MTH-252	Calculus II	55	5				
WR-122	English Composition	44	4				
				ENGR-231	Properties of Materials	66	4
Spring Term	1	-	4				
NR-227	Technical Report Writing	44	4			T	T
	Social Science Elective		4		REMOVE	-	•
	Track Requirement		8		REMOVE		
				COMM-111	Public Speaking	44	4
				ENGR-112	Engineering Programming	33	3
				MTH-254	Vector Calculus	55	5
Summer Tei	rm	-	-				
-	Track Requirement		12		REMOVE		
				MTH-256	Differential Equations	44	4
					Social Science Elective		3-4
		Prog	ram Require	ements – 2 nd Y	ear		
Fall Term			1.4				
ENGR-221 MTH-254	Electrical Circuit Analysis I Vector Calculus	66 55	4		REMOVE Move to Term 3		
PH-211	General Physics with	55 70	5 5		Nove to Term 3	1	1
F11 - 211	Calculus	70	3			44	
				ENGR-211			4
Winter Term				MTH-261	Linear Algebra	44	4
ENGR-222	-	66	1	•	REMOVE		
MTH-256	Electrical Circuit Analysis II Differential Equations	44	4		Move to Term 4		
PH-212	General Physics with Calculus	70	5				
				CDT-103	Computer-Aided Drafting I	66	3
				ENGR-212	Dynamics	44	4
		1	1		Humanities Electives		3-4
Spring Term	1		-				-
PH-213	General Physics with Calculus	70	5				
	Track Requirement		12		REMOVE	-	
				EC-201 Or EC-202	Principles of Economics: MICRO Principles of Economics: MACRO	44	4
				ENGR-201	Electrical Fundamentals	33	4
				ENGR-213	Strength of Materials	44	4
			Track Rec	uirements			
Mechanical							
CDT-103	Computer-Aided Drafting I	66	3		Move to Term 6		
EC-201 Or	Principles of Economics: MICRO	44	4		Move to Term 7		

EC-202	Principles of Economics: MACRO			
ENGR-111	Introduction to Engineering	33	3	Move to Term 1
ENGR-112	Engineering Programming	33	3	Move to Term 3
ENGR-211	Statics	44	4	Move to Term 5
ENGR-212	Dynamics	44	4	Move to Term 6
ENGR-213	Strength of Materials	44	4	Move to Term 7
ENGR-231	Properties of Materials	66	4	Move to Term 2
	Humanities Electives	33	3	REMOVE
Social Science	ce Electives			
ANT-101, 102, 103, 231, 232; EC-200, 201, 202; GEO-100, 110, 121, 122, 130; HST-101, 102, 103, 130, 131, 132, 136, 137, 138, 201, 202, 203, 220; PS-200, 201, 203, 204, 205, 225, 297; PSY-101, 110, 200, 205, 214, 215, 219, 221, 231, 240; SSC-160, 233, 235, 240, 241, 242; SOC-204, 205, 206, 210, 225;				ANT, EC, GEO, HST, PS, PSY, SOC, SSC, WS
WS-101; Humanities E				
226, 227, 250 286, 291, 292 ASL-201, 202 BA-130; COMM-126, 1 DMC-195; ENG-104, 105 204, 205, 213 254, 266, 270 FR-201, 202, GER-201, 202, HUM-160, 233 J-211; MUS-105, 117 PHL-101, 102 SPN-201, 202 TA-101, 102,	, 203; 40, 212, 218, 219, 227; 5, 106, 107, 108, 109, 116, 121; , 214, 218, 226, 240, 241, 242, ; 203, 211; 2, 203; 3, 240, 241, 242; 1, 112, 113, 205, 206, 211, 212 2, 103, 205, 210, 215;	282, 283 , 130, 195 250, 251 , 213;	, 284, 285, 5, 201, 202, , 252, 253,	Choose courses from the following subjects: ART, ASL (200-level), ENG, FR (200-level), GER (200-level), HUM, MUS, PHL, R, SPN (200-level), TA
TOTAL CUP	RRENT CREDITS:		104	TOTAL PROPOSED CREDITS: 103-105
College Co	ntact			Telephone No.
E-Mail Add	ress			Fax No.
Chief Acade	emic Officer <i>or</i> CTE Dean	Signatı	Ire	Durt Fran Date 1/8/19

Office of Educational Improvement & Innovation

Phone: (503) 378-3600 FAX: (503) 378-5156



COMMUNITY COLLEGE ASSOCIATE OF SCIENCE AREA OF EMPHASIS AMENDMENT FORM

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

College: Clackamas Community College

Date

CAREER LEARNING AREA					
Ag, Food & Natural Resource Systems					
Arts, Information & Communications	Human Resources				
Business & Management	\checkmark Industrial & Engineering Systems				

PROGRAM INFORMATION							
<u>APPROVED</u> Program Title	APPROVED CIP Code (Include 7th & 8th digits used for OCCURS reporting.) 6-digit CIP Z th 8th digit digit digit			<u>APPROVED</u> Recognition Award	Current Credits		
AS Area of Emphasis Title: Engineering – Renewable Energy				Associate of Applied Science Area of Emphasis	104		
Partnering Institution Name Oregon Institute of Technology (Oregon Tech)							

Last amendment approved on 10/06/17

TYPE OF PROGRAM AMENDMENT (Check ALL That Apply)						
New Agreement	Curriculum Revision	Revision in Program Credits				
		<i>Proposed</i> Total Credits:	99- 104			
□ SUSPENSION of Program	Reason for Suspension:					
Suspension Effective Date:						

Course Fall Term CH-221 COMM-111 MTH-251 WR-121	URRENT CURRICULUM [List entire curriculum as last app Title General Chemistry Public Speaking Calculus I English Composition	Proved) Hours Prog 77 44 55	Credits ram Require	Course	ROPOSED CURRICULUM [List only course(s) to be amen Title	ded]		
Fall Term CH-221 COMM-111 MTH-251 WR-121	General Chemistry Public Speaking Calculus I	Prog 77 44 55	ram Requir		Title			
CH-221 COMM-111 MTH-251 WR-121	Public Speaking Calculus I	77 44 55		emente 🗕 1 st V		Hours	Credits	
CH-221 COMM-111 MTH-251 WR-121	Public Speaking Calculus I	44 55			ear			
COMM-111 MTH-251 WR-121	Public Speaking Calculus I	44 55	5				1	
MTH-251 WR-121	Calculus I	55	4		Move to Term 2		<u></u>	
WR-121		-	4 5				T	
	Englien composition	44	4					
				RET-200 Or	Renewable Energy Systems Or		3-4	
				ENGR-111	Introduction to Engineering			
Winter Term		_	-		-		_	
CH-222	General Chemistry	77	5					
MTH-252	Calculus II	55	5					
WR-122	English Composition	44	4		Move to Term 5	-		
				COMM-111	Public Speaking	44	4	
					Humanities Elective		3-4	
Spring Term		-	1			r —		
WR-227	Technical Report Writing	44	4					
	Social Science Elective		4		REMOVE			
	Track Requirement		8	50.001	REMOVE		.	
				EC-201 Or EC-202	Principles of Economics: MICRO Principles of Economics:	44	4	
					MACRO			
				MTH-261	Linear Algebra	44	4	
			<u> </u>		Humanities Elective		3-4	
Summer Tern	n Track Requirement	T	12		REMOVE			
	Track Requirement	Brog		ements – 2 nd Y				
Fall Term		FIUg	ram Keyun		601			
ENGR-221	Electrical Circuit Analysis I	33	4	•			1	
	Vector Calculus	55	6					
PH-211	General Physics with Calculus	70	5					
				ENGR-211	Statics	44	4	
Winter Term				-				
ENGR-222	Electrical Circuit Analysis II	33	4					
MTH-256	Differential Equations	44	4					
PH-212	General Physics with Calculus	70	5					
				WR-122	English Composition	44	4	
Spring Term		1	T -				-	
PH-213	General Physics with Calculus	70	5					
	Track Requirement	 	12		REMOVE	0.0		
			ļ	ENGR-223	Electrical Circuit Analysis III	33	4	
					Social Science Elective		3-4	
		L	Treat D		Social Science Elective		<mark>3-4</mark>	
Domoural-L. C			Track Rec	uirements				
Renewable E		4.4	4					
COMM-219 EC-201 Or EC-202	Small Group Discussion Principles of Economics: MICRO Principles of Economics:	44	4	REMOVE Move to Term 3				

ENGR-211	Statics	44	4		Move to T	erm 4		
ENGR-223	Electrical Circuit Analysis III	33	4		Move to T	erm 6		
MTH-243	Statistics I	44	4		REMO	/E		
MTH-244	Statistics II	44	4					
MTH-261	Linear Algebra	44	4		Move to T	erm 3		
RET-200	Renewable Energy Systems	44	4		Move to T	erm 1		
Social Scien			-					
	2, 103, 231, 232;			Choose co	urses from the following	subjects:		
EC-200, 201,					GEO, HST, PS, PSY, SO		WS	
	0, 121, 122, 130;							
	2, 103, 130, 131, 132, 136, 137	7, 138, 201,	202, 203,					
220;	203, 204, 205, 225, 297;							
	203, 204, 205, 223, 297,), 200, 205, 214, 215, 219, 22 [,]	1 231 240.						
	<i>3</i> , 235, 240, 241, 242;	·, 20 ·, 270,						
	5, 206, 210, 225;							
WS- 101;								
Humanities E	Electives			-				
	2, 103, 115, 116, 117, 131, 19				urses from the following			
	, 251, 252, 253, 254, 255, 281	, 282, 283,	284, 285,		(200-level), ENG, FR (20		GER (200	-level),
286, 291, 292				HUM, MUS	<mark>, PHL, R, SPN</mark> (200-leve	el), TA		
ASL -201, 202 BA -130:	2, 203;							
/	40, 212, 218, 219, 227;							
DMC-195;	10, 212, 210, 210, 211,							
	5, 106, 107, 108, 109, 116, 12	1, 130, 195,	201, 202,					
	, 214, 218, 226, 240, 241, 242	2, 250, 251,	252, 253,					
254, 266, 270								
FR-201, 202,								
GER -201, 202	2, 203; 3, 240, 241, 242;							
J- 211;	5, 240, 241, 242,							
	1, 112, 113, 205, 206, 211, 21	2, 213:						
	2, 103, 205, 210, 215;	_,,						
SPN-201, 202								
	103, 141, 142, 143;							
	242, 243, 244, 245, 248, 262	, 263, 265, 2	270;					
TOTAL CUI	RRENT CREDITS:		104	TOTAL P	ROPOSED CREDITS			99-104
College Co	ntact				Telephone No.			
E-Mail Add	ress		_		Fax No.			
Chief Acad	emic Officer <i>or</i> CTE Dea	n Signatu	re 🧹		<i></i>	Date	1/8/19	
			$\square \bigcirc$	mt	Zan		-, -, =	
					-	_		

Office of Educational Improvement & Innovation

Phone: (503) 378-3600 FAX: (503) 378-5156



COMMUNITY COLLEGE ASSOCIATE OF SCIENCE AREA OF EMPHASIS AMENDMENT FORM

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

College: Clackamas Community College

Date

CAREER LEARNING AREA					
□ Ag, Food & Natural Resource Systems □ Health Services					
Arts, Information & Communications	Human Resources				
Business & Management	\checkmark Industrial & Engineering Systems				

PROGRAM INFORMATION							
<u>APPROVED</u> Program Title	APPROVED CIP Code (Include 7th & 8th digits used for OCCURS reporting.) 6-digit CIP 2th digit 2th digit 8th digit			<u>APPROVED</u> Recognition Award	Current Credits		
AS Area of Emphasis Title: Engineering – Biological Engineering				Associate of Applied Science Area of Emphasis	107		
Partnering Institution Name Oregon State University							

Last amendment approved on 01.20.17

TYPE OF PROGRAM AMENDMENT (Check ALL That Apply)						
New Agreement	Curriculum Revision	Revision in Program Credits				
		<i>Proposed</i> Total Credits:				
□ SUSPENSION of Program	Reason for Suspension:					
Suspension Effective Date:						

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.]								
С	URRENT CURRICULUM	2018-19	· · · · ·	[List only course(s) to be amended]				
Course Number	Course Title	Clock Hours	Credits	Course Clock			Credits	
		Prog	ram Require	rements – 1 st Year				
Fall Term								
COMM-111	Public Speaking	44	4					
ENGR-111	Introduction to Engineering	33	3					
MTH-251	Calculus I	55	5					
WR-121	English Composition	44	4					
Winter Term		-	-					
BI-204	Elementary Microbiology	66	4					
CH-221	General Chemistry	77	5					
ENGR-112	Engineering Programming	33	3					
MTH-252	Calculus II	55	5					
Spring Term				-			-	
CH-222	General Chemistry	77	5					
MTH-254	Vector Calculus	55	5					
WR-227	Technical Report Writing	44	4					
Summer Terr		ī	1_			-		
CH-223	General Chemistry	77	5					
MTH-256	Differential Equations	44	4					
	Social Process elective	Ļ	4					
		Progi	ram Require	ements – 2 nd Ye	ear			
Fall Term	Organia Chamistry I	77	-			1		
CH-241	Organic Chemistry I	77	5					
ENGR-211 PH-211	Statics General Physics with	44 70	4 5					
	Calculus	70	5					
Winter Term		-						
CH-242	Organic Chemistry II	77	5					
MTH-253	Calculus III	55	5					
PH-212	General Physics with Calculus	70	5					
Spring Term								
CH-243	Organic Chemistry III	77	5					
ENGR-221	Electrical Circuit Analysis	66	4		REMOVE			
PH-213	General Physics with Calculus	70	5					
	Western Culture elective		4					
				ENGR-201	Electrical Fundamentals	33	4	
Social Proces ANT-103; EC-201, 202; HST-101, 102 PS-201, 204, PSY-110, 200 SOC-204, 205	2, 103; 205, 225;), 205, 219, 231;							
Western Cult								
ART- 204, 205, 206; ENG- 107, 108, 109, 201, 202, 204, 205, 250, 251, 253, 254, 255; GEO- 122, 208; HST- 101, 102, 103, 201, 202, 203; PHL- 102, 215; R- 204;		GEO-122, 208	3, 109, 201, 202, 204, 205, 250 8; 2, 103, 132 , 201, 202, 203;	, 251, 253,	254, 255;			
may complet	Optional: 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 Bache completion of one course fi	elor of Science degree requir rom each category below.	res the					
Cultural Diversity Elective							
ANT- 231, 232;			ANT-231, 2				
ENG-213, 252;			ENG- 213, 2				
GEO -110, 121;			GEO-110 , 1				
R- 101, 102, 103, 210;			R- 101, 102,	103, 210;			
Literature and the Arts Elec	tive						
ART-101, 102, 103, 204, 205	, 206;		ART -101, 1	02, 103, 204, 205, 206;			
DMC -194;			DMC-194;				
ENG-104, 105, 106, 107, 108	, 109, 194, 195, 201, 202, 204	l, 205,	ENG-104, 105, 106, 107, 108, 109, 194, 195, 201, 202, 204, 205,				
213, 250, 251, 252, 253, 254,	255, 260;		213, 241, 242 , 250, 251, 252, 253, 254, 255, 260, 270 ;				
MUS-105, 205, 206			MUS-105, 205, 206				
Difference, Power, and Disc	rimination Elective						
HST-201, 202, 203;							
SOC-225							
Physical Education Elective)		-				
HPE-295							
TOTAL CURRENT CRED	ITS: 10	07	TOTAL P	ROPOSED CREDITS:	:		
College Contact				Telephone No.			
E-Mail Address		_		Fax No.			
Chief Academic Officer	or CTE Dean Signature	$\overline{\bigcirc}$	my	Zan	Date	1/8/19)

Office of Educational Improvement & Innovation

Phone: (503) 378-3600 FAX: (503) 378-5156



COMMUNITY COLLEGE ASSOCIATE OF SCIENCE AREA OF EMPHASIS AMENDMENT FORM

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

College: Clackamas Community College

Date

CAREER LEARNING AREA					
Ag, Food & Natural Resource Systems	Health Services				
Arts, Information & Communications	Human Resources				
Business & Management	\checkmark Industrial & Engineering Systems				

PROGRAM INFORMATION						
<u>APPROVED</u> Program Title	APPROVED CIP Code (Include 7 th & 8 th digits used for OCCURS reporting.) 6-digit CIP Z th digit 8 th digit			<u>APPROVED</u> Recognition Award	Current Credits	
AS Area of Emphasis Title: Engineering – Chemical Engineering				Associate of Applied Science Area of Emphasis	103	
Partnering Institution Name Oregon State University						

 Last amendment approved on 01.20.17

 TYPE OF PROGRAM AMENDMENT (Check ALL That Apply)

 New Agreement
 Curriculum Revision

 Proposed Total Credits:

 Proposed Total Credits:

 Suspension Effective Date:

		efined Seque	nce of Courses	Format, e.g., Quarte Proposed Curriculu	er-to-quarter mapping.				
C	URRENT CURRICULUM [List entire curriculum as last app	2018-19		PROPOSED CURRICULUM 2019-20 [List only course(s) to be amended]					
Course	Title	Hours	Credits	Course	Title	Hours	Credits		
		Prog	ram Requir	ements – 1 st Ye	ear				
Fall Term		144	17	•					
COMM-111	Public Speaking	44	4			_			
ENGR-111 MTH-251	Introduction to Engineering Calculus I	33 55	3 5						
WR-121	English Composition	44	4						
Winter Term		44	4				<u> </u>		
CH-221	General Chemistry	77	5	1	İ	1	1		
ENGR-112	Engineering Programming	33	3						
MTH-252	Calculus II	55	5						
WR-227	Technical Report Writing	44	4						
Spring Term			<u>.</u>						
CH-222	General Chemistry	77	5		1		Ī		
MTH-254	Vector Calculus	55	5				Ī		
-	Social Processes elective	1	4				Ī		
Summer Ter	m		-	-	-	-	=		
CH-223	General Chemistry	77	5						
MTH-256	Differential Equations	44	4						
		Prog	ram Require	ements – 2 nd Y	ear				
Fall Term	-	_	_		_	_	_		
CH-241	Organic Chemistry I	77	5						
ENGR-211	Statics	44	4						
PH-211	General Physics with Calculus	70	5						
Winter Term	-	_	_		_	_	-		
CH-242	Organic Chemistry II	77	5						
MTH-253	Calculus III	55	5						
PH-212	General Physics with Calculus	70	5						
Spring Term	_	_	_		_	_	_		
CH-243	Organic Chemistry III	77	5						
ENGR-221	Electrical Circuit Analysis I	66	4		REMOVE		8		
PH-213	General Physics with Calculus	70	5						
	Western Culture elective		4						
				ENGR-201	Electrical Fundamentals	33	4		
Social Proces ANT-103; EC-201, 202; HST-101, 102 PS-201, 204, PSY-110, 200 SOC-204, 20 Western Cult	2, 103; 205, 225; 0, 205, 219, 231; 5, 206;								
ART-204, 20				ART- 204, 20	5.206				
ENG -107, 10 GEO -122, 20	8, 109, 201, 202, 204, 205, 250 8; 2, 103, 201, 202, 203;	, 251, 253,	254, 255;	ENG -107, 10 GEO -122, 20	8, 109, 201, 202, 204, 205, 25 8; 2, 103, 132 , 201, 202, 203;	0, 251, 253,	254, 255;		
Optional: Wh complete add requirements University. Th	nile not required for the A.S. deg itional coursework at CCC that for the Bachelor of Science deg ne Bachelor of Science degree r one course from each category	will meet gree at Ore equires the	egon State						

ANT-231, 232;			
ENG- 213, 252;			
GEO-110 , 121;			
R- 101, 102, 103, 210;			
ART -101, 102, 103, 204, 205, 206;			
DMC- 194;			
ENG -104, 105, 106, 107, 108, 109, 194, 195, 201, 202, 204, 205,			
213, 241, 242 , 250, 251, 252, 253, 254, 255, 260, 270 ;			
MUS-105, 205, 206;			
-			
BI -101, 102, 103, 175, 176, 177 , 204, 211, 212, 213, 234;			
ESR -171, 172, 173;			
Z -201, 202, 203;			
-			
TOTAL PROPOSED CREDITS:			
Telephone No.			
Fax No.			
Date 1/8/19			
Jul Jan			

Office of Educational Improvement & Innovation

Phone: (503) 378-3600 FAX: (503) 378-5156



COMMUNITY COLLEGE ASSOCIATE OF SCIENCE AREA OF EMPHASIS AMENDMENT FORM

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

College: Clackamas Community College

Date

CAREER LEARNING AREA					
Ag, Food & Natural Resource Systems	Health Services				
Arts, Information & Communications	Human Resources				
Business & Management	\checkmark Industrial & Engineering Systems				

PROGRAM INFORMATION						
<u>APPROVED</u> Program Title	APPROVED CIP Code (Include 7 th & 8 th digits used for OCCURS reporting.) 6-digit CIP Z th digit 8 th digit			<u>APPROVED</u> Recognition Award	Current Credits	
AS Area of Emphasis Title: Engineering – Civil Engineering				Associate of Applied Science Area of Emphasis	97	
Partnering Institution Name Oregon State University						

Last amendment approved on 10.06.17

Check ALL That Apply)								
New Agreement	Curriculum Revision	□ Revision in Program Credit						
		Proposed Total Credits:						
□ SUSPENSION of Program	Reason for Suspension:							
Suspension Effective Date:								

	[listin a D				IENT ter-to-quarter mapping.		
C	For a CURRENT CURRICULUM	a New Program 2018-19	m, complete the	Proposed Curricul	um section only.] ROPOSED CURRICULU		0
Course	[List entire curriculum as last ap Title	proved) Hours	Credits	[List only course(s) to be amended] Course Title Hours			Credits
000136	The			ements – 1 st Y		Tiours	oreans
Fall Term							
CH-221	General Chemistry	77	5				
EC-201	Principles of Economics: MICRO	44	4		Move to Term 3	_	_
ENGR-111	Introduction to Engineering	33	3				
MTH-251	Calculus I	55	5				
				WR-121	English Composition	44	4
Winter Term			-	-			-
CH-222	General Chemistry	77	5				
ENGR-112	Engineering Programming	33	3				
MTH-252	Calculus II	55	5				
WR-121	English Composition	44	4		Move to Term 1	_	
				CDT-103	Computer-Aided Drafting I	66	3
Spring Term		1	Ŧ	-		-	
COMM-111	Public Speaking	44	4				
ENGR-115	Engineering Graphics	33	3	_	REMOVE		
MTH-254	Vector Calculus	55	5				
WR-227	Technical Report Writing	44	4				
				EC-201	Principles of Economics: MICRO	33	4
Summer Ter		1	1.				
GIS-201	Geographic Information Systems	66	3				
MTH-256	Differential Equations	44	4				
		Prog	ram Require	ements – 2 nd Y	(ear		
Fall Term		.	.	-			
ENGR-211	Statics	44	4	_		_	
PH-211	General Physics with Calculus	70	5				
	Western Culture elective		4				
Winter Term		.	.	-			
ENGR-212	Dynamics	44	4				
MTH-253	Calculus III	55	5				
PH-212	General Physics with Calculus	70	5				
Spring Term		1	.		1		
ENGR-213	Strength of Materials	44	4				
ENGR-221	Electrical Circuit Analysis I	66	4		REMOVE		
PH-213	General Physics with Calculus	70	5				
	Calculus			ENGR-201	Electrical Fundamentals	66	4
Western Cul	turo Electivo	<u> </u>	<u> </u>			00	*
ART-204, 204 ENG-107, 10 GEO-122, 20 HST-101, 102 PHL-102, 215 R-204; Optional: Whi complete add requirements	5, 206; 8, 109, 201, 202, 204, 205, 250 8; 2, 103, 201, 202, 203; 5; ile not required for the A.S. degr litional coursework at CCC that for the Bachelor of Science deg	ree, studer will meet gree at Ore	nts may egon State	GEO-122, 20	08, 109, 201, 202, 204, 205, 250 08; 12, 103, 132 , 201, 202, 203;	0, 251, 253,	254, 255;
	ne Bachelor of Science degree r		e				
	one course from each category	/ below.					
Cultural Diver	rsity Elective						

ANT -231, 232; ENG -213, 252; GEO -110, 121; R -101, 102, 103, 210;		ANT-231, 232; ENG-213, 252; GEO-440, 121; R-101, 102, 103, 210;
Literature and the Arts Elective		
ART -101, 102, 103, 204, 205, 206; DMC -194; ENG -104, 105, 106, 107, 108, 109, 194, 195, 201, 202, 213, 250, 251, 252, 253, 254, 255, 260; MUS -105, 205, 206;	, 204, 205,	ART -101, 102, 103, 204, 205, 206; DMC -194; ENG -104, 105, 106, 107, 108, 109, 194, 195, 201, 202, 204, 205, 213, 241 , 242 , 250, 251, 252, 253, 254, 255, 260, 270 ; MUS -105, 205, 206;
Difference, Power, and Discrimination Elective		
HST-201, 202, 203; SOC-225;		
Biological Science Elective		
BI -101, 102, 103, 204, 211, 212, 213, 234; ESR -171, 172, 173; Z -201, 202, 203;		BI -101, 102, 103, 175, 176, 177, 204, 211, 212, 213, 234; ESR -171, 172, 173; Z -201, 202, 203;
TOTAL CURRENT CREDITS:	97	TOTAL PROPOSED CREDITS:
College Contact		Telephone No.
E-Mail Address		Fax No.
Chief Academic Officer or CTE Dean Signatu		Jud Fran Date 1/8/19

Office of Educational Improvement & Innovation

Phone: (503) 378-3600 FAX: (503) 378-5156



COMMUNITY COLLEGE ASSOCIATE OF SCIENCE AREA OF EMPHASIS AMENDMENT FORM

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

College: Clackamas Community College

Date

CAREER LEARNING AREA					
Ag, Food & Natural Resource Systems	Health Services				
Arts, Information & Communications	Human Resources				
Business & Management	\checkmark Industrial & Engineering Systems				

PROGRAM INFORMATION						
<u>APPROVED</u> Program Title	APPROVED CIP Code (Include 7 th & 8 th digits used for OCCURS reporting.) 6-digit CIP Z th <u>digit</u> <u>digit</u>			<u>APPROVED</u> Recognition Award	Current Credits	
AS Area of Emphasis Title: Engineering – Construction Engineering Management				Associate of Applied Science Area of Emphasis	92	
Partnering Institution Name Oregon State University						

TYPE OF PROGRAM AMENDMENT (Check ALL That Apply)						
New Agreement	Curriculum Revision	Revision in Program Credit				
		Proposed Total Credits:				
□ SUSPENSION of Program	Reason for Suspension:					
Suspension Effective Date:						

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.]							
С	URRENT CURRICULUM	2018-19	· · · ·		ROPOSED CURRICULUI [List only course(s) to be ame		0
Course Number	Course Title	Clock Hours	Credits	Course Number	Course Title	Clock Hours	Credits
		Prog	ram Require	ements – 1 st Ye	ar		
Fall Term		-	-				-
CH-221	General Chemistry	77	5				
ENGR-111	Introduction to Engineering	33	3				
MTH-251	Calculus I	55	5				
WR-121	English Composition	44	4				
Winter Term			-		-	-	
BA-226	Business Law I	44	4				
EC-201	Principles of Economics: MICRO	44	4		Move to Term 3		
ENGR-112	Engineering Programming	33	3				
MTH-252	Calculus II	55	5				
				CDT-103	Computer-Aided Drafting I	66	3
Spring Term				-		-=	_
EC-202	Principles of Economics: MACRO	44	4				
ENGR-115	Engineering Graphics	33	3		REMOVE	-	-
	Biological Science elective		4				
	Literature and the Arts elective		4				
				EC-201	Principles of Economics: MICRO	44	4
		Prog	am Require	ements – 2 nd Y	ear	•	
Fall Term			•				
ENGR-211	Statics	44	4			T	
HPE-295	Health & Fitness for Life	60	3				
PH-211	General Physics with Calculus	70	5				
Winter Term				<u>-</u>	•	4	-
BA-215	Fundamentals of Accounting (online through OSU)		4				
PH-212	General Physics with Calculus	70	5				
PHL-102	Ethics	44	4				
	Cultural Diversity elective		4				
Spring Term			• ·			-	
COMM-111	Public Speaking	44	4				
ENGR-213	Strength of Materials	44	4				
ENGR-390	Engineering Economy (online through OSU)		3				
WR-227	Technical Report Writing	44	4			1	
	rsity Elective		<u>.</u>			1	
ANT-231, 232				ANT-231, 23	2.		
ENG-213, 252				ENG-213, 25			
GEO-110, 12				GEO-110 , 12			
R -101, 102, 1				R- 101, 102, 1	103, 210;		
	d the Arts Elective 2, 103, 204, 205, 206;			ART -101, 102	2, 103, 204, 205, 206;		
DMC-194;				DMC -194;			
213, 250, 251	5, 106, 107, 108, 109, 194, 195, , 252, 253, 254, 255, 260;	201, 202,	204, 205,	213, 241, 24 2	5, 106, 107, 108, 109, 194, 195 2, 250, 251, 252, 253, 254, 255,		204, 205,
MUS-105, 205				MUS -105, 20	5, 206;		
•	cience Elective						
BI- 101, 102, 1	103, 204, 211, 212, 213, 234;			BI -101, 102,	103, 175, 176, 177 , 204, 211, 2	12, 213, 23	34;

ESR -171, 172, 173; Z -201, 202, 203; Optional: While not required complete additional coursew requirements for the Bachelo University. The Bachelor of S completion of one course fro	ork at CCC that will meet or of Science degree at Orec Science degree requires the	jon State	ESR- 171, 172, 173; Z- 201, 202, 203; Optional: While not required for the AS 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 the category below.				
Difference, Power, and Discrimination Elective							
HST-201, 202, 203; SOC-225;		_					
TOTAL CURRENT CREE	DITS:	92	TOTAL PROPOSED CREDITS:				
College Contact				Telephone No.			
E-Mail Address Fax No.							
Chief Academic Officer <i>or</i> CTE Dean Signature		e	Ind	Zan	Date	1/8/19)

Office of Educational Improvement & Innovation

Phone: (503) 378-3600 FAX: (503) 378-5156



COMMUNITY COLLEGE ASSOCIATE OF SCIENCE AREA OF EMPHASIS AMENDMENT FORM

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

College: Clackamas Community College

Date

CAREER LEARNING AREA					
Ag, Food & Natural Resource Systems	Health Services				
Arts, Information & Communications	Human Resources				
Business & Management	\checkmark Industrial & Engineering Systems				

PROGRAM INFORMATION						
<u>APPROVED</u> Program Title	APPROVED CIP Code (Include 7th & 8th digits used for OCCURS reporting.) 6-digit CIP Zth			<u>APPROVED</u> Recognition Award	Current Credits	
	<u>6-digit CIP</u>	<u></u> <u>digit</u>	<u>digit</u>			
AS Area of Emphasis Title: Engineering – Ecological Engineering				Associate of Applied Science Area of Emphasis	103	
Partnering Institution Name Oregon State University						

TYPE OF PROGRAM AMENDMENT (Check ALL That Apply)						
New Agreement	Curriculum Revision	Revision in Program Credits		Revision in Program Credit		
		<i>Proposed</i> Total Credits:	102- 103			
□ SUSPENSION of Program	Reason for Suspension:					
Suspension Effective Date:						

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.]							
С	URRENT CURRICULUM	2018-19	,		ROPOSED CURRICULUI [List only course(s) to be ame		0
Course	Title	Hours	Credits	Course	Title	Hours	Credits
		Prog	ram Require	ements – 1 st Ye	ear		
Fall Term							
COMM-111	Public Speaking	44	4				
ENGR-111	Introduction to Engineering	33	3				
MTH-251	Calculus I	55	5				
WR-121	English Composition	44	4				
Winter Term	_	-	-		_	_	
CH-221	General Chemistry	77	5				
ENGR-112	Engineering Programming	33	3				
MTH-252	Calculus II	55	5				
	Social Processes Elective		4		REMOVE		
					Literature and the Arts Elective		3-4
Spring Term							
CH-222	General Chemistry	77	5				
MTH-254	Vector Calculus	55	5				
WR-227	Technical Report Writing	44	4				
Summer Terr	n	-		-		-	
CH-223	General Chemistry	77	5				
MTH-256	Differential Equations	44	4				
		Progr	ram Require	ments – 2 nd Y	ear		
Fall Term					•		
BI-211	General Biology for Science Majors (Cellular Biology)	77	5				
ENGR-211	Statics	44	4				
PH-211	General Physics with Calculus	70	5				
Winter Term		2			•	-	
BI-212	General Biology for Science Majors (Animal Biology)	77	5				
MTH-253	Calculus III	55	5				
PH-212	General Physics with Calculus	70	5				
Spring Term		-	-				
BI-213	General Biology for Science Majors (Plant Biology & Ecology)	77	5				
ENGR-213	Strength of Materials	44	4				
PH-213	General Physics with Calculus	70	5				
	Western Culture elective		4				
Social Proce	sses Elective						
ANT -103;							
EC-201, 202; HST-101, 102 PS-201, 204, PSY-110, 200 SOC-204, 205	205, 225;), 205, 219, 231;				REMOVE		
Western Cult							
GEO-122, 208	3, 109, 201, 202, 204, 205, 250, 3; 2, 103, 201, 202, 203;	251, 253,	254, 255;				

Optional: 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	
Cultural Diversity Elective	
ANT -231, 232; ENG -213, 252; GEO -110, 121; R -101, 102, 103, 210;	ANT-231, 232; ENG-213, 252; GEO- 110 , 121; R-101, 102, 103, 210;
Literature and the Arts Elective	
ART -101, 102, 103, 204, 205, 206; DMC -194; ENG -104, 105, 106, 107, 108, 109, 194, 195, 201, 202, 204, 205, 213, 250, 251, 252, 253, 254, 255, 260; MUS -105, 205, 206;	ART -101, 102, 103, 204, 205, 206; DMC -194; ENG -104, 105, 106, 107, 108, 109, 194, 195, 201, 202, 204, 205, 213, 241, 242, 250, 251, 252, 253, 254, 255, 260, 270 ; MUS -105, 205, 206;
Difference, Power, and Discrimination Elective	
HST-201, 202, 203; SOC-225;	
Biological Science Elective	
BI -101, 102, 103, 204, 211, 212, 213, 234; ESR -171, 172, 173; Z -201, 202, 203;	REMOVE
Physical Education Elective	
HPE-295;	
TOTAL CURRENT CREDITS: 103	TOTAL PROPOSED CREDITS: 102-103
College Contact	Telephone No.
E-Mail Address	Fax No.
Chief Academic Officer <i>or</i> CTE Dean Signature	Dud Fran Date 1/8/19

Office of Educational Improvement & Innovation

Phone: (503) 378-3600 FAX: (503) 378-5156



COMMUNITY COLLEGE ASSOCIATE OF SCIENCE AREA OF EMPHASIS AMENDMENT FORM

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

College: Clackamas Community College

Date

CAREER LEARNING AREA				
Ag, Food & Natural Resource Systems	Health Services			
Arts, Information & Communications	Human Resources			
Business & Management	\checkmark Industrial & Engineering Systems			

PROGRAM INFORMATION						
<u>APPROVED</u> Program Title	APPROVED CIP Code (Include 7th & 8th digits used for OCCURS reporting.) 6-digit CIP Zth <u>digit</u> <u>digit</u>		s used ig.) <u>8th</u>	<u>APPROVED</u> Recognition Award	Current Credits	
AS Area of Emphasis Title: Engineering – Electrical Engineering				Associate of Applied Science Area of Emphasis	102	
Partnering Institution Name Oregon State University						

Last amendment approved on 01.20.17

TYPE OF PROGRAM AMENDMENT (Check ALL That Apply)						
New Agreement	Curriculum Revision	Revision in Program Credits				
		<i>Proposed</i> Total Credits:				
□ SUSPENSION of Program	Reason for Suspension:					
Suspension Effective Date:						

CURRICULUM AMENDMENT [List in a Defined Sequence of Courses Format, e.g., Quarter-to-quarter mapping.								
For a New Program, complete the CURRENT CURRICULUM 2018-19				Proposed Curriculum section only.] PROPOSED CURRICULUM 2019-20				
Course	[List entire curriculum as last app Title	oroved) Hours	Credits	Course	[List only course(s) to be amen	nded] Hours	Credits	
		Progra	am Requirer	monte - First '	Title			
Program Requirements – First Year Fall Term								
CS-161	Computer Science I	44	4		T			
ENGR-111	Introduction to Engineering	33	3	I	 	 	 	
MTH-251	Calculus I	55	5		t	} ────	 	
WR-121	English Composition	44	4	1	1			
Winter Term								
CH-221	General Chemistry	77	5					
CS-162	Computer Science II	44	4					
ENGR-112	Engineering Programming	33	3					
MTH-252	Calculus II	55	5					
Spring Term								
CS-260	Data Structures	44	4			<u> </u>		
MTH-253	Calculus III	55	5			<u> </u>		
WR-227	Technical Report Writing	44	4			 '		
	Social Processes elective		4		L	L!		
Summer Terr					-	-		
COMM-111	Public Speaking	44	4			 ′		
MTH-256	Differential Equations	44	4					
		Program	n Requireme	ents – Second	l Year			
Fall Term	Electrical Circuit Apolygia	1.00	1		Ĩ			
ENGR-221 MTH-254	Electrical Circuit Analysis I Vector Calculus	33 55	4 5	╉─────	╉─────	╂────┘	┟────┤	
PH-211	General Physics with Calculus	70	5		1			
Winter Term	Odiodido							
CS-250	Discrete Structures I	44	4		REMOVE			
ENGR-171	Digital Logic	66	4		Т	, I		
ENGR-222	Electrical Circuit Analysis II	33	4		t	 ;		
PH-212	General Physics with	70	5		1	1		
	Calculus	<u> </u>				<u> </u>		
	L			MTH-231	Elements of Discrete Mathematics	44	4	
Spring Term				_				
ENGR-223	Electrical Circuit Analysis III	33	4		_	 '		
PH-213	General Physics with Calculus	70	5					
	Western Culture elective		4	<u></u>	<u> </u>	 '		
Social Processes Elective								
ANT-103; EC-201, 202; HST-101, 102, 103; PS-201, 204, 205, 225; PSY-110, 200, 205, 219, 231; SOC-204, 205, 206;								
Western Cult	ure Elective							
ART -204, 205, 206; ENG -107, 108, 109, 201, 202, 204, 205, 250, 251, 253, 254, 255; GEO -122, 208; HST -101, 102, 103, 201, 202, 203; PHL -102, 215; R -204;				ART-204, 205, 206; ENG-107, 108, 109, 201, 202, 204, 205, 250, 251, 253, 254, 255; GEO-122, 208; HST-101, 102, 103, 132, 201, 202, 203; PHL-102, 215; R-204;				
Optional: 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								
Cultural Diversity Elective								
ANT-231, 232; ENG-213, 252; GEO-110, 121; R-101, 102, 103, 210;	ANT-231, 232; ENG-213, 252; GEO- 110 , 121; R-101, 102, 103, 210;							
Literature and the Arts Elective								
ART -101, 102, 103, 204, 205, 206; DMC -194; ENG -104, 105, 106, 107, 108, 109, 194, 195, 201, 202, 204, 205, 213, 250, 251, 252, 253, 254, 255, 260; MUS -105, 205, 206;								
Difference, Power, and Discrimination Elective								
HST-201, 202, 203; SOC-225;								
Biological Science Elective								
BI -101, 102, 103, 204, 211, 212, 213, 234; ESR- 171, 172, 173; Z -201, 202, 203;	BI -101, 102, 103, 175, 176, 177 , 204, 211, 212, 213, 234; ESR- 171, 172, 173; Z -201, 202, 203;							
Physical Education Elective								
HPE-295;								
TOTAL CURRENT CREDITS: 102	TOTAL PROPOSED CREDITS:							
College Contact	Telephone No.							
E-Mail Address	Fax No.							
Chief Academic Officer or CTE Dean Signature July Date 1/8/19								

Office of Educational Improvement & Innovation

Phone: (503) 378-3600 FAX: (503) 378-5156



COMMUNITY COLLEGE ASSOCIATE OF SCIENCE AREA OF EMPHASIS AMENDMENT FORM

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

College: Clackamas Community College

Date

CAREER LEARNING AREA					
Ag, Food & Natural Resource Systems	Health Services				
Arts, Information & Communications	Human Resources				
Business & Management	\checkmark Industrial & Engineering Systems				

PROGRAM INFORMATION							
<u>APPROVED</u> Program Title	APPROVED CIP Code (Include 7 th & 8 th digits used for OCCURS reporting.) 6-digit CIP $\frac{Z^h}{digit}$			<u>APPROVED</u> Recognition Award	Current Credits		
AS Area of Emphasis Title: Engineering – Energy Systems Engineering				Associate of Applied Science Area of Emphasis	98-99		
Partnering Institution Name Oregon State University							

TYPE OF PROGRAM AMENDMENT (Check ALL That Apply)								
New Agreement	Curriculum Revision	Revision in Program (Credits					
		<i>Proposed</i> Total Credits:						
□ SUSPENSION of Program	Reason for Suspension:							
Suspension Effective Date:								

	[List in a D	efined Sequer	nce of Courses	AMENDMENT Format, e.g., Quarter-to-quarter mapping. Proposed Curriculum section only.]					
С	For a CURRENT CURRICULUM [List entire curriculum as last app	2018-19	/	[List only course(s) to be amended]					
Course	Title	Hours	Credits	Course Title Hours Credi					
		Progra	am Require	ments – First Year					
Fall Term		-	-						
CH-221	General Chemistry	77	5						
ENGR-111	Introduction to Engineering	33	3						
MTH-251	Calculus I	55	5						
WR-121	English Composition	44	4						
Winter Term		1	ī	• · · · · · · · · · · · · · · · · · · ·					
CH-222	General Chemistry	77	5						
ENGR-112	Engineering Programming	33	3						
MTH-252	Calculus II	55	5	┦───┤───┤──┤					
Spring Term									
COMM-111 EC-201	Public Speaking Principles of Economics:	44 44	4	+ + + + + + + + + + + + + + + + + + +					
	MICRO		·						
MTH-253	Calculus III	55	5						
WR-227	Technical Report Writing	44	4						
Summer Ter	-	1	1.	• • • • • • • • •					
MTH-256	Differential Equations	44	4						
		Program	n Requirem	ents – Second Year					
Fall Term		1	1.	r i i i					
BA-211	Financial Accounting I	44	4						
ENGR-211	Statics	44	4						
ENGR-221	Electrical Circuit Analysis I	33	4						
PH-211	General Physics with Calculus	70	5						
Winter Term		-	T	• • • • • • • • • • • • • • • • • • •					
ENGR-212	Dynamics	44	4						
ENGR-222	Electrical Circuit Analysis II	33	4						
PH-212	General Physics with Calculus	70	5						
Spring Term		-	-						
MTH-254	Vector Calculus	55	5						
PH-213	General Physics with Calculus	70	5						
	Engineering elective		3-4						
	Western Culture elective		4						
Engineering									
ENGR-115, 2									
GEO-122, 20	5, 206; 8, 109, 201, 202, 204, 205, 250 8; 2, 103, 201, 202, 203;	, 251, 253,	254, 255;	ART -204, 205, 206; ENG -107, 108, 109, 201, 202, 204, 205, 250, 251, 253, 254, 25 GEO -122, 208; HST -101, 102, 103, 132 , 201, 202, 203; PHL -102, 215; R -204;					
Optional: Wh complete add requirements University. Th completion of Cultural Dive	ile not required for the A.S. deg itional coursework at CCC that for the Bachelor of Science deg Bachelor of Science degree r one course from each category ersity Elective	will meet gree at Ore equires the	gon State						
ANT-231, 232 ENG-213, 252				ANT-231, 232; ENG-213, 252;					
GEO -110, 12				GEO-110 , 121;					
R -101, 102, 1				R -101, 102, 103, 210;					

Literature and the Arts Election	ive							
ART-101, 102, 103, 204, 205, 1	206;		ART -101, 1	<mark>02, 103, 204, 205, 20</mark>	6;			
DMC- 194;			DMC- 194;					
ENG -104, 105, 106, 107, 108,		4, 205,		<mark>05, 106, 107, 108, 10</mark>				
213, 250, 251, 252, 253, 254, 2	255, 260;			42 , 250, 251, 252, 253	3, 254, 255,	260, 270 ;		
MUS -105, 205, 206;			MUS- 105, 2	.05, 206;				
Difference, Power, and Discr	imination Elective							
HST -201, 202, 203;								
SOC -225;								
Biological Science Elective			_					
BI-101, 102, 103, 204, 211, 21	2, 213, 234;		BI-101, 102, 103, 175, 176, 177, 204, 211, 212, 213, 234;					
ESR -171, 172, 173;			ESR- 171, 172, 173;					
Z- 201, 202, 203;			Z -201, 202,	203;				
Physical Education Elective								
HPE -295;	_					-		
TOTAL CURRENT CREDIT	rs: g	98-99	TOTAL P	ROPOSED CREDIT	S:			
College Contact				Telephone No.				
E-Mail Address		_		Fax No.		-		
Chief Academic Officer o	r CTE Dean Signature				Date	1/8/19		
			1 . 1	-Hin		, -,		

Office of Educational Improvement & Innovation

Phone: (503) 378-3600 FAX: (503) 378-5156



COMMUNITY COLLEGE ASSOCIATE OF SCIENCE AREA OF EMPHASIS AMENDMENT FORM

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

College: Clackamas Community College

Date

CAREER LEARNING AREA					
□ Ag, Food & Natural Resource Systems □ Health Services					
Arts, Information & Communications	Human Resources				
Business & Management	\checkmark Industrial & Engineering Systems				

PROGRAM INFORMATION							
<u>APPROVED</u> Program Title	APPROVED CIP Code (Include 7th & 8th digits used for OCCURS reporting.) 6-digit CIP Zh digit			<u>APPROVED</u> Recognition Award	Current Credits		
AS Area of Emphasis Title: Engineering – Environmental Engineering				Associate of Applied Science Area of Emphasis	110		
Partnering Institution Name Oregon State University							

Last amendment approved on 01.20.17

Check ALL That Apply)							
New Agreement	reement Curriculum Revision	Revision in Program Credits					
		<i>Proposed</i> Total Credits:					
□ SUSPENSION of Program	Reason for Suspension:						
Suspension Effective Date:							

	[List in a D	efined Sequer	nce of Courses	Format, e.g., Quarte	er-to-quarter mapping.		
<i>CURRENT CURRICULUM 2018-19</i> [List entire curriculum as last approved]		Proposed Curriculum section only.] PROPOSED CURRICULUM 2019-20 [List only course(s) to be amended]					
Course	Title	Hours	Credits	Course	Title	Hours	Credits
	-	Progra	am Require	ments – First \	Year		
Fall Term							
ENGR-111	Introduction to Engineering	33	3				
MTH-251	Calculus I	55	5				
WR-121	English Composition	44	4				
	Social Processes elective		4				
Winter Term	-	_	_			_	_
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				
Spring Term							
CH-222	General Chemistry	77	5				
ENGR-115	Engineering Graphics	33	3				
MTH-254	Vector Calculus	55	5				
	Western Culture elective		4				
Summer Terr	m	_	_			_	_
CH-223	General Chemistry	77	5				
COMM-111	Public Speaking	44	4				
MTH-256	Differential Equations	44	4				
		Program	n Requirem	ents – Second	l Year	-	_
Fall Term	-	_	_		_	<u>_</u>	_
CH-241	Organic Chemistry I	77	5				
ENGR-211	Statics	44	4				
PH-211	General Physics with Calculus	70	5				
Winter Term	-	_	_			_	_
CH-242	Organic Chemistry II	77	5				
ENGR-212	Dynamics	44	4				
PH-212	General Physics with Calculus	70	5				
Spring Term		_	-				
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	70	5				
Social Proce	sses Elective						
ANT -103; EC -201, 202; HST -101, 102 PS -201, 204,							
), 205, 219, 231;						
Western Cult				-			
GEO-122, 208	8, 109, 201, 202, 204, 205, 250, 8; 2, 103, 201, 202, 203;	251, 253,	254, 255;	GEO-122, 20	8, 109, 201, 202, 204, 205 8; 2, 103, 132 , 201, 202, 203;		254, 255;
Optional : Wh complete add	ile not required for the A.S. deg itional coursework at CCC that for the Bachelor of Science deg	will meet	-				

University. The Bachelor of Science degree requires the completion of one course from each category below.	
Cultural Diversity Elective	
ANT -231, 232; ENG -213, 252; GEO -110, 121; R -101, 102, 103, 210;	ANT-231, 232; ENG-213, 252; GEO-110, 121; R-101, 102, 103, 210;
Literature and the Arts Elective	
ART -101, 102, 103, 204, 205, 206; DMC -194; ENG -104, 105, 106, 107, 108, 109, 194, 195, 201, 202, 204, 205, 213, 250, 251, 252, 253, 254, 255, 260; MUS -105, 205, 206;	
Difference, Power, and Discrimination Elective	
HST-201, 202, 203; SOC-225;	
Biological Science Elective	
BI -101, 102, 103, 204, 211, 212, 213, 234; ESR -171, 172, 173; Z -201, 202, 203;	BI -101, 102, 103, 175, 176, 177 , 204, 211, 212, 213, 234; ESR -171, 172, 173; Z -201, 202, 203;
Physical Education Elective	
HPE-295;	
TOTAL CURRENT CREDITS: 110	TOTAL PROPOSED CREDITS:
College Contact	Telephone No.
E-Mail Address	Fax No.
Chief Academic Officer <i>or</i> CTE Dean Signature	Jud Fran Date 1/8/19

Office of Educational Improvement & Innovation

Phone: (503) 378-3600 FAX: (503) 378-5156



COMMUNITY COLLEGE ASSOCIATE OF SCIENCE AREA OF EMPHASIS AMENDMENT FORM

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

College: Clackamas Community College

Date

CAREER LEARNING AREA					
□ Ag, Food & Natural Resource Systems □ Health Services					
Arts, Information & Communications	Human Resources				
Business & Management	\checkmark Industrial & Engineering Systems				

PROGRAM INFORMATION							
<u>APPROVED</u> Program Title	APPROVED CIP Code (Include 7 th & 8 th digits used for OCCURS reporting.) 6-digit CIP Z th digit			<u>APPROVED</u> Recognition Award	Current Credits		
AS Area of Emphasis Title: Engineering – Industrial/Manufacturing				Associate of Applied Science Area of Emphasis	94		
Partnering Institution Name Oregon State University							

TYPE OF PROGRAM AMENDMENT (Check ALL That Apply)					
New Agreement	Curriculum Revision	ulum Revision 🛛 🗆 Revision in Program C			
		<i>Proposed</i> Total Credits:			
□ SUSPENSION of Program	Reason for Suspension:				
Suspension Effective Date:					

Course List entire of Fall Term COMM-111 Public Spear ENGR-111 Introduction MTH-251 Calculus I	CURRICULUM curriculum as last app Title aking to Engineering mposition	2018-19 roved) Hours	Credits	Proposed Curriculu PF Course ments – First Y	ROPOSED CURRICULU [List only course(s) to be am Title		0 Credits
CourseFall TermCOMM-111Public SpeaENGR-111IntroductionMTH-251Calculus I	Title aking to Engineering mposition	Hours Progra 44 33 55	am Require		Title	_	Credits
COMM-111Public SpeaENGR-111IntroductionMTH-251Calculus I	n to Engineering	44 33 55	4	ments – First Y	ear	-	
COMM-111Public SpeaENGR-111IntroductionMTH-251Calculus I	n to Engineering	33 55					
ENGR-111 Introduction MTH-251 Calculus I	n to Engineering	33 55					
MTH-251 Calculus I	nposition	55	3				
		44	5				
WR-121 English Cor	· .		4				
Winter Term	• •	-	_		-	-	_
CH-221 General Ch	emistry	77	5				
ENGR-112 Engineering	g Programming	33	3				
MTH-252 Calculus II		55	5				
Spring Term			-				
CH-222 General Ch		77	5				
ENGR-115 Engineering	g Graphics	33	3				
MTH-254 Vector Calc		55	5				
	Report Writing	44	4				
Summer Term			-	-			
MTH-256 Differential		44	4				
Social Proc	esses elective		4				
		Progran	n Requirem	ents – Second	Year		
Fall Term		-	-			-	
ENGR-211 Statics		44	4				
PH-211 General Ph Calculus	•	70	5				
	ulture elective		4				
Winter Term				-			_
ENGR-212 Dynamics		44	4				
MTH-253 Calculus III		55	5				
PH-212 General Ph Calculus	ysics with	70	5				
Spring Term							
ENGR-213 Strength of	Materials	44	4				
	ircuit Analysis I	66	4		REMOVE		
PH-213 General Ph Calculus	ysics with	70	5				
				ENGR-201	Electrical Fundamentals	33	4
Social Processes Electiv	e	-	-	-			
ANT-103; EC-201, 202; HST-101, 102, 103; PS-201, 204, 205, 225; PSY-110, 200, 205, 219, 2 SOC-204, 205, 206; Western Culture Elective							
ART-204, 205, 206;				ART- 204, 205	206		
ENG-107, 108, 109, 201, 202, 204, 205, 250, 251, 253, 254, 255; GEO-122, 208, 230; HST-101, 102, 103, 201, 202, 203; PHL-102, 215; R-204;		ENG -107, 108 GEO -122, 208	3, 109, 201, 202, 204, 205, 25 3, 230; 4, 103, 132 , 201, 202, 203;	0, 251, 253,	254, 255;		
Optional: While not require complete additional course requirements for the Bache University. The Bachelor o completion of one course f Cultural Diversity Electiv	work at CCC that v elor of Science deg f Science degree re rom each category	vill meet ree at Ore equires the	gon State				

ANT- 231, 232;	ANT- 231, 232;
ENG- 213, 252;	ENG- 213, 252;
GEO -110, 121;	GEO-110 , 121;
R- 101, 102, 103, 210;	R -101, 102, 103, 210;
Literature and the Arts Elective	
ART- 101, 102, 103, 204, 205, 206;	ART- 101, 102, 103, 204, 205, 206;
DMC- 194;	DMC- 194;
ENG-104, 105, 106, 107, 108, 109, 194, 195, 201, 202, 204, 205	ENG-104, 105, 106, 107, 108, 109, 194, 195, 201, 202, 204, 205,
213, 250, 251, 252, 253, 254, 255, 260;	213, 241, 242 , 250, 251, 252, 253, 254, 255, 260, 270 ;
MUS -105, 205, 206;	MUS-105, 205, 206;
Difference, Power, and Discrimination Elective	
HST-201, 202, 203;	
SOC- 225;	
Biological Science Elective	
BI -101, 102, 103, 204, 211, 212, 213, 234;	BI -101, 102, 103, 175, 176, 177, 204, 211, 212, 213, 234;
ESR -171, 172, 173;	ESR -171, 172, 173;
Z -201, 202, 203;	Z -201, 202, 203;
Physical Education Elective	
HPE-295;	
TOTAL CURRENT CREDITS: 94	TOTAL PROPOSED CREDITS:
College Contact	Telephone No.
E-Mail Address	Fax No.
Chief Academic Officer <i>or</i> CTE Dean Signature	Date 1/8/19
	Just for

Office of Educational Improvement & Innovation

Phone: (503) 378-3600 FAX: (503) 378-5156



COMMUNITY COLLEGE ASSOCIATE OF SCIENCE AREA OF EMPHASIS AMENDMENT FORM

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

College: Clackamas Community College

Date

CAREER LEARNING AREA					
Ag, Food & Natural Resource Systems	Health Services				
Arts, Information & Communications	Human Resources				
Business & Management	\checkmark Industrial & Engineering Systems				

PROGRAM INFORMATION							
<u>APPROVED</u> Program Title	APPROVED CIP Code (Include 7th & 8th digits used for OCCURS reporting.) 6-digit CIP Zth digit Zth digit gth digit		s used ig.) <u>8th</u>	<u>APPROVED</u> Recognition Award	Current Credits		
AS Area of Emphasis Title: Engineering – Mechanical Engineering				Associate of Applied Science Area of Emphasis	98		
Partnering Institution Name Oregon State University							

TYPE OF PROGRAM AMENDMENT (Check ALL That Apply)						
New Agreement	Curriculum Revision	Revision in Program Credits				
		<i>Proposed</i> Total Credits:				
□ SUSPENSION of Program	Reason for Suspension:					
Suspension Effective Date:						

		fined Sequer	ice of Courses F	AMENDME Format, e.g., Quarte Proposed Curriculu	r-to-quarter mapping.		
CL	JRRENT CURRICULUM [List entire curriculum as last app	2018-19	· · · ·	[List only course(s) to be amended]			
Course	Title	Hours	Credits	Course	Title	Hours	Credits
		Progra	am Requirer	nents – First Y	′ear		
Fall Term							
COMM-111	Public Speaking	44	4				
ENGR-111	Introduction to Engineering	33	3				
MTH-251	Calculus I	55	5				
WR-121	English Composition	44	4				
Winter Term		ī	ī	-	1		
CH-221	General Chemistry	77	5			_	
EC-201 Or	Principles of Economics: MICRO	44	4				
EC-202	or						
	Principles of Economics: MACRO						
ENGR-112	Engineering Programming	33	3				
MTH-252	Calculus II	55	5				
Spring Term		-	-		_		
CH-222	General Chemistry	77	5				
ENGR-115	Engineering Graphics	33	3				
MTH-254	Vector Calculus	55	5				
WR-227	Technical Report Writing	44	4				
Summer Term		I 44	T .			-	
MTH-256	Differential Equations	44 Drogram	4 Decuirem	anto Cocond	Veer		
Fall Term		Progran	n Requirem	ents – Second	Year		
ENGR-211	Statics	44	4				_
ENGR-211 ENGR-221	Electrical Circuit Analysis I	33	4				
PH-211	General Physics with	70	5				
111-211	Calculus	10	Ŭ				
	Western Culture elective		4				
Winter Term	-	-	-		_		
ENGR-212	Dynamics	44	4				
ENGR-222	Electrical Circuit Analysis II	33	4				
PH-212	General Physics with Calculus	70	5				
Spring Term	_	_	_				-
ENGR-213	Strength of Materials	44	4				
MTH-253	Calculus III	55	5				
PH-213	General Physics with Calculus	70	5				
Western Cultu	Ire Elective						
GEO-122, 208;	109, 201, 202, 204, 205, 250, 103, 201, 202, 203;	251, 253,	254, 255;	GEO-122, 208	3, 109, 201, 202, 204, 205, 25 8; 2, 103, 132 , 201, 202, 203;	0, 251, 253,	254, 255;
complete additi requirements for University. The completion of c	e not required for the A.S. degre ional coursework at CCC that v or the Bachelors of Science degree Bachelor of Science degree re one course from each category	vill meet gree at Ore equires the	egon State				
Cultural Diver	•			ANT 024 000).		
ANT-231, 232; ENG-213, 252; GEO-110, 121;				ANT-231, 232 ENG-213, 252 GEO- 110 , 121	<u>2;</u>		
R -101, 102, 10				R -101, 102, 1			

Literature and the Arts Ele	ctive							
213, 250, 251, 252, 253, 254 MUS- 105, 205, 206;	DMC-194 08, 109, 194, 195, 201, 202, 204, 205, 4, 255, 260; MUS-105			ART -101, 102, 103, 204, 205, 206; DMC -194; ENG -104, 105, 106, 107, 108, 109, 194, 195, 201, 202, 204, 205, 213, 241, 242 , 250, 251, 252, 253, 254, 255, 260, 270 ; MUS -105, 205, 206;				
Difference, Power, and Dis	crimination Elective							
HST-201, 202, 203; SOC-225;								
Biological Science Elective	e		_					
BI -101, 102, 103, 204, 211, ESR -171, 172, 173; Z -201, 202, 203;	ESR -171,			BI -101, 102, 103, 175, 176, 177 , 204, 211, 212, 213, 234; ESR -171, 172, 173; Z -201, 202, 203;				
Physical Education Electiv	/e							
HPE- 295;		-				-		
TOTAL CURRENT CREI	DITS:	98	TOTAL P	ROPOSED CREDITS	:			
College Contact				Telephone No.				
E-Mail Address				Fax No.				
Chief Academic Office	or CTE Dean Signatur	e Ó	Ind	Zan	Date	1/8/19		

Office of Educational Improvement & Innovation

Phone: (503) 378-3600 FAX: (503) 378-5156



COMMUNITY COLLEGE ASSOCIATE OF SCIENCE AREA OF EMPHASIS AMENDMENT FORM

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

College: Clackamas Community College

Date

CAREER LEARNING AREA					
Ag, Food & Natural Resource Systems	Health Services				
Arts, Information & Communications	Human Resources				
Business & Management	\checkmark Industrial & Engineering Systems				

PROGRAM INFORMATION							
<u>APPROVED</u> Program Title	APPROVED CIP Code (Include 7th & 8th digits used for OCCURS reporting.) 6-digit CIP Zth digit 8th digit			<u>APPROVED</u> Recognition Award	Current Credits		
AS Area of Emphasis Title: Engineering – Civil/Environmental				Associate of Applied Science Area of Emphasis	96-106		
Partnering Institution Name Portland State University							

Last amendment approved on 06.02.17

TYPE OF PROGRAM AMENDMENT (Check ALL That Apply)						
New Agreement	Curriculum Revision	Revision in Program Credit				
		<i>Proposed</i> Total Credits:	96- 100			
□ SUSPENSION of Program	Reason for Suspension:					
Suspension Effective Date:						

0	CURRENT CURRICULUM	CURRENT CURRICULUM 2018-19		Proposed Curriculum section only.] PROPOSED CURRICULUM 2019-20			
Course	[List entire curriculum as last ap Title	proved) Hours	Credits	Course	[List only course(s) to be am Title	ended] Hours	Credits
Course	The			ments – First \		Tiours	oreans
				Term			
CH-221	General Chemistry	77	5				
ENGR-111	Introduction to Engineering	33	3				
MTH-251	Calculus I	55	5				
NR-121	English Composition	44	4				
			-	r Term	i		1
ENGR-112 MTH-252	Engineering Programming Calculus II	33 55	3 5				
WR-122 or	English Composition	55 44	5 4		REMOVE WR-122		
WR-227*	Technical Report Writing		-		Move WR-227 to Terr		
-	Track Requirement		3-4		REMOVE		_
				BI-204*	Elementary Microbiology	66	4
				CH-222	General Chemistry	77	5
				g Term			
MTH-261	Linear Algebra	44	4		Move to Term 6		
	Arts & Letters elective		4				<u> </u>
-	Track Requirement	1	3-5 3-5	-	REMOVE		
-	Track Requirement		3-0	COMM-111	Public Speaking	44	4
				MTH-254	Vector Calculus	55	5
				WR-227	Technical Report Writing	44	4
	•	Program	n Requirem	ents – Second		<mark>_</mark>	
		¥		Term			
PH-211	General Physics with Calculus	70	5				
	Track Requirement		3-5		REMOVE		
	Track Requirement		3-5				
-	Track Requirement		3-5				
				ENGR-211	Statics	44	4
				GIS-201	Geographic Information Systems	66	3
					Social Science elective		4
	Dublic On 11		1	r Term			
COMM-111 MTH-256	Public Speaking Differential Equations	44 44	4		Move to Term 3	1	1
PH-212	General Physics with Calculus	70	4 5				
	Calculus Track Requirement		3-5		REMOVE		
		1	5-5	CDT-103	Computer-Aided Drafting I	66	3
	1	1	1	ENGR-212	Dynamics	44	4
			Spring	g Term			
PH-213	General Physics with Calculus	70	5				
-	Arts & Letters or Social Science elective		4				
-	Social Science elective		4		Move to Term 4		
-	Track Requirement		3-5				
	Track Requirement (if necessary)		3-5		REMOVE		
	neeeeeary						
				ENGR-213 MTH-261	Strength of Materials Linear Algebra	44 44	4 4

ASL-101, 102 COMM-100, 1 ENG-104, 103 202, 204, 205 250, 251, 252 FR-101, 102, GER-101, 102 HUM-160, 233 MUS-105, 140 PHL-101, 102 SPN-101, 102 WR-140, 220, 270; Social Scient ANT-101, 102 EC-200, 201, GEO-100, 110 HST-101, 102 220; PS-200, 201, PSY-101, 110 SSC-160, 233	2, 103, 231, 232;	5, 121, 130, 194, , 226, 230, 240, , 270, 295; 212, 213; , 212, 213; 244, 245, 246, 2	All courses in ASL, COMM, ENG, FR, GER, HUM, PHL, SPN, WR. Note that native speakers should only take advanced (300 level or above) foreign language courses. Non-performance based courses in art, journalism, music, and theater also meet this requirement. The accepted courses at CCC are: ART-101, 102, 103, 205, 206; J-211; MUS-105, 141, 205, 206, 230; TA-101, 102; All courses in ANT, EC, GEO, HST, PS, PSY, SOC, SSC, and WS.				
SOC -204, 208 WS -101;	5, 206, 210, 225;						
			Track Rec	uirements			
Civil Engineer	ring						
CDT-103	Computer-Aided Draftin	g I 66	3	Move to Term 5			
CH-222	General Chemistry	77	5	Move to Term 2			
ENGR-211	Statics	44	4	Move to Term 4			
ENGR-212	Dynamics	44	4	Move to Term 5			
ENGR-213	Strength of Materials	44	4	Move to Term 6			
GIS-201	Geographic Information Systems	66	3	Move to Term 4			
MTH-254	Vector Calculus	55	5	Move to Term 3			
Environmenta							
BI-204	Elementary Microbiolog	y 66	4	Move to Term 2			
CDT-103	Computer-Aided Draftin	gl 66	3	Move to Term 5			
CH-222	General Chemistry	77	5	Move to Term 2			
ENGR-211	Statics	44	4	Move to Term 4			
ENGR-212	Dynamics	44	4	Move to Term 5			
ENGR-213	Strength of Materials	44	4	Move to Term 6			
GIS-201	Geographic Information Systems		3	Move to Term 4			
MTH-254	Vector Calculus	55	5	Move to Term 3			
TOTAL CUP	RRENT CREDITS:		96-106	TOTAL PROPOSED CREDITS: 96-100			
College Co	ntact			Telephone No.			
E-Mail Add	ress		_	Fax No.			
Chief Acad	emic Officer <i>or</i> CTE I	Dean Signatu	re	Date 1/8/19			

Office of Educational Improvement & Innovation

Phone: (503) 378-3600 FAX: (503) 378-5156



COMMUNITY COLLEGE ASSOCIATE OF SCIENCE AREA OF EMPHASIS AMENDMENT FORM

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

College: Clackamas Community College

Date

CAREER LEARNING AREA							
Ag, Food & Natural Resource Systems	Health Services						
Arts, Information & Communications	Human Resources						
Business & Management	\checkmark Industrial & Engineering Systems						

PROGRAM INFORMATION								
<u>APPROVED</u> Program Title	APPROVED CIP Code (Include 7th & 8th digits used for OCCURS reporting.) 6-digit CIP Zth digit digit digit Zth digit Sth digit			<u>APPROVED</u> Recognition Award	Current Credits			
AS Area of Emphasis Title: Engineering – Electrical/Computer				Associate of Applied Science Area of Emphasis	96-106			
Partnering Institution Name Portland State University								

Last amendment approved on 06.02.17

TYPE OF PROGRAM AMENDMENT (Check ALL That Apply)									
New Agreement	Curriculum Revision	Revision in Program Credit							
		<i>Proposed</i> Total Credits:	101- 106						
□ SUSPENSION of Program	Reason for Suspension:								
Suspension Effective Date:									

	[List in a [For	Defined Sequer	nce of Courses F	AMENDM Format, e.g., Quarte Proposed Curriculu	er-to-quarter mapping.			
CURRENT CURRICULUM 2018-19 [List entire curriculum as last approved)				PROPOSED CURRICULUM 2019-20 [List only course(s) to be amended]				
Course	Title	Hours	Credits	Course	Title	Hours	Credits	
		Progra		ments – First \	Year			
		T		Term				
CH-221	General Chemistry	77	5					
ENGR-111	Introduction to Engineering	33	3					
MTH-251	Calculus I	55	5		Move to Term 3	<u> </u>	<u> </u>	
WR-121	English Composition	44	4	CS-161		44	4	
	1		Winte		Computer Science I	44	4	
ENGR-112	Engineering Programming	33	3	Telli		1	ſ	
MTH-252	Calculus II	55	5					
WR-122	English Composition	44	4		<u> </u>	<u>I</u>	<u> </u>	
Or NR-227*	or Technical Report Writing		Ť		Move to Term 4			
	Track Requirement		3-4		REMOVE			
				CS-162	Computer Science II	44	4	
				ENGR-171	Digital Logic	66	4	
	-	_	Spring	g Term	_	_	_	
MTH-261	Linear Algebra	44	4					
-	Arts & Letters elective		4		Move to Term 5			
-	Track Requirement		3-5		REMOVE			
-	Track Requirement		3-5		REMOVE			
				COMM-111	Public Speaking	44	4	
				ENGR-271	Digital Systems	66	4	
				WR-121	English Composition	44	4	
	1		Summe	-				
				WR-122 Or	English Composition or	44	4	
				WR-227	Technical Report Writing			
		Program	n Requirem	ents – Second				
		¥	Fall					
PH-211	General Physics with Calculus	70	5					
-	Track Requirement		3-5			-		
-	Track Requirement		3-5		REMOVE			
-	Track Requirement		3-5			_	_	
				ENGR-221	Electrical Circuit Analysis I	33	4	
				MTH-254*	Vector Calculus	55	5	
					Arts & Letters elective		4	
		-	Winte	r Term				
COMM-111	Public Speaking	44	4		Move to Term 3	1	Ī	
MTH-256	Differential Equations	44	4					
PH-212	General Physics with Calculus	70	5					
-	Track Requirement		3-5		REMOVE			
		_		ENGR-222	Electrical Circuit Analysis II	33	4	
					Social Science elective		4	
PH-213	General Physics with Calculus	70	5	g Term	1	1	1	
-	Arts & Letters or Social Science elective		4					
_	Social Science elective	+	4		Move to Term 6			
	Track Requirement		3-5		REMOVE			

	Track Requirement (if		3-5	5					
	necessary)		_					00	- i ,
			-		ENGR-223	Electrical Circuit Anal	ysis III	33	4
	-				MTH-253	Calculus III		55	5
Catalog Note	S				*Electrical Tr	raak anly			
		Arte & Lo	ottore	or Soc	ial Science El				
Arts & Letters		AILS & LE	ellers	01 300		lectives			
	2, 103, 204, 205, 206;				All courses in	ASL, COMM, ENG, FF	R, GER, I	HUM, PI	HL, SPN,
ASL-101, 102, 103, 201, 202, 203; COMM-100, 112, 126, 140, 212, 218, 219, 227; ENG-104, 105, 106, 107, 108, 109, 116, 121, 130, 194, 195, 201, 202, 204, 205, 213, 214, 217, 218, 225, 226, 230, 240, 241, 242, 250, 251, 252, 253, 254, 255, 261, 266, 270, 295; FR-101, 102, 103, 201, 202, 203, 211, 212, 213; GER-101, 102, 103, 201, 202, 203; HUM-160, 233, 235, 240, 241, 242; MUS-105, 140, 141, 205, 206, 230; PHL-101, 102, 103, 201, 202, 203, 211, 212, 213; WR-140, 220, 222, 240, 241, 242, 243, 244, 245, 246, 262, 263, 270; Social Science ANT-101, 102, 103, 231, 232; EC-200, 201, 202; GEO-100, 110, 121, 122, 130; HST-101, 102, 103, 130, 131, 132, 136, 137, 138, 201, 202, 203, 220; PS-200, 201, 203, 204, 205, 225, 297; PSY-101, 110, 200, 205, 214, 215, 219, 221, 231, 240; SSC-160, 233, 235, 240, 241, 242; SOC-204, 205, 206, 210, 225;					WR. Note that native speakers should only take advanced (300 level or above) foreign language courses. Non-performance based courses in art, journalism, music, and theater also meet this requirement. The accepted courses at CCC are: ART-101, 102, 103, 205, 206; J-211; MUS-105, 141, 205, 206, 230; TA-101, 102;				
WS -101;			Tra	ack Red	uirements				
Computer Eng	gineering			I					
CS-161	Computer Science I	44	4			Move to Te	rm 1		
CS-162	Computer Science II	44	4			Move to Te	rm 2		
ENGR-171	Digital Logic	66	4			Move to Te	rm 2		
ENGR-221	Electrical Circuit Analysis I	33	4			Move to Te	erm 5		
ENGR-222	Electrical Circuit Analysis II	33	4			Move to Te	erm 6		
ENGR-223	Electrical Circuit Analysis III	33	4			Move to Te	rm 7		
ENGR-271	Digital Systems	66	4			Move to Te	rm 3		
MTH-253	Calculus III	55	5			Move to Te	rm 7		
Electrical Engi									
CS-161	Computer Science I	44	4			Move to Te			
CS-162	Computer Science II	44	4			Move to Te	rm 2		
ENGR-171	Digital Logic	66	4			Move to Te	rm 2		
ENGR-221	Electrical Circuit Analysis I	33	4			Move to Te			
ENGR-222	Electrical Circuit Analysis II	33	4			Move to Te			
ENGR-223	Electrical Circuit Analysis III	33	4			Move to Te	rm 7		
ENGR-271	Digital Systems	66	4			Move to Te			
MTH-253	Calculus III	55	5			Move to Te			
MTH-254	Vector Calculus	55	5			Move to Te	rm 5		
TOTAL CUP	RRENT CREDITS:		96	-106	TOTAL PR	OPOSED CREDITS:			101-106
College Cor	ntact					Telephone No.			
E-Mail Add	ress					Fax No.			
Chief Acade	emic Officer or CTE Dean	Signatu	re	$\langle \rangle$	nd	3 cm	Date	1/8/	19

Office of Educational Improvement & Innovation

Phone: (503) 378-3600 FAX: (503) 378-5156



COMMUNITY COLLEGE ASSOCIATE OF SCIENCE AREA OF EMPHASIS AMENDMENT FORM

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

College: Clackamas Community College

Date

CAREER LEARNING AREA							
Ag, Food & Natural Resource Systems	Health Services						
Arts, Information & Communications	Human Resources						
Business & Management	\checkmark Industrial & Engineering Systems						

PROGRAM INFORMATION								
<u>APPROVED</u> Program Title	APPROVED CIP Code (Include 7th & 8th digits used for OCCURS reporting.) 6-digit CIP Z th 8th digit digit digit			<u>APPROVED</u> Recognition Award	Current Credits			
AS Area of Emphasis Title: Engineering - Mechanical				Associate of Applied Science Area of Emphasis	96-106			
Partnering Institution Name Portland State University								

Last amendment approved on 06.02.17

TYPE OF PROGRAM AMENDMENT (Check ALL That Apply)									
New Agreement	Curriculum Revision	Revision in Program Cre							
		<i>Proposed</i> Total Credits:	101						
□ SUSPENSION of Program	Reason for Suspension:								
Suspension Effective Date:									

		CURF	RICULUM	AMENDM	ENT		
				Format, e.g., Quarte Proposed Curriculu	er-to-quarter mapping.		
C	CURRENT CURRICULUM	1 2018-19	· · · ·	PROPOSED CURRICULUM 2019-20 [List only course(s) to be amended]			
Course	Title	Hours	Credits	Course	Title	Hours	Credits
	-	Progr	am Require	ments – First N	/ear	-	-
			Fall	Term			
CH-221	General Chemistry	77	5				
ENGR-111	Introduction to Engineering	33	3				
MTH-251	Calculus I	55	5				
WR-121	English Composition	44	4				
ENOD 440		0.0	Winte	r Term	1	1	
ENGR-112	Engineering Programming	33	3				
MTH-252 WR-122	Calculus II English Composition	55 44	5		Move to Term 3		
Or WR-227	or Technical Report Writing	44	4				
	Track Requirement		3-4		REMOVE		
				CH-222	General Chemistry	77	5
				ENGR-231	Properties of Materials	66	4
			Spring	g Term			
MTH-261	Linear Algebra	44	4		Move to Term 4		
	Arts & Letters elective		4		Move to Term 4		
	Track Requirement		3-5		REMOVE		
	Track Requirement		3-5			1	
				ENGR-115	Engineering Graphics	33	3
				COMM-111	Public Speaking	44	4
		_		MTH-254	Vector Calculus	55	5
				WR-122 Or WR-227	English Composition or Technical Report Writing	44	4
		Progra	m Requirem	ents – Second			-
		v	-	Term			
PH-211	General Physics with Calculus	70	5				
	Track Requirement		3-5			-	
	Track Requirement		3-5		REMOVE		
	Track Requirement		3-5				
				ENGR-211	Statics	44	4
				MTH-261	Linear Algebra	44	4
			VA/I (Arts & Letters elective		4
COMM-111	Dublic Speaking	4.4	-	r Term	Move to Term 3		
MTH-256	Public Speaking	44 44	4		Twove to Term 3	1	
PH-212	Differential Equations General Physics with Calculus	44 70	5			†	
	Track Requirement		3-5		REMOVE	1	<u> </u>
	Thank thogail officine	1		ENGR-212	Dynamics	44	4
	1		1		Social Science elective		4
			Spring	g Term			
PH-213	General Physics with Calculus	70	5				
	Arts & Letters or Social Science elective		4				
	Social Science elective		4		Move to Term 5		
	Track Requirement		3-5				
	Track Requirement (if necessary)		3-5		REMOVE		
				ENGR-201	Electrical Fundamentals	33	4

					ENGR-213	Strength of Materials		44	4
Electives				-		• • •		•	-
Arts & Letters									
ENG-104, 105 202, 204, 205 250, 251, 252 FR-101, 102, GER-101, 102 HUM-160, 233 MUS-105, 140 PHL-101, 102 SPN-101, 102 WR-140, 220, 270;	2, 103, 201, 20 12, 126, 140, 5, 106, 107, 10 , 213, 214, 21 , 253, 254, 252 103, 201, 202 2, 103, 201, 202 3, 235, 240, 24 0, 141, 205, 20 2, 103, 205, 21 2, 103, 201, 20 , 222, 240, 241	2, 203; 212, 218, 219, 22)8, 109, 116, 121, 7, 218, 225, 226, 2 5, 261, 266, 270, 2 , 203, 211, 212, 2)2, 203; 11, 242;)6, 230;	All courses in ASL, COMM, ENG, FR, GER, HUM, PHL, SPN, WR. Note that native speakers should only take advanced (300 level or above) foreign language courses. Non-performance based courses in art, journalism, music, and theater also meet this requirement. The accepted courses at CCC are: ART -101, 102, 103, 205, 206; J -211; MUS -105, 141, 205, 206, 230; TA -101, 102;						
Social Science	ce				-				
ANT-101, 102, 103, 231, 232; EC-200, 201, 202; GEO-100, 110, 121, 122, 130; HST-101, 102, 103, 130, 131, 132, 136, 137, 138, 201, 202, 203, 220; PS-200, 201, 203, 204, 205, 225, 297; PSY-101, 110, 200, 205, 214, 215, 219, 221, 231, 240; SSC-160, 233, 235, 240, 241, 242; SOC-204, 205, 206, 210, 225; WS-101;					All courses in ANT, EC, GEO, HST, PS, PSY, SOC, SSC, and WS.				
				Track Red	quirements				
Mechanical E			-	-					
CH-222	General Che	mistry	77	5		Move to T	erm 2		
ENGR-115	Engineering	Graphics	33	3		Move to T	erm 3		
ENGR-211	Statics		44	4		Move to T	erm 4		
ENGR-212	Dynamics		44	4		Move to Te	erm 5		
ENGR-213	Strength of M	/laterials	44	4		Move to Te	erm 6		
ENGR-221	Electrical Cir	cuit Analysis I	66	4		REMO	VE		
MTH-254	Vector Calcu	llus	55	5		Move to Te	erm 3		
	ed: One addition	onal Arts & Letters, CCC.	/Social Sc	ience		REMO			
TOTAL CURRENT CREDITS: 96-106 T						OPOSED CREDITS:			101
College Co		Eric Lee				Telephone No.	6163		
E-Mail Add		-				Fax No.			
		r <i>or</i> CTE Dean	Signatu	re 🔿	my		Date	1/8/19	Ð

Office of Educational Improvement & Innovation

Phone: (503) 378-3600 FAX: (503) 378-5156



COMMUNITY COLLEGE PROGRAM AMENDMENT FORM

(For changes to State Approved Associate of Applied Science degree, AAS option and Certificate of Completion programs)

This form should be completed electronically and the boxes will expand to accommodate text. Current instructions, forms, handouts and other useful resources are located at http://www.ode.state.or.us/search/results/?id=231

College: Clackamas Community College	Date	
--------------------------------------	------	--

CAREER LEARNING AREA						
Ag, Food & Natural Resource Systems Health Services						
Arts, Information & Communications	Human Resources					
Business & Management	Industrial & Engineering Systems					

PROGRAM	PROGRAM INFORMATION						
<u>APPROVED</u> Program Title	APPROVED CIP Code (Include 7 th & 8 th digits used for OCCURS reporting.)		ligits	<u>APPROVED</u> Recognition Award	Current Credits		
(For Official Program Title, refer to your directory at <u>http://www.ode.state.or.us/search/results/?id=232</u>)	<u>6-digit CIP</u>	<u>7</u> th <u>di</u> <u>git</u>	<u>8th digit</u>				
AAS Title: Auto Body/Collision Repair and Refinishing Technology	47.060 3			✓ AAS (90-108 credits)	93-94		
Option Title**				OPTION to AAS Degree			
Related Programs: Auto Body Specialist CC Auto Body/Collision Repair and Refinishing Technology CPCC				Certificate of Completion			

**Enter name of base degree in 'AAS Title' box LAST AMENDMENT APPROVED ON 01/19/18

TYPE OF PROGRAM AMENDMENT (Check ALL That Apply)								
New Program++	Curriculum Revision Curriculum Revision Curriculum Revision							
Title Change for Program		Proposed Total Credits:	91-92					
Proposed AAS Title:								
Proposed OPTION Title:								
Proposed Certificate Title:								
SUSPENSION of Program	Reason for Suspension:	_						
Suspension Effective Date:								

	m is an additional award for an exi						, pi ograni.
					ter-to-quarter mapping.		
					ilum section only.]		
C	CURRENT CURRICULUM 2 [List entire curriculum as last appro	018-19			[List only course(s) to be am		20
Course Number	Course Title	Clock Hours	Credits	Course Number	Course Title	Clock Hours	Credits
	Auto Body/Collision Repair and	Refinishir		gy Associate of	f Applied Science Degree:	1 st Year	<u></u>
Fall			-				
AB-112	Collision Repair Welding I	48	2				
AB-113	Collision Repair I/Nonstructural	132	6				
ABR-125	Collision Repair/Refinishing I	132	6				
MTH-050 Or MTH-065	Technical Mathematics I or Algebra II	44	4				
Winter		-		-		-	-
AB-123	Collision Repair Welding II	48	2				
AB-133	Collision Repair II/Structural	132	6				
ABR-127*	Collision Repair/Refinishing II	132	6				
Spring							
AB-222	Collision Repair III/Advanced Structural	132	6				
ABR-129	Collision Repair/Refinishing III	132	6				
	Human Relations requirement (see page 82) (Recommended: COMM-100 or PSY-101		3				
	Auto Body/Collision Repair and	Refinishir	g Technolo	gy Associate of	Applied Science Degree:	2 nd Year	<u></u>
Fall							
AB-149	Collision Repair Estimating I	28	2				
AB-224	Collision Repair IV/Advanced Structural	132	6				
ABR-225	Production Shop Techniques	132	6				
	PE/Health/Safety/First Aid requirement (see page 82) (Recommended: HE-252 or MFG-107)		3				
Winter		•	•			<u>.</u>	<u>.</u>
AB-150	Collision Repair Computerized Estimating - Audatex	44	2				
AB-226	Collision Repair V/Advanced Structural	132	6				
AB-235	Collision Repair Welding III	48	2				
ABR-227	Restoration Practices	132	6				
Spring							

AB-151	Collision Repair Computerized Estimating - CCC ONE	44	2			
AB-280	Collision Repair/CWE	216	6			
ABR-142 Or ABR-152 Or ABR-162	Airbrush Art Custom Painting Fundamentals Basic Automotive Pinstriping	44	2		REMOVE	
WR-101 Or WR-121	Communication Skills: Occupational Writing or English Composition	33- 44	3-4			
* Successfu	* Successful completion of ABR-125 required.					
TOTAL CU	RRENT CREDITS:		93-94	TOTAL PR	OPOSED CREDITS:	91-92

College Contact	Dave Bradley	Telephone No.	3051	
E-Mail Address	-	Fax No.		_
Chief Academic Offic PTE Dean Signature			Date	1/11/19

Office of Educational Improvement & Innovation

Phone: (503) 378-3600 FAX: (503) 378-5156



COMMUNITY COLLEGE PROGRAM AMENDMENT FORM

(For changes to State Approved Associate of Applied Science degree, AAS option and Certificate of Completion programs)

This form should be completed electronically and the boxes will expand to accommodate text. Current instructions, forms, handouts and other useful resources are located at http://www.ode.state.or.us/search/results/?id=231

College:	Clackamas Community College	Date	

CAREER LEARNING AREA						
Ag, Food & Natural Resource Systems Health Services						
Arts, Information & Communications	Human Resources					
Business & Management	Industrial & Engineering Systems					

PROGRAM INFORMATION									
<u>APPROVED</u> Program Title (For Official Program Title, refer to your directory at <u>http://www.ode.state.or.us/search/results/?id=232</u>)	APPROVED CIP Code (Include 7 th & 8 th digits used for OCCURS reporting.) 6-digit CIP Z th digit <u>8th</u> digit		CIP Code (Include 7 th & 8 th digits used for OCCURS reporting.) <u>6-digit CIP</u> 7 th 8 th		CIP Code (Include 7 th & 8 th digits used for OCCURS reporting.) <u>6-digit CIP</u> 7 th 8 th		gits 5	<u>APPROVED</u> Recognition Award	Current Credits
AAS Title: Clinical Laboratory Assistant Certificate				Associate of Applied Science (AAS) Degree					
Option Title**				OPTION to AAS Degree					
Certificate Title: <u>Within</u> AAS Degree? □ Yes** √ No Basic Health Sciences Career Pathway	51.0802			✓ Career Pathway (12-44)	16				

**Enter name of base degree in `AAS Title' box NEW PROGRAM APPROVED ON 08/03/17

TYPE OF PROGRAM AMENDMENT (Check ALL That Apply)								
New Program++	□ Curriculum Revision ✓ Revision in Program Cred							
Title Change for Program		Proposed Total Credits:	17					
Proposed AAS Title:								
Proposed OPTION Title:								
Proposed Certificate Title:								
SUSPENSION of Program	Reason for Suspension:							
Suspension Effective Date:								

++If new program is an additional award for an existing degree or certificate, complete 'Program Information' section for existing program.

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.]								
CURRENT CURRICULUM 2018-19PROPOSED CURRICULUM 201[List entire curriculum as last approved)[List only course(s) to be amended]				?0				
Course	Title	Hours	Credits	Course	Title	Hours	Credits	
CLA-100	Introduction to Health Care	22	2					
MA-110	Medical Terminology	33	3	MA-110	Medical Terminology	44	4	
MTH-065	Algebra II	44	4					
PSY-101	Human Relations	33	3					
WR-121	English Composition	44	4					
TOTAL CURRENT CREDITS:16TOTAL PROPOSED CREDITS:					17			
			•	TOTAL PR	OPOSED CREDITS:		17	

College Contact	Allied Health	Telephone No.		
E-Mail Address	-	Fax No.		_
Chief Academic Offic PTE Dean Signature	Date	12/18/18		
	0			

Office of Educational Improvement & Innovation

Phone: (503) 378-3600 FAX: (503) 378-5156



COMMUNITY COLLEGE PROGRAM AMENDMENT FORM

(For changes to State Approved Associate of Applied Science degree, AAS option and Certificate of Completion programs)

This form should be completed electronically and the boxes will expand to accommodate text. Current instructions, forms, handouts and other useful resources are located at http://www.ode.state.or.us/search/results/?id=231

College:	Clackamas Community College	Date	

CAREER LEARNING AREA					
Ag, Food & Natural Resource Systems	Health Services				
Arts, Information & Communications	Human Resources				
Business & Management	Industrial & Engineering Systems				

PROGRAM INFORMATION						
<u>APPROVED</u> Program Title (For Official Program Title, refer to your directory at <u>http://www.ode.state.or.us/search/results/?id=232</u>)	APPROVED CIP Code (Include 7 th & 8 th digits used for OCCURS reporting.) 6-digit CIP 2 th digit		igits S	<u>APPROVED</u> Recognition Award	Current Credits	
AAS Title:				Associate of Applied Science (AAS) Degree		
Related Program: Basic Health Science Career Pathway				OPTION to AAS Degree		
Certificate Title: <u>Within</u> AAS Degree? □ Yes** √ No Clinical Laboratory Assistant Certificate	51.0802			✓ CC1 (45-60 credits)	45-47	

**Enter name of base degree in `AAS Title' box LAST AMENDMENT APPROVED ON 01/19/18

TYPE OF PROGRAM AMENDMENT (Check ALL That Apply)							
□ New Program++ □ Curriculum Revision ✓ Revision in Program Credits							
Title Change for Program		Proposed Total Credits:					
Proposed AAS Title:		· · · · · · · · · · · · · · · · · · ·					
Proposed OPTION Title:							
Proposed Certificate Title: Clinical Laboratory Assistant/Phlebotomy Certificate							
SUSPENSION of Program Reason for Suspension:							

	C	URRTC		MENDME	NT			
	[List in a Defined Seque	ence of C	Courses Form	nat, e.g., Qua	arter-to-quarter mapping.			
			lete the Pro		culum section only.]	14 2010	20	
C	[List entire curriculum as last approved			PROPOSED CURRICULUM 2019-20 [List only course(s) to be amended]				
Course	Title	Hours			Title	Hours	Credits	
				Certificate Pro	erequisites			
the student's co may change ye	prerequisites must be completed p cohort. Curriculum prerequisites an early. To see prerequisites or requ partment website.	ind requi	irements					
MA-110	Medical Terminology	33	3	MA-110	Medical Terminology	44	4	
MTH-050	Technical Mathematics I	44	4					
Or MTH-065	or Algebra II							
	Cli	nical Lat	ooratory Ass	sistant Certific	cate			
Fall Term								
BI-120*	Introduction to Human Anatomy and Physiology	66	4					
CLA-100	Introduction to Health Care	22	2					
CLA-101	Clinical Laboratory Assistant Skills I	33	3					
CLA-101L	Clinical Laboratory Assistant Skills Lab I	33	1					
CLA-118	Phlebotomy for Clinical Laboratory Assistants	11	1					
CLA-118L	Phlebotomy for Clinical Laboratory Assistant Lab	33	1					
WR-101 Or WR-121	Communication Skills: Occupational Writing or English Composition	33- 44	3-4			Τ		
Winter Term								
CLA-102	Clinical Laboratory Assistant Skills II	33	3					
CLA-102L	Clinical Laboratory Assistant Skills Lab II	33	1			1		
CLA-115	Laboratory Administrative Skills	22	2			\top		
CLA-119	Laboratory/Phlebotomy Practicum	82	3					
CLA-130	Specimen Collection	22	1					
CS-120	Survey of Computing	55	4					
Spring Term								
CLA-103	Clinical Laboratory Assistant Skills III	33	3					
CLA-103L	Clinical Laboratory Assistant Skills Lab III	33	1					
CLA-120	Laboratory/Phlebotomy Practicum II	107	4					
CLA-125	Introduction to Clinical Research	22	2					

					Ī	
COMM-100**	Basic Speech	33-	3-4			
Or	Communication	44				
COMM-111	or					
Or	Public Speaking					
COMM-218	or					
	Interpersonal					
	Communication					
PSY-101	Human Relations	33	3			
BI-102 with a C c	ns to meet biology requiremen or better or successfully comple 233, Anatomy & Physiology ser	ete the er				
ASHI) card are re prior to the first t to complete a crin	Current First Aid card and Healthcare Provider level CPR (AHA or ASHI) card are required during practicums and must be taken prior to the first term practicum. All CLA students will be required to complete a criminal history background, provide proof of immunization, and take a drug test.					
may be taken for other courses are	practicum courses are Pass/No either a letter grade or pass/r e letter grades only and must b n order to continue to the next	io pass o e passed	ption. All			
Core curriculum is sequential and may not be taken out of order, with the exception of CLA-100 which may be taken prior to beginning the program. Curriculum is intended to be completed in one academic year.			to			
Individuals who have been found guilty of a felony or pleaded guilty to a felony may not be eligible for clinical practicum placement or be eligible to take the National exams.						
TOTAL CURREN	VT CREDITS:		45-47	TOTAL PR	OPOSED CREDITS:	

College Contact	health-sciences-questions@clackamas.edu	Telephone No.		
E-Mail Address		Fax No.		
Chief Academic Offic PTE Dean Signature			Date	1/3/19
	0			

Office of Educational Improvement & Innovation

Phone: (503) 378-3600 FAX: (503) 378-5156



COMMUNITY COLLEGE PROGRAM AMENDMENT FORM

(For changes to State Approved Associate of Applied Science degree, AAS option and Certificate of Completion programs)

This form should be completed electronically and the boxes will expand to accommodate text. Current instructions, forms, handouts and other useful resources are located at http://www.ode.state.or.us/search/results/?id=231

College:	Clackamas Community College	Date	

CAREER LEARNING AREA					
Ag, Food & Natural Resource Systems	Health Services				
Arts, Information & Communications	Human Resources				
Business & Management	Industrial & Engineering Systems				

PROGRAM INFORMATION							
<u>APPROVED</u> Program Title	APPROVED CIP Code (Include 7 th & 8 th digits used for OCCURS reporting.)		igits	<u>APPROVED</u> Recognition Award	<u>Current</u> Credits		
(For Official Program Title, refer to your directory at <u>http://www.ode.state.or.us/search/results/?id=232</u>)	<u>6-digit CIP</u>	<u>Zth digit</u>	<u>8th digit</u>				
AAS Title: Criminal Justice	43.0107			✓ AAS (90-108 credits)	91-95		
Related Option: Corrections				OPTION to AAS Degree			
Related Certificates:				Certificate of Completion			

**Enter name of base degree in `AAS Title' box LAST AMENDMENT APPROVED ON 01/19/18

TYPE OF PROGRAM AMENDMENT (Check ALL That Apply)						
New Program++						
Title Change for Program		Proposed Total Credits:	90-92			
Proposed AAS Title:						
Proposed OPTION Title:						
Proposed Certificate Title:						
SUSPENSION of Program	Reason for Suspension:					
Suspension Effective Date:						

++If new program is an additional award for an existing degree or certificate, complete 'Program Information' section for existing program.

				AMENDME					
					arter-to-quarter mapping.				
	RRENT CURRICULUM 2		•	Proposed Curriculum section only.] PROPOSED CURRICULUM 2019-20					
	[List entire curriculum as last appro			[List only course(s) to be amended]					
Course	Title	Hours	Credits	Course	Title	Hours	Credits		
	Criminal Jus	tice Asso	ciate of App	lied Science	Degree: 1 st Year				
Fall Term									
CJA-110	Introduction to Law Enforcement	44	4	CJA-110	Introduction to Law Enforcement	33	3		
CJA-122	Criminal Law	44	4						
MTH-050 or MTH-065 or MTH-098	Technical Mathematics I Algebra II College Math Foundations	44	4		REMOVE	_			
WR-121	English Composition	44	4						
				MTH-098	College Math Foundations	44	4		
Winter Term									
CJA-101 or CJA-201	Criminology Juvenile Delinquency	44	4						
CJA-120	Judicial Process	33	3	CJA-120	Introduction to Courts	33	3		
CJA-203	Crisis Intervention	33	3						
WR-122	English Composition	44	4						
				LIB-101	Introduction to Library Research	11	1		
Spring Term		-	_			-	_		
CJA-130	Introduction to Corrections	33	3						
CJA-243	Drugs, Crime and the Law	33	3						
PSY-219	Introduction to Abnormal Psychology	44	4						
	Criminal Justice program electives		3-4		REMOVE				
				HD-161	Multicultural Awareness	33	3		
	Criminal Jus	tice Asso	ciate of App	lied Science I	Degree: 2 nd Year				
Fall Term									
CJA-170	Careers in Criminal Justice	33	3		Move to term 5	_			
CJA-210	Criminal Investigation I	33	3						
HE-163 or HE-205	Body & Drugs I: Introduction to Abuse & Addiction Youth Addictions	33	3	REMOVE					
HS-260	Victim Advocacy & Assistance	44	4		REMOVE				
	Criminal Justice program electives		3-4						
				CJA-214	Intimate Partner Violence	33	3		
				CJA-223	Criminal Justice Ethics	33	3		
				HDF-260	Understanding Child Abuse and Neglect	44	4		
Winter Term			-	-					
CJA-211	Criminal Investigation II	33	3						
CJA-222	Procedural Law	33	3						
CJA-223	Criminal Justice Ethics	33	3		Move to term 4				

CJA-280	Criminal Justice/Corrections/CWE	108	3	Move to term 6			
CWE-281	Cooperative Work Experience Seminar	16	0		REMOVE	_	_
	Criminal Justice program electives		3-4				
				CJA-170	Careers in Criminal Justice	33	3
				HPE-296	Health and Fitness for Criminal Justice	33	3
Spring Term		_	-		-	-	-
CJA-200	Community Policing in a Culturally Diverse Society	44	4	CJA-200	Community Policing	33	3
CJA-212	Criminal Investigation III	33	3				
CJA-250	Reporting, Recording & Testifying	44	4				
CJA-281	Criminal Justice/Corrections/CWE	108	3	REMOVE			
CWE-281	Cooperative Work Experience Seminar	16	0	REMOVE			
	Criminal Justice program electives		3-4	REMOVE			
				CJA-270	Criminal Justice Capstone	33	3
				CJA-280 Or HD-102	Criminal Justice/Corrections/CWE Or Service Learning Experience	108	3
Criminal Justi	ce Program Electives						
	, FR, GER, HS, PHL, PS, PSY, S n the Criminal Justice Program,				urse not included in the Crim r any of the following:	inal Justi	ce
COMM-126	Communication Between the Sexes	44	4		REMOVE		
COMM-140	Introduction to Intercultural Communication	44	4	REMOVE			
COMM-218	Interpersonal Communication	44	4		REMOVE		
COMM-227	Nonverbal Communication	44	4		REMOVE		
GRN-183	Death and Dying	33	3				
HDF-260	Understanding Child Abuse and Neglect	44	4		REMOVE		
HST-131	History of Crime & Punishment in Western Civilization	44	4				
TOTAL CUR	RENT CREDITS:		91-95	TOTAL PR	OPOSED CREDITS:		90-92

	-			_	
College Contact	Sharro	n Furno	Telephone No.	6224	
E-Mail Address sharro		n.furno@clackamas.edu Fax No.			_
Chief Academic Officer <i>or</i> PTE Dean Signature		Contair, Rui	Cu	Date	11/27/18

Office of Educational Improvement & Innovation

Phone: (503) 378-3600 FAX: (503) 378-5156



COMMUNITY COLLEGE PROGRAM AMENDMENT FORM

(For changes to State Approved Associate of Applied Science degree, AAS option and Certificate of Completion programs)

This form should be completed electronically and the boxes will expand to accommodate text. Current instructions, forms, handouts and other useful resources are located at http://www.ode.state.or.us/search/results/?id=231

College:	Clackamas Community College	Date	

CAREER LEARNING AREA						
Ag, Food & Natural Resource Systems Health Services						
Arts, Information & Communications	Human Resources					
Business & Management Industrial & Engineering Systems						

PROGRAM INFORMATION						
<u>APPROVED</u> Program Title	APPROVED CIP Code (Include 7 th & 8 th digits used for OCCURS reporting.)		igits S	<u>APPROVED</u> Recognition Award	Current Credits	
(For Official Program Title, refer to your directory at <u>http://www.ode.state.or.us/search/results/?id=232</u>)	<u>6-digit CIP</u>	<u></u> <u>digit</u>	<u>8th digit</u>			
AAS Title: Criminal Justice				AAS		
Option Title** Corrections	43.0102			✓ OPTION to AAS (at least 70% of base AAS, 90-108 credits)	91	
Related Certificate: Corrections Certificate				Certificate of Completion		

**Enter name of base degree in `AAS Title' box AST AMENDMENT APPROVED ON 01/19/18

TYPE OF PROGRAM AMENDMENT (Check ALL That Apply)									
New Program++	Curriculum Revision Curriculum Revision Curriculum Revision								
Title Change for Program		Proposed Total Credits:	91-92						
Proposed AAS Title:									
Proposed OPTION Title:									
Proposed Certificate Title:									
SUSPENSION of Program	Reason for Suspension:								
Suspension Effective Date:									
The second			•						

++If new program is an additional award for an existing degree or certificate, complete 'Program Information' section for existing program.

lis\i:\curriculum office\(02) curriculum committee\1-meetings\2018-19 meeting handouts\2019 - 01.18\all program changes\amendments\amendment criminal justice aas - corrections option.docx\09202005 (Revised 05/17/05)

	[List in a Defined Sequ	lence of (Courses For		arter-to-quarter mapping.		
CU	RRENT CURRICULUM 2	018-19	plete the Pi		culum section only.] ROPOSED CURRICULUM		20
Course	[List entire curriculum as last appro Title	Hours	Credits	Course	[List only course(s) to be amer	Hours	Credits
Course					egree: 1 st Year	Hours	Creats
Fall Term	CONECTION						
CJA-110	Introduction to Law Enforcement	44	4	CJA-110	Introduction to Law Enforcement	33	3
CJA-122	Criminal Law	44	4		Enoreement		
MTH-050 or MTH-065 or MTH-098	Technical Mathematics I Algebra II College Math Foundations	44	4		Remove		
WR-121	English Composition	44	4				
				MTH-098	College Math Foundations	44	4
Winter Term		_	_		_	_	
CJA-101 or CJA-201	Criminology Juvenile Delinquency	44	4				
CJA-120	Judicial Process	33	3	CJA-120	Introduction to Courts	33	3
CJA-203	Crisis Intervention	33	3				
WR-122	English Composition	44	4				
				LIB-101	Introduction to Library Research	11	1
Spring Term	-	_		-			
CJA-130	Introduction to Corrections	33	3				
CJA-243	Drugs, Crime and the Law	33	3				
PSY-219	Introduction to Abnormal Psychology	44	4				
	Corrections program elective		3		Remove		
				HD-161	Multicultural Awareness	33	3
	Corrections	Associat	ion of Appli	ed Science D	egree: 2 nd Year		
Fall Term		_	_				
CJA-170	Careers in Criminal Justice	33	3		Move to term 5		
CJA-252	Introduction to Restorative Justice	33	3				
HE-163 Or HE-205	Body & Drugs I: Introduction to Abuse & Addiction Youth Addictions	33	3		Remove		
HS-260	Victim Advocacy & Assistance	44	4	Remove			
				CJA-223	Criminal Justice Ethics	33	3
				HE-163	Body & Drugs I: Introduction to Abuse & Addiction	33	3
				HDF-260	Understanding Child Abuse and Neglect	44	4
	Corrections program elective		3		Corrections program elective		3-4

Winter Term							
CJA-134	Correctional Institutions	33	3				
CJA-223	Criminal Justice Ethics	33	3		Move to term 4		
CJA-280	Criminal Justice/Corrections/CWE	108	3	Move to term 6			
CWE-281	Cooperative Work Experience Seminar	16	0	Remove			
HS-156	Conducting Human Service Interviews	33	3				
HS-211	Infectious Diseases and Harm Reduction	11	1				
	Corrections program elective		3		Remove		
				CJA-170	Careers in Criminal Justice	33	3
				HPE-296	Health and Fitness for Criminal Justice	33	3
				HS-216	Group Counseling Skills	33	3
Spring Term							
CJA-232	Case Management	33	3				
CJA-250	Reporting, Recording & Testifying	44	4				
CJA-281	Criminal Justice/Corrections/CWE	108	3	Remove			-
CWE-281	Cooperative Work Experience Seminar	16	0	Remove			
HS-216	Group Counseling Skills	33	3	Move to term 5			
	Corrections program elective		3	Remove			
				CJA-215	Sexual Abuse and Human Trafficking	33	3
				CJA-270	Criminal Justice Capstone	33	3
				CJA-280 or HD-102	Criminal Justice/Corrections/CWE Or Service Learning	108	3
					Experience		
	rogram Electives						
	, FR, GER, HS, PHL, PS, PSY, S cluded in the Corrections Prog				urse not already included in t any of the following:	the Correc	ctions
COMM-126	Communication Between the Sexes	44	4	Remove			
COMM-140	Introduction to Intercultural Communication	44	4	Remove			
COMM-218	Interpersonal Communication	44	4	Remove			
COMM-227	Nonverbal Communication	44	4		Remove		
GRN-183	Death and Dying	33	3				
HDF-260	Understanding Child Abuse and Neglect	33	4		Remove		

HST-131	History of Crime & Punishment in Western Civilization	44	4			
TOTAL CURRENT CREDITS:		91	TOTAL PRO	OPOSED CREDITS:	91-92	

College Contact	Ida Flippo	Telephone No.	3363	
E-Mail Address	iflipp@clackamas.edu	Fax No.		
Chief Academic Offic PTE Dean Signature		<u>Cri</u>	Date	11/27/18

Office of Educational Improvement & Innovation

Phone: (503) 378-3600 FAX: (503) 378-5156



COMMUNITY COLLEGE PROGRAM AMENDMENT FORM

(For changes to State Approved Associate of Applied Science degree, AAS option and Certificate of Completion programs)

This form should be completed electronically and the boxes will expand to accommodate text. Current instructions, forms, handouts and other useful resources are located at http://www.ode.state.or.us/search/results/?id=231

College:	Clackamas Community College	Date	

CAREER LEARNING AREA						
□ Ag, Food & Natural Resource Systems √ Health Services						
Arts, Information & Communications	Human Resources					
Business & Management	Industrial & Engineering Systems					

PROGRAM INFORMATION						
<u>APPROVED</u> Program Title (For Official Program Title, refer to your directory at <u>http://www.ode.state.or.us/search/results/?id=232</u>)	APPROVED CIP Code (Include 7 th & 8 th digits used for OCCURS reporting.) 6-digit CIP		igits S	<u>APPROVED</u> Recognition Award	Current Credits	
AAS Title: Emergency Medical Technology- Paramedic AAS				Associate of Applied Science (AAS) Degree		
Option Title**				OPTION to AAS Degree		
Certificate Title: <u>Within</u> AAS Degree? √ Yes** □ No Emergency Medical Technology **Enter name of base degree in `AAS Title' box	51.0904			✓ SSC1 Statewide Certificate (45-60 credits)	53	

LAST AMENDMENT APPROVED ON 04/06/18

TYPE OF PROGRAM AMENDMENT (Check ALL That Apply)								
New Program++	Curriculum Revision Revision in Program Cr							
Title Change for Program		Proposed Total Credits:	54					
Proposed AAS Title:								
Proposed OPTION Title:								
Proposed Certificate Title:								
SUSPENSION of Program	Reason for Suspension:							
Suspension Effective Date:								

CURRICULUM AMENDMENT									
					arter-to-quarter mapping.				
(CURRENT CURRICULUM 2			roposed Curriculum section only.] PROPOSED CURRICULUM 2019-20					
	List entire curriculum as last appro		_	[List only course(s) to be amended]					
Course	Title	Hours	Credits	Course	Title	Hours	Credits		
Fall Term		-			-	•	1		
BI-231	Human Anatomy & Physiology I	66	4						
EMT-101*	Emergency Medical Technology Part I	77	5						
EMT-105	Introduction to Emergency Medical Services	33	3						
MA-110	Medical Terminology	33	3	MA-110	Medical Terminology	44	4		
MTH-065	Algebra II	44	4						
Winter Term				-	-	-			
BI-232	Human Anatomy & Physiology II	66	4						
CJA-203	Crisis Intervention	33	3						
EMT-102	Emergency Medical Technology Part II	77	5						
EMT-109	Emergency Response Communication/Documentati on	22	2						
WR-121	English Composition	44	4						
Spring Term		-	-		-	_			
BI-233	Human Anatomy & Physiology III	66	4						
COMM-111	Public Speaking	44	4						
EMT-107	EMT Rescue	49	3						
EMT-108	Emergency Response Patient Transportation	44	2						
PSY-101	Human Relations	33	3						
Catalog Note	S			-	-				
	ition Required								
required; crir immunizatior arranged by	Current Healthcare Provider level CPR (AHA or ASHI) are required; criminal history background check, proof of immunization, and students will be asked to take a drug test as arranged by the department								
TOTAL CUR	RENT CREDITS:		53	TOTAL PR	OPOSED CREDITS:		54		

College Contact	EMT Program Director	Telephone No.	0696	
E-Mail Address	-	Fax No.	IX No.	
Chief Academic Offic PTE Dean Signature		v 1	Date	1/3/19
	()			

Office of Educational Improvement & Innovation

Phone: (503) 378-3600 FAX: (503) 378-5156



COMMUNITY COLLEGE PROGRAM AMENDMENT FORM

(For changes to State Approved Associate of Applied Science degree, AAS option and Certificate of Completion programs)

This form should be completed electronically and the boxes will expand to accommodate text. Current instructions, forms, handouts and other useful resources are located at http://www.ode.state.or.us/search/results/?id=231

College: Clackamas Community College	Date	
--------------------------------------	------	--

CAREER LEARNING AREA							
Ag, Food & Natural Resource Systems Health Services							
Arts, Information & Communications	Human Resources						
Business & Management	Industrial & Engineering Systems						

PROGRAM INFORMATION							
<u>APPROVED</u> Program Title (For Official Program Title, refer to your directory at	APPROVED CIP Code (Include 7 th & 8 th digits used for OCCURS reporting.)		igits	<u>APPROVED</u> Recognition Award	Current Credits		
http://www.ode.state.or.us/search/results/?id=232) AAS Title:		<u>digit</u>	<u>digit</u>				
Horticulture	1.0601			✓ AAS (90-108 credits)	97-101		
Option Title**				OPTION to AAS Degree			
Related Certificates: Horticulture Certificate Irrigation Technician CP Plant Health Management CP				Certificate of Completion			
Plant Health Management CP **Enter name of base degree in 'AAS Title' box							

LAST AMENDMENT APPROVED ON 01/19/2018

TYPE OF PROGRAM AMENDMENT (Check ALL That Apply)							
□ New Program++ □ Curriculum Revision ✓ Revision in Program Cre							
Title Change for Program		Proposed Total Credits:	94-98				
Proposed AAS Title:							
Proposed OPTION Title:							
Proposed Certificate Title:							
SUSPENSION of Program	Reason for Suspension:	-					
Suspension Effective Date:							

				MENDMEI mat, e.g., Qua	NT arter-to-quarter mapping.		
	For a New Progra	am, comp	lete the Pro	oposed Curric	ulum section only.]		
CU	RRENT CURRICULUM 20			PROPOSED CURRICULUM 2019-20			
Courses	[List entire curriculum as last approv		Cuedite	Course	[List only course(s) to be amer		Credito
Course	Title	Hours		Course		Hours	Credits
Fall Term1	Horticulture	e Associat	le of Applie	a science Deg	gree: 1 st Year		
HOR-111	Horticulture Practicum/Fall	44	2			1	I
HOR-111	Horticulture Safety	10	2 1				
HOR-122	Greenhouse I	44	3			<u>.</u>	
Or	or		5		Move to Term 5		
HOR-224	Landscape Installation						
HOR-226	Plant Identification/Fall	44	4				
MTH-050	Technical Mathematics	44	4-5				
or MTH-065	I						
or higher	or Algebra II						
level math	or higher level math						
				HOR-223	Applied Plant Science	44	4
Winter Term2		00.44				1	•
HOR-130 Or	Plant Propagation Theory or	33-44	3				
HOR-131	Tree & Shrub Pruning						
HOR-133	Horticulture	44	2				
	Practicum/Winter						
HOR-216	Integrated Pest	33	3				
HOR-222	Management	20	2				
NUK-222	Horticultural Computer Applications	20	2				
HOR-227	Plant Identification/Winter	44	4			Ì	
Spring Term3						<u> </u>	
HOR-112	Horticulture Career	24	2				Ī
	Exploration						
HOR-120	Pesticide Laws & Safety	12	1				
HOR-140	Soils	33	3			<u> </u>	
HOR-142	Greenhouse II	44	2-3				
Or HOR-145	or Turf Installation &				Move to Term 7		
	Maintenance						
HOR-143	Horticulture	44	2				
	Practicum/Spring					<u> </u>	<u> </u>
HOR-228	Plant Identification/Spring	44	4				
				WR-101 Or	Communication Skills: Occupational Writing	33- 44	3-4
				WR-121	or		
					English Composition		
Summer Term4							
HOR-281	Horticulture/CWE	180	6				
Or HOR-280	Or Horticulture/CW/E						
HOR-280 and	Horticulture/CWE and						
4114		I	I		I	1	

HOR-282	Horticulture/CWE	Ī					
		e Associa	ate of App	lied Science De	gree: 2 nd Year		
Fall Term5							
HOR-223	Applied Plant Science	44	4		Move to Term 1		
HOR-235	Weed Identification	20	2				
Or	or						
HOR-236	Insect Identification			_			
SPN-101	First-Year Spanish I	44	4	_			
WR-101 Or WR-121	Communication Skills: Occupational Writing or English Composition	33- 44	3-4		Move to Term 3		
	Horticulture program electives		3				
				BA-285	Human Relations in	33-	3-4
				Or	Business	44	
				СОММ- 100	or Basic Speech Communication		
				HOR-122	Greenhouse I	44	3
				Or	or		
				HOR-224	Landscape Installation		
Winter Term6		I	1.	-			1
BA-101	Introduction to Business	44	4	_			
BA-119	Project Management Practices	22	2				
HOR-230	Equipment Operation & Maintenance	44	2				
HOR-231	Irrigation Design	44	3				
HOR-237	Disease Identification	20	2				
	Horticulture program electives		3				
Spring Term7		-	-			=	-
BA-285 Or COMM-100	Human Relations in Business or Basic Speech Communication	33- 44	3-4		Move to Term 5		
HE-252**	First Aid/CPR/AED	33	3		REMOVE		
HOR-240	Irrigation Practices	44	3				
	Horticulture program electives		8				
				HOR-142 Or HOR-145	Greenhouse II or Turf Installation & Maintenance	44	2-3
Horticulture Pro	og <u>r</u> am Electives						
BA-223	Principles of Marketing	44	4				
HOR-113	Organic Farming Practicum/Fall	55	3				
HOR-122 Or HOR-224	Greenhouse I or Landscape Installation	44	3				
		44	2	-		-	
HOR-123	Landscape Maintenance	44	3				1

HOR-124	Food Harvest	44	3			Ī	
HOR-125*	Food Production in the	33	3		l	1	
_	Willamette Valley						
HOR-126*	Landscape Water Features	20	1				
HOR-127*	Landscape Lighting	20	1				
HOR-128*	Landscape Stones & Pavers	20	1				
HOR-129*	Landscape Decks & Fences	20	1				
HOR-130	Plant Propagation Theory	33-44	3				
Or HOR-131	or Tree & Shrub Pruning						
HOR-134	Herb Growing & Gardening	20	1		REMOVE		
HOR-135	Propagation of Edible Plants	44	3				
HOR-136	Organic Farming Practicum/Winter	55	3				
HOR-141	Organic Farming Practicum/Spring	88	4				
HOR-142	Greenhouse II	44	2-3				
Or HOR-145	or Turf Installation &						
	Maintenance						
HOR-146	Fruit & Berry Growing	44	3				
HOR-148	Farm Equipment	44	3				
HOR-211	Native Plant Identification	10	1				
HOR-212	Flower Arranger's Garden/Fall	44	2				
HOR-213*	Computer-Aided Landscape Design	44	3				
HOR-215	Herbaceous Perennials	44	3				
HOR-220	Plant Propagation/Fall	44	3				
HOR-225	Arboriculture I	33	3				
HOR-229*	Introduction to Landscape Design	44	3	HOR-229	Introduction to Landscape Design	44	3
HOR-232*	Commercial Floral Design	44	3				
HOR-235	Weed Identification	20	2				
Or	or In sect I double stimu						
HOR-236	Insect Identification	24	1				
HOR-239	Tree Climber Training	24	1				
HOR-241*	Nursery Management	33	3				
HOR-244*	Environmental Landscape Design	44	3				
HOR-246	Organic Farming and Gardening	44	2				
HOR-250	Herb Growing and Gardening	20	2				
HOR-251	Herbal Products	20	1				
HOR-252	Kitchen Herbs	20	1				
HOR-260	Arboriculture II	33	3				
HOR-261	Tree Diagnostics	44	2				
HOR-281	Horticulture/CWE	180	6				
Or HOR-280	or Horticulture/CWE						

And HOR-282	Or Horticulture/CWE					
*Offered alternat	te years					
**Course may be	e waived with current CPR certification	ation	REMOVE			
TOTAL CURREN	VT CREDITS:	97-101	1 TOTAL PROPOSED CREDITS:		94-98	

College Contact	April Chastain	Telephone No.	3055	
E-Mail Address	_	Fax No.		_
Chief Academic Offic PTE Dean Signature		5	Date	12/11/18

Office of Educational Improvement & Innovation

Phone: (503) 378-3600 FAX: (503) 378-5156



COMMUNITY COLLEGE PROGRAM AMENDMENT FORM

(For changes to State Approved Associate of Applied Science degree, AAS option and Certificate of Completion programs)

This form should be completed electronically and the boxes will expand to accommodate text. Current instructions, forms, handouts and other useful resources are located at http://www.ode.state.or.us/search/results/?id=231

College: Clackamas Community College Date	
---	--

CAREER LEARNING AREA					
Ag, Food & Natural Resource Systems	Health Services				
Arts, Information & Communications	Human Resources				
Business & Management	Industrial & Engineering Systems				

PROGRAM INFORMATION							
<u>APPROVED</u> Program Title (For Official Program Title, refer to your directory at <u>http://www.ode.state.or.us/search/results/?id=232</u>)	APPRO CIP C (Include 7 th (used for C report <u>6-digit CIP</u>	Code & 8 th dig DCCURS ing.)	its <u>8th digit</u>	<u>APPROVED</u> Recognition Award	Current Credits		
AAS Title:				Associate of Applied Science (AAS) Degree			
Related Certificates: Human Resource Management Essentials CP				OPTION to AAS Degree			
Certificate Title: <u>Within</u> AAS Degree? □ Yes** √ No Human Resource Management **Enter name of base degree in 'AAS Title' box	52.1005			CC1 (45-60 credits)	45-46		

LAST AMENDMENT APPROVED ON 04/20/18

TYPE OF PROGRAM AMENDMENT (Check ALL That Apply)							
New Program++	☑ Curriculum Revision □ Revision in Program						
Title Change for Program		Proposed Total Credits:	45-47				
Proposed AAS Title:							
Proposed OPTION Title:							
Proposed Certificate Title:							
SUSPENSION of Program	Reason for Suspension:						
Suspension Effective Date:							

	C	URRIC	ULUM A	MENI	DME	NT				
Cl	URRENT CURRICULUM 20. [List entire curriculum as last approve			[List only course(s) to be amended]						
Course	Title	Hours	Credits	Num	ber	Title		Hours	Credit	ts
	Hun	nan Reso	urce Mana	gement	t Certi	ficate			-	
Fall Term										
BA-101	Introduction to Business	44	4							
BA-104	Business Math	33-44	3-4							
Or	or									
MTH-065	Algebra II									
BA-131	Introduction to Business Computing	44	4							
WR-121	English Composition	44	4							
Winter Term	-	_	-			-		-	_	
BA-208	Employee and Labor Relations	44	4							
BA-224	Human Resource Management	44	4							
BA-250	Small Business Management	33	3							
BA-285	Human Relations in Business	44	4							
Spring Term	-	-		_		•			-	
BA-226	Business Law I	44	4						l .	
BA-229	Employment Law	44	4							
BA-254	Basic Compensation & Benefits	44	4							
BA-280	Business/CWE	216	3			RE	MOVE			
						Human Resour Management P Electives			3-4	
Catalog Notes						•			<u>H</u>	
-	program can be applied to satis	fy require	ements in						l – – – – – – – – – – – – – – – – – – –	
the Business A		, ,								
				Huma	an Res	source Managem	ent Progr	am Electives	5	
				Any Business Administration (BA) or Business Technology (BT) course not included in the Human Resource Management program.					ју	
TOTAL CURR	ENT CREDITS:	-	45-46		<u> </u>	OPOSED CRED	ITS:		45-47	,
College Con						ephone No.	3370			Γ
E-Mail Addr										1
E-Mail AddressFax No.Chief Academic Officer or PTE Dean SignatureDate12/5/18				8						

Office of Educational Improvement & Innovation

Phone: (503) 378-3600 FAX: (503) 378-5156



COMMUNITY COLLEGE PROGRAM AMENDMENT FORM

(For changes to State Approved Associate of Applied Science degree, AAS option and Certificate of Completion programs)

This form should be completed electronically and the boxes will expand to accommodate text. Current instructions, forms, handouts and other useful resources are located at <u>http://www.ode.state.or.us/search/results/?id=231</u>

College:	Clackamas Community College	Date	
----------	-----------------------------	------	--

CAREER LEARNING AREA						
✓ Ag, Food & Natural Resource Systems	Health Services					
Arts, Information & Communications	Human Resources					
Business & Management	Industrial & Engineering Systems					

PROGRAM INFORMATION							
<u>APPROVED</u> Program Title	APPROVED CIP Code (Include 7 th & 8 th digits used for OCCURS reporting.)			<u>APPROVED</u> Recognition Award	Current Credits		
(For Official Program Title, refer to your directory at <u>http://www.ode.state.or.us/search/results/?id=232</u>)	<u>6-digit CIP</u>	<u>Zth</u> <u>digit</u>	<u>8</u> th <u>digit</u>				
Parent AAS Title: Landscape Management AAS				□ AAS			
Option Title** Arboriculture	01.0605	I	*	✓ OPTION to AAS (at least 70% of base AAS, 90-108 credits)	98-101		
Certificate Title: <u>Within</u> AAS Degree? Yes** No				Certificate of Completion			

**Enter name of base degree in 'AAS Title' box LAST AMENDMENT APPROVED ON 1/19/2018

TYPE OF PROGRAM AMENDMENT (Check ALL That Apply)							
New Program++	Curriculum Revision	Revision in Program	Credits				
Title Change for Program		Proposed Total Credits:	94-97				
Proposed AAS Title:							
Proposed OPTION Title:							
Proposed Certificate Title:							
SUSPENSION of Program	Reason for Suspension:	-					
Suspension Effective Date:							
+If new program is an additional award for an existing degree or certificate, complete 'Program Information' section for existing program							

					Quarter-to-quarter mapping. riculum section only.]		
С	URRENT CURRICULUM A [List entire curriculum as last app	2018-19			[List only course(s) to be amended]		
Course	Course Title	Hours	Credits	Course	Course Title	Hours	Credits
			1 st Y	'ear			
Fall Term1	_	_	_		_	_	_
HE-252**	First Aid/CPR/AED	33	3				
HOR-115	Horticulture Safety	10	1				
HOR-226	Plant Identification/Fall	44	4				
HOR-236	Insect Identification	20	2				
MTH-050	Technical Mathematics I	44	4-5		Move to Term 5		_
or MTH-065 or higher	or Algebra II or higher level of math						
				HOR-223	Applied Plant Science	44	4
Winter Term			-			-	
HOR-131	Tree & Shrub Pruning	44	3				
HOR-216	Integrated Pest Management	33	3				
HOR-225	Arboriculture I	33	3		Move to Term 5		
HOR-230	Equipment Operation & Maintenance	44	2				
HOR-237	Disease Identification	20	2	Move to Term 6		-	-
HOR-239	Tree Climber Training	24	1				
				HOR-222	Horticultural Computer Applications	20	2
				HOR-227	Plant Identification/Winter	44	4
Spring Term	13	•	-		· · ·	<u></u>	•
BA-285 or COMM-100	Human Relations in Business or Basic Speech	33-44	3-4				
	Communication						
HOR-120	Pesticide Laws & Safety	12	1			T	Ī
HOR-228	Plant Identification/Spring	44	4			Ī	
HOR-261	Tree Diagnostics	44	2		Move to Term 7		
WR-121 or	English Composition or	33-44	3-4				
BA-214	Business Communications						
				HOR-140	Soils	33	3
Summer Ter			-			-	
HOR-211	Native Plant Identification	10	1				
SPN-101	First-Year Spanish I	44	4		MOVE TO ELECTIVE		
				HOR-280	Horticulture/CWE (in Arboriculture field)	90	3
			2 nd Y	'ear			
Fall Term5			_			_	
HOR-123	Landscape Maintenance	44	3				
HOR-223	Applied Plant Science	44	4		Move to Term 1		
HOR-260	Arboriculture II	33	3		Move to Term 6		

HOR-262	Treework Practicum I	66	2				
				HOR-225	Arboriculture I	33	3
				MTH-050	Technical Mathematics I	44	4-5
				or	or		
				MTH-065	Algebra II		
				or higher	or higher level of math		
					Arboriculture program		3
					electives		
Winter Term						I	-
BA-119	Project Management Practices	22	2				
HOR-222	Horticultural Computer Applications	20	2		Move to Term 2		
HOR-227	Plant Identification/Winter	44	4		Move to Term 2		
HOR-229*	Introduction to Landscape	44	3	HOR-229	Introduction to	44	3
or	Design		1	or	Landscape Design		
HOR-244*	or		1	HOR-244*	or		
	Environmental Landscape Design				Environmental Landscape Design		
	Arboriculture program electives		5		Arboriculture program electives		3
				HOR-237	Disease Identification	20	2
			1	HOR-260	Arboriculture II	33	3
Spring Term	7	P	•	-	•	8	•
HOR-140	Soils	33	3		Move to Term 3		
HOR-215	Herbaceous Perennials	44	3				
HOR-263	Plant Health Care Practicum	66	2				
HOR-280	Horticulture/CWE (in Arboriculture field)	90	3		Move to Term 4		
	Arboriculture program		4		Arboriculture program		3
	electives				electives		
				HOR-261	Tree Diagnostics	44	2
				HOR-282	Horticulture/CWE (in	90	3
					Arboriculture field)		
Summer Ter	m8						
HOR-281	Horticulture/CWE (in Arboriculture field)	180	6				
HOR-282	Horticulture/CWE (in Arboriculture field)	90	3		Move to Term 7		
Arboriculture	Program Electives						
BA-101	Introduction to Business	44	4				
HOR-134	Herb Growing & Gardening	20	1		REMOVE		
HOR-145	Turf Installation &	44	2				T
HOILT IJ	Maintenance		1			I	
HOR-146	Fruit & Berry Growing	44	3				1
HOR-213*	Computer-Aided Landscape Design	44	3				
HOR-224	Landscape Installation	44	3				
HOR-224 HOR-229*		44	3	HOR-229	Introduction to	44	3
HOR-229* Or	Introduction to Landscape Design	44)	HOR-229 Or	Landscape Design	44	5
HOR-244	or		1	HOR-244	Or		

	Design				Design		
HOR-231	Irrigation Design	44	3				
HOR-235	Weed Identification	20	2				
HOR-240	Irrigation Practices	44	3				
HOR-264	Treework Practicum II (Aerial)	66	2				
SPN-102	First-Year Spanish II	44	4		REMOVE		-
				SPN-101	First-Year Spanish I	44	4
Catalog Note	S				_	_	_
*Currently of	fered alternate years.						
**Course may be waived with current CPR certification							
TOTAL CUR	RENT CREDITS:		98-101	11 TOTAL PROPOSED CREDITS:			

College Contact	April Chastain	Telephone No.	3055	
E-Mail Address		Fax No.		
Chief Academic Offic PTE Dean Signature		7	Date	12/11/18

Office of Educational Improvement & Innovation

Phone: (503) 378-3600 FAX: (503) 378-5156



COMMUNITY COLLEGE PROGRAM AMENDMENT FORM

(For changes to State Approved Associate of Applied Science degree, AAS option and Certificate of Completion programs)

This form should be completed electronically and the boxes will expand to accommodate text. Current instructions, forms, handouts and other useful resources are located at http://www.ode.state.or.us/search/results/?id=231

College: Clackamas Community College	Date	
--------------------------------------	------	--

CAREER LEARNING AREA						
Ag, Food & Natural Resource Systems	Health Services					
Arts, Information & Communications	Human Resources					
Business & Management	Industrial & Engineering Systems					

PROGRAM INFORMATION							
<u>APPROVED</u> Program Title (For Official Program Title, refer to your directory at http://www.ode.state.or.us/search/results/?id=232)	APPROVED CIP Code (Include 7 th & 8 th digits used for OCCURS reporting.) 6-digit CIP 2 th		e Recognition Award		Current Credits		
AAS Title:		<u>digit</u>	<u>digit</u>	Associate of Applied Science (AAS) Degree			
Option Title**				OPTION to AAS Degree			
Certificate Title: <u>Within</u> AAS Degree? □ Yes** √ No Geographic Information Systems (GIS) Technology	15.1102			✓ CC1 (45-60 credits)	47		

LAST AMENDMENT APPROVED ON 2/2/18

TYPE OF PROGRAM AMENDMENT (Check ALL That Apply)								
New Program++	Curriculum Revision Revision in Program							
Title Change for Program		Proposed Total Credits:	45					
Proposed AAS Title:			-					
Proposed OPTION Title:								
Proposed Certificate Title:								
SUSPENSION of Program	Reason for Suspension:	-						
Suspension Effective Date:								

				AMENDME			
					uarter-to-quarter mapping. culum section only.]		
C	URRENT CURRICULUM 2 [List entire curriculum as last appro	018-19	•	[List only course(s) to be amended]			
Course	Title	Hours	Credits	Course	Title	Hours Credits	
First Term					•		
GEO-100 Or GEO-130	Introduction to Physical Geography or Introduction to Environmental Geography	44	4				
GIS-101	Maps and Geospatial Concepts	44	2				
GIS-236	Introduction to Programming for GIS	66	3				
MTH-050 Or MTH-065	Technical Mathematics I or Algebra II	44	4				
WR-121	English Composition	44	4		Move to Term 3	-	
				GIS-281	ArcGIS I	60	3
Second Term							
GIS-201	Introduction to Geographic Information Systems	60	3	REMOVE			
GIS-205	Cartography and Map Making	33	3				
GIS-237	Advanced Programming for GIS	66	3				
GIS-281	ArcGIS I	60	3		Move to Term 1		
GIS-286	Remote Sensing	60	3		Move to Term 3		
				GIS-240	Geospatial Database Development and Management	66	3
				GIS-282	ArcGIS II	66	3
					Human Relations requirement (see page 82)		3
Third Term							
GIS-232	Data Collection & Application	66	3	GIS-232	Data Collection & Application	44	2
GIS-280	GIS/CWE	108	3				
GIS-282	ArcGIS II	66	3		Move to Term 2		
	Human Relations requirement (see page 82)		3	Move to Term 2			
	Program Elective		3		REMOVE		
				GIS-238	GIS Web Mapping and Services	44	2
				GIS-286	Remote Sensing	60	3
				WR-121	English Composition	44	4

Program Ele	ectives				
FRP-244	Wilderness II: Basic Land Navigation (S-244)	33	3	REMOVE	
GIS-238	GIS Web Mapping and Services	44	2	Move to Term 3	
GIS-240	Geospatial Database Development and Management	66	3	Move to Term 2	
USP-201	Unmanned Aircraft Systems (UAS) Pilot	66	3		
USP-205	Unmanned Aircraft Systems (UAS) Applied Projects	44	2	REMOVE	
USP-210	Unmanned Aircraft Systems (UAS) Builder Lab	33	1		
TOTAL CU	RRENT CREDITS:	-	47	TOTAL PROPOSED CREDITS:	45

College Contact	Manufacturing Department	Telephone No.	3318		
E-Mail Address		Fax No.		_	
Chief Academic Offic PTE Dean Signature		i cn	Date	12/27/18	

Office of Educational Improvement & Innovation

Phone: (503) 378-3600 FAX: (503) 378-5156



COMMUNITY COLLEGE PROGRAM AMENDMENT FORM

(For changes to State Approved Associate of Applied Science degree, AAS option and Certificate of Completion programs)

This form should be completed electronically and the boxes will expand to accommodate text. Current instructions, forms, handouts and other useful resources are located at http://www.ode.state.or.us/search/results/?id=231

College:	Clackamas Community College	Date	

CAREER LEARNING AREA							
Ag, Food & Natural Resource Systems Health Services							
Arts, Information & Communications	Human Resources						
Business & Management	Industrial & Engineering Systems						

PROGRAM INFORMATION								
<u>APPROVED</u> Program Title	APPROVED CIP Code (Include 7 th & 8 th digits used for OCCURS reporting.)			<u>APPROVED</u> Recognition Award	Current Credits			
(For Official Program Title, refer to your directory at <u>http://www.ode.state.or.us/search/results/?id=232</u>)	<u>6-digit CIP</u>	<u>Zth digit</u>	<u>8th</u> <u>digit</u>					
AAS Title: Landscape Management	1.0605			✓ AAS (90-108 credits)	99-102			
Option Title** Arboriculture AAS				OPTION to AAS Degree				
Related Certificates: Landscape Practices Certificate				Certificate of Completion				

**Enter name of base degree in 'AAS Title' box LAST AMENDMENT APPROVED ON 1/19/2018

TYPE OF PROGRAM AMENDMENT (Check ALL That Apply)							
□ New Program++ □ Curriculum Revision ✓ Revision in Program Credits							
Title Change for Program		Proposed Total Credits:	94-97				
Proposed AAS Title:							
Proposed OPTION Title:							
Proposed Certificate Title:							
SUSPENSION of Program	Reason for Suspension:	_					
Suspension Effective Date:							

				MENDME				
					arter-to-quarter mapping. ulum section only.]			
CUI	CURRENT CURRICULUM 2018-19 [List entire curriculum as last approved)			PROPOSED CURRICULUM 2019-20 [List only course(s) to be amended]				
Course	Title	Hours	Credits	Course	Title	Hours	Credits	
	Landscape Manag	gement As	ssociate of	Applied Scien	ce Degree: 1 st Year			
Fall Term1								
HOR-111	Horticulture Practicum/Fall	44	2					
HOR-115	Horticulture Safety	10	1					
HOR-123	Landscape Maintenance	44	3		Move to Term 5			
HOR-226	Plant Identification/Fall	44	4					
HOR-236	Insect Identification	20	2		Move to Term 5			
MTH-050 Or MTH-065 or higher level math	Technical Mathematics I Or Algebra II or higher level math	44	4-5					
				HOR-223	Applied Plant Science	44	4	
Winter Term2								
HOR-131	Tree & Shrub Pruning	44	3					
HOR-133	Horticulture Practicum/Winter	44	2					
HOR-216	Integrated Pest Management	33	3					
HOR-222	Horticultural Computer Applications	20	2					
HOR-227	Plant Identification/Winter	44	4					
HOR-229* Or HOR-244*	Introduction to Landscape Design or Environmental Landscape Design	44	3	HOR-229 Or HOR-244*	Introduction to Landscape Design or Environmental Landscape Design	44	3	
Spring Term3								
BA-285 Or COMM-100	Human Relations in Business or Basic Speech Communication	33-44	3-4					
HOR-112	Horticulture Career Exploration	24	2					
HOR-120	Pesticide Laws & Safety	12	1					
HOR-140	Soils	33	3					
HOR-143	Horticulture Practicum/Spring	44	2					
HOR-228	Plant Identification/Spring	44	4					
Summer Term4		-	-					
HOR-281 Or HOR-280 and HOR-282	Horticulture/CWE Or Horticulture/CWE And Horticulture/CWE	180	6					
	Landscape Manag	jement As	sociate of <i>i</i>	Applied Scient	ce Degree: 2 nd Year			

Fall Term5							
HOR-223	Applied Plant Science	44	4		Move to Term 1		
HOR-224	Landscape Installation	44	3			Ι	1
HOR-235	Weed Identification	20	2	HOR-235 Or HOR-236	Weed Identification Or Insect Identification	20	2
SPN-101	First-Year Spanish I	44	4				
	Landscape Management program electives		3				
				HOR-123	Landscape Maintenance	44	3
Winter Term6		_		-	-	-	-
BA-101	Introduction to Business	44	4		Move to Term 7		
BA-119	Project Management Practices	22	2				
HOR-230	Equipment Operation & Maintenance	44	2				
HOR-231	Irrigation Design	44	3				
HOR-237	Disease Identification	20	2				
WR-101 Or WR-121 Or BA-214	Communication Skills: Occupational Writing or English Composition or	33-44	3-4				
	Business Communications						
Spring Term7		T	•				
HE-252**	First Aid/CPR/AED	33	3		REMOVE	-	-
	m the following (2 credits):						
HOR-126*	Landscape Water Features	20	1				
HOR-127*	Landscape Lighting	20	1				
HOR-128*	Landscape Stones & Pavers	20	1				
HOR-129*	Landscape Decks & Fences	20	1				
HOR-145	Turf Installation & Maintenance	44	2				
HOR-215	Herbaceous Perennials	44	3				
HOR-240	Irrigation Practices	44	3				
				BA-101	Introduction to Business	44	4
	agement Program Electives	1		-		-	-
BA-223	Principles of Marketing	44	4		Į	 	ļ
HOR-126* Or HOR-127* Or HOR-128* Or	Landscape Water Features or Landscape Lighting or Landscape Stones & Pavers	20	1				
HOR-129*	or Landscape Decks & Fences						
HOR-134	Herb Growing & Gardening	20	1		REMOVE		
HOR-142	Greenhouse Crops/Bedding Plants	44	3		REMOVE		
HOR-146	Fruit & Berry Growing	44	3				
HOR-211	Native Plant Identification	10	1				

HOR-212	Flower Arranger's Garden/Fall	44	2				
HOR-213*	Computer-Aided Landscape Design	44	3				
HOR-220	Plant Propagation/Fall	44	3				
HOR-225	Arboriculture I	33	3				
HOR-229* Or HOR-244*	Introduction to Landscape Design or Environmental Landscape Design	44	3	HOR-229 Or HOR-244*	Introduction to Landscape Design or Environmental Landscape Design	44	3
HOR-239	Tree Climber Training	24	1				
HOR-246	Organic Farming and Gardening	44	2				
HOR-260	Arboriculture II	33	3				
HOR-261	Tree Diagnostics	44	2				
WET-109	Backflow Assembly Operation and Testing	66	4				
				HOR-290	Special Topics in Horticulture	66	3
*Offered alter	nate years						
	be waived with current CPR cer	tificatio	n		REMOVE		
	RENT CREDITS:		99-102	TOTAL PR	OPOSED CREDITS:		94-97

College Contact	April Chastain	Telephone No.	3055	
E-Mail Address		Fax No.		_
Chief Academic Offic PTE Dean Signature		in	Date	12/11/18

Office of Educational Improvement & Innovation

Phone: (503) 378-3600 FAX: (503) 378-5156



COMMUNITY COLLEGE PROGRAM AMENDMENT FORM

(For changes to State Approved Associate of Applied Science degree, AAS option and Certificate of Completion programs)

This form should be completed electronically and the boxes will expand to accommodate text. Current instructions, forms, handouts and other useful resources are located at http://www.ode.state.or.us/search/results/?id=231

College:	Clackamas Community College	Date	

CAREER LEARNING AREA					
Ag, Food & Natural Resource Systems	✓ Health Services				
Arts, Information & Communications	Human Resources				
Business & Management	Industrial & Engineering Systems				

PROGRAM INFORMATION							
<u>APPROVED</u> Program Title (For Official Program Title, refer to your directory at <u>http://www.ode.state.or.us/search/results/?id=232</u>)	APPROVED CIP Code (Include 7 th & 8 th digits used for OCCURS reporting.) 6-digit CIP $\frac{7^{th}}{digit}$ $\frac{8^{th}}{digit}$			<u>APPROVED</u> Recognition Award	Current Credits		
AAS Title:				Associate of Applied Science (AAS) Degree			
Option Title**				OPTION to AAS Degree			
Certificate Title: <u>Within</u> AAS Degree? □ Yes** √ No Medical Assistant	51.0801			✓ CC1 (45-60 credits)	47		

**Enter name of base degree in 'AAS Title' box

TYPE OF PROGRAM AMENDMENT (Check ALL That Apply)						
New Program++	Curriculum Revision	Revision in Program Cre				
Title Change for Program		Proposed Total Credits:	49			
Proposed AAS Title:						
Proposed OPTION Title:						
Proposed Certificate Title:						
SUSPENSION of Program	Reason for Suspension:					
Suspension Effective Date:						

++If new program is an additional award for an existing degree or certificate, complete 'Program Information' section for existing program.

lis\i:\curriculum office\(02) curriculum committee\1-meetings\2018-19 meeting handouts\2019 - 01.18\all program changes\amendments\amendment medical assistant cc.docx\09202005 (Revised 05/17/05)

CURRICULUM AMENDMENT [List in a Defined Sequence of Courses Format, e.g., Quarter-to-quarter mapping.								
			plete the Pr		culum section only.]			
<i>CURRENT CURRICULUM 2018-19</i> [List entire curriculum as last approved)				PR	COPOSED CURRICULUM [List only course(s) to be amer		20	
Course	Title	Hours	Credits	Course	Title	Hours	Credits	
	ant Certificate Prerequisite to A			course		nouis	ercurto	
MA-110	Medical Terminology	33	3	MA-110	Medical Terminology	44	4	
WR-101 Or WR-121	Communication Skills: Occupational Writing or English Composition	33- 44	3-4	WR-101 Or WR-121 (preferre d)	Communication Skills: Occupational Writing or English Composition	33- 44	3-4	
First Term	<u>.</u>	<u></u>				<u>.</u>	•	
BI-120 Or BI-101 & BI-102 Or BI-231 & BI-232 & BI-233	Introduction to Human Anatomy and Physiology or General Biology; Cellular Biology and General Biology; Animal Systems or Human Anatomy & Physiology I and Human Anatomy & Physiology II and Human Anatomy & Physiology III and Human Anatomy & Physiology III	66	4					
MA-112	Medical Office Practices	44	4					
MA-145	Insurance & Health Information Management	44	4	MA-145	Insurance & Health Information Management	55	5	
				PSY-101	Human Relations	33	3	
Second Term								
MA-116	Introduction to Medications	44	4					
MA-117	Clinical Lab Procedures I	11	1					
MA-117L	Clinical Lab Procedures I Lab	33	1					
MA-118	Examination Room Techniques	44	4	MA-118	Examination Room Techniques	55	5	
MA-118L	Examination Room Techniques Lab	33	1					
MTH-054	Medication Calculations for Medical Assistants	44	4					
PSY-101	Human Relations	33	3	Move to Term 1				
Third Term (Weeks 1-5)								
MA-115	Phlebotomy for Medical Assistants	11	1					
MA-115L	Phlebotomy for Medical Assistants Lab	33	1					

MA-121	Clinical I	ab Procedures II	11	1						
MA-121L		ab Procedures II	33	1						
PSY-215	Introduc Develop	tion to mental Psychology	44	4						
Third Term (Weeks 6-11)				_		-				
MA-119**	Medical A Practicur		253	9						
Catalog Notes										
 **To meet graduation requirements in addition to successful completion of courses, the MA student is required to: Participate in an unpaid, supervised externship in an ambulatory care setting. Perform 20 hours of public health-related community service. Register for the CMA (AAMA) certification exam. Note: All clinical/practicum courses are Pass/No Pass. All other courses are letter graded and must be passed with C or better. All related instruction courses may be taken prior to entering the MA program. Core curriculum is sequential and may not be taken out of order. Core curriculum is intended to be completed over three consecutive terms in one academic year. For the Certified Medical Assistant (CMA) exam, direct inquiries to: AAMA Certification Department at www.aama-ntl.org or by phone 800-228-2262. 										
TOTAL CURR	<i>ENT</i> CREI	DITS:		47	TOTAL PR	OPOSED CREDITS): 		49	
College Con	tact	Karen Maynard			Tel	ephone No.				

conege contact	Raien Maynaiù	Telephone No.		
E-Mail Address		Fax No.		
Chief Academic Offic PTE Dean Signature		*1	Date	1/15/19
	0	•		

Office of Educational Improvement & Innovation

Phone: (503) 378-3600 FAX: (503) 378-5156



COMMUNITY COLLEGE PROGRAM AMENDMENT FORM

(For changes to State Approved Associate of Applied Science degree, AAS option and Certificate of Completion programs)

This form should be completed electronically and the boxes will expand to accommodate text. Current instructions, forms, handouts and other useful resources are located at http://www.ode.state.or.us/search/results/?id=231

College:	Clackamas Community College	Date	

CAREER LEARNING AREA							
Ag, Food & Natural Resource Systems	Health Services						
Arts, Information & Communications	Human Resources						
Business & Management	Industrial & Engineering Systems						

PROGRA	PROGRAM INFORMATION								
<u>APPROVED</u> Program Title (For Official Program Title, refer to your directory at <u>http://www.ode.state.or.us/search/results/?id=232</u>)	APPROVED CIP Code (Include 7 th & 8 th digits used for OCCURS reporting.) 6-digit CIP $\frac{7^{th}}{digit}$ $\frac{8^{th}}{digit}$			<u>APPROVED</u> Recognition Award	Current Credits				
AAS Title:				Associate of Applied Science (AAS) Degree					
Option Title**				OPTION to AAS Degree					
Certificate Title: <u>Within</u> AAS Degree? □ Yes** √ No Organic Farming	1.0304			√ CC1 (45-60 credits)	57-60				

**Enter name of base degree in 'AAS Title' box LAST AMENDMENT APPROVED ON 1/19/2018

TYPE OF PROGRAM AMENDMENT (Check ALL That Apply) New Program++ Curriculum Revision Revision in Program Credits Title Change for Program Proposed Total Credits: 56-59 Proposed AAS Title: Proposed OPTION Title: Proposed Certificate Title: Reason for Suspension: Suspension Effective Date: Reason for Suspension:

++If new program is an additional award for an existing degree or certificate, complete 'Program Information' section for existing program.

lis\i:\curriculum office\(02) curriculum committee\1-meetings\2018-19 meeting handouts\2019 - 01.18\all program changes\amendments\amendment organic farming cc.docx\09202005 (Revised 05/17/05)

	[List in a Defined Seq			MENDME mat, e.g., Qua		arter mappin	g.	
	For a New Prog RRENT CURRICULUM 2		plete the Pro					
CU	PR			.UM 2019-2	20			
Course	[List entire curriculum as last appro Title	Hours	Credits	Course	List only	course(s) to be Title	Hours	Credits
Fall Term		Hours	ercures	course			nouis	ercurto
HOR-113	Organic Farming	55	3					
	Practicum/Fall		_					
HOR-124	Food Harvest	44	3					
HOR-235	Weed Identification	20	2					
HOR-236	Insect Identification	20	2					
WR-101 Or WR-121	Communication Skills: Occupational Writing or	33- 44	3-4					
	English Composition		2					
	Organic Farming program electives		2					
Winter Term		-						
HOR-135	Propagation of Edible Plants	44	3					
HOR-136	Organic Farming Practicum/Winter	55	3					
HOR-216	Integrated Pest Management	33	3					
HOR-237	Disease Identification	20	2					
MTH-050 Or MTH-065 Or higher	Technical Mathematics I or Algebra II or higher level math	44- 55	4-5					
Spring Term	<u> </u>	_	_					
HOR-120	Pesticide Laws & Safety	12	1		_	REMOVE		_
HOR-140	Soils	33	3					
HOR-141	Organic Farming Practicum/Spring	88	4					
HOR-148	Farm Equipment	44	3					
	Organic Farming program electives		4					
Summer Term								
BA-285 Or COMM-100	Human Relations in Business or Basic Speech Communication	33- 44	3-4					
HOR-146	Fruit & Berry Growing	44	3					
HOR-284	Organic Farming - Campus Farm/CWE	108	3					
HOR-285	Organic Farming/CWE	90	3					
	g Program Electives							
BA-101	Introduction to Business	44	4					

BA-223	Principles of Marketing	44	4				
HOR-125*	Food Production in the Willamette Valley	33	3				
HOR-134	Herb Growing & Gardening	20	1	REMOVE			
HOR-231	Irrigation Design	44	3				
HOR-240	Irrigation Practices	44	3				
HOR-246	Organic Farming and Gardening	44	2				
HOR-250	Herb Growing and Gardening	20	2				
HOR-251	Herbal Products	20	1				
HOR-252	Kitchen Herbs	20	1				
*Offered alter	nate years						
TOTAL CURRENT CREDITS:			57-60	TOTAL PROPOSED CREDITS:			56-59

College Contact	April Chastain Telephone N	lo. 3055	
E-Mail Address	Fax No.		_
Chief Academic Offic PTE Dean Signature	er or Sund Fran	Date	12/11/18

Office of Educational Improvement & Innovation

Phone: (503) 378-3600 FAX: (503) 378-5156



COMMUNITY COLLEGE PROGRAM AMENDMENT FORM

(For changes to State Approved Associate of Applied Science degree, AAS option and Certificate of Completion programs)

This form should be completed electronically and the boxes will expand to accommodate text. Current instructions, forms, handouts and other useful resources are located at http://www.ode.state.or.us/search/results/?id=231

College:	Clackamas Community College	Date	

CAREER LEARNING AREA							
Ag, Food & Natural Resource Systems	Health Services						
Arts, Information & Communications	Human Resources						
Business & Management	Industrial & Engineering Systems						

PROGRAM INFORMATION								
<u>APPROVED</u> Program Title (For Official Program Title, refer to your directory at <u>http://www.ode.state.or.us/search/results/?id=232</u>)	APPROVED CIP Code (Include 7 th & 8 th digits used for OCCURS reporting.) 6-digit CIP $\frac{7^{th}}{digit}$ $\frac{5^{th}}{digit}$ $\frac{8^{th}}{digit}$			Recognition Award				
AAS Title:				Associate of Applied Science (AAS) Degree				
Option Title**				OPTION to AAS Degree				
Certificate Title: <u>Within</u> AAS Degree? □ Yes** √ No Retail Management	52.1803			✓ SSC Statewide Certificate (12-30 credits)	29-30			

**Enter name of base degree in `AAS Title' box LAST AMENDMENT APPROVED ON 5/19/17

TYPE OF PROGRAM AMENDMENT (Check ALL That Apply) New Program++ Curriculum Revision Revision in Program Credits Proposed AAS Title: Proposed AAS Title: Proposed OPTION Title: Proposed Certificate Title: Suspension Effective Date:

++If new program is an additional award for an existing degree or certificate, complete 'Program Information' section for existing program.

lis\i:\curriculum office\(02) curriculum committee\1-meetings\2018-19 meeting handouts\2019 - 01.18\all program changes\amendments\amendment retail management certificate.docx\09202005 (Revised 05/17/05)

	[List in a Defined Seq	uence of (Courses For	MENDMENT mat, e.g., Quarter oposed Curriculun		g.	
C	CURRENT CURRICULUM 2 [List entire curriculum as last appro				DSED CURRICUL List only course(s) to be		20
Course	Title	Hours	Credits	Course	Title	Hours	Credits
Fall Term		_					
BA-131	Introduction to Business Computing	44	4				
BA-206	Management Fundamentals	44	4				
BA-223	Principles of Marketing	44	4				
Winter Term			-				
BA-214 Or BA-205	Business Communications or Business Communications with Technology	33-44	3-4				
BA-224	Human Resource Management	44	4				
BA-285	Human Relations in Business	44	4				
Spring Term							
BA-217	Budgeting for Managers	33	3				
BA-249	Retailing	33	3				
Catalog Note	es la						
Note: This co one year.	ertificate is designed to be com	pleted in l	ess than				
	s in this program can be applied irements in the Business Manag	•					
TOTAL CUR	RRENT CREDITS:		29-30	TOTAL PROPO	SED CREDITS:		

College Contact	Thomas Frank	Telephone No.	3660	
E-Mail Address		Fax No.		
Chief Academic Officer or PTE Dean Signature		Date	1/14/19	



Program Learning Outcomes

January 18, 2019 (8-10am, CC127)

Program	
Horticulture AAS	
Horticulture CC	
Landscape Management AAS	
Landscape Management AAS - Arboriculture Option	
Landscape Practices CC	
Organic Farming CC	
Plant Health Management CPCC	

Horticulture

Associate of Applied Science Degree PROGRAM CODE: AAS.HORT1

Upon successful completion of this program, students should be able to:

- o demonstrate a broad range of skills in the production and maintenance of plants, including: safe use of tools and equipment, propagation from seeds and cuttings, landscape maintenance activities, growing in a greenhouse environment, and vegetable bed preparation;
- o identify common woody plants in the landscape;
- o recognize and evaluate key pests and propose solutions based on IPM strategies;
- o use a basic understanding of plant biology and soil science to make sound decisions in the production and maintenance of plants;
- o display effective decision making, time management and project management skills in the horticulture industry;
- o communicate effectively with co-workers and customers through speaking, writing and computer technology.
- o pass the ODA Pesticide Laws & Safety exam, and an applicator exam.

Horticulture

Certificate PROGRAM CODE: CC.HORT

Upon successful completion of this program, students should be able to:

- o demonstrate a broad range of skills in the production and maintenance of plants, including: safe use of tools and equipment, propagation from seeds and cuttings, landscape maintenance activities, growing in a greenhouse environment, and vegetable bed preparation;
- o identify common woody plants in the landscape;
- o implement IPM strategies in the horticulture industry;
- o use a basic understanding of plant biology and soil science to make sound decisions in the production and maintenance of plants;
- o effectively communicate with co-workers and customers through speaking, writing, and computer technology.
- pass the ODA Pesticide Laws & Safety exam.

Landscape Management

Associate of Applied Science Degree PROGRAM CODE: AAS.LANDSCAPEMGMT

Upon successful completion of this program, students should be able to:

- o demonstrate competency in sustainable landscape maintenance and installation activities, including: safe use of tools and equipment, operation of irrigation systems, pruning and training techniques, turf maintenance, hardscape installation and reading/installing from a design plan;
- o identify common woody and herbaceous plants in the landscape;
- o recognize and evaluate key pests in the landscape and propose solutions based on IPM strategies;

- o use a basic understanding of plant biology and soil science to make sound decisions in the design and maintenance of landscapes;
- o display effective decision making, time management and project management skills in the landscape industry environment;
- o effectively communicate with co-workers and customers through speaking, writing and computer technology.
- o pass the ODA Pesticide Laws & Safety exam, and an applicator exam;
- o pass NALP's Landscape Industry Certified Technician-Exterior test for Ornamental Maintenance.

Landscape Management, Arboriculture Option

Associate of Applied Science Degree

PROGRAM CODE: AAS.LANDMGMTARBOR

This degree prepares students for entry-level positions in commercial arboriculture and urban forestry, while enhancing their ability to move into management positions. Students will gain practical expertise in the establishment and caring for landscape trees, including planting, pruning, pest management, tree diagnostics, and operating industry standard equipment. Additionally, students will learn skills in communicating with customers, both orally and through report writing. Students completing this program and some additional work experience, would be qualified to sit for the International Society of Arboriculture's Certified Arborist exam.

Sustainable practices, such as the use of Integrated Pest Management, low water use landscapes, and techniques that protect and care for the soil are emphasized throughout the program. Students use industry standard equipment and practices in the care of CCC's trees and shrubs.

Students may begin this program any term, but some courses have prerequisites, which must be taken first. Following the course offerings in the order listed is not required, but will allow for completion in a two year period.

PROGRAM OUTCOMES

Upon successful completion of this program, students should be able to:

- o demonstrate competency with the use of standard arboriculture equipment, including: climbing gear, chainsaw, chipper, hydraulic sprayer, truck and trailer;
- o identify common woody and herbaceous plants in the landscape;
- o recognize and identify key biotic and abiotic disorders in trees;
- o perform site assessments, including: plant health inspections of key plants, hazard tree identification, and water audit interpretations;
- o effectively communicate with co-workers and customers through speaking, report writing and computer technology.

o-pass the International Society of Arboriculture's Certified Arborist exam;

o pass the ODA Pesticide Laws & Safety exam, and the ODA Ornamental & Turf Insecticide/Fungicide exam.

Landscape Practices

Certificate PROGRAM CODE: CC.LANDSCAPEPRAC

Upon successful completion of this program, students should be able to:

- o demonstrate competency in sustainable landscape maintenance and installation activities, including: safe use of tools and equipment, operation of irrigation systems, pruning and training techniques, turf maintenance, hardscape installation and reading/installing from a design plan;
- o identify common woody and herbaceous plants in the landscape;
- o recognize key pests in the landscape and follow IPM strategies;
- o use a basic understanding of soil science to make sound decisions in the maintenance of landscapes.
- o pass the ODA Pesticide Laws & Safety exam.

Organic Farming

Certificate

PROGRAM CODE: CC.ORGANICFARM

This certificate focuses on an ecological systems approach to sustainable farming principles and practices which are suitable for local urban market farming. Many classes have a lab component, which provides students with the opportunity to gain a practical, working knowledge of small-scale, organic farming and marketing practices. Production methods for vegetables, grain, and fruit and aquaponics are covered. Students may begin this program any term.

PROGRAM OUTCOMES

Upon successful completion of this program, students should be able to:

- o apply sustainable, organic methods in the planning, planting, management and harvesting of food crops;
- o select and properly use farm equipment that is appropriate for a given scale and system of farming;
- o implement organic IPM strategies in orchards and on small scale vegetable and berry farms;
- o use a basic understanding of soil science and irrigation systems to make ecologically sound decisions in the production of food crops;
- o write a business plan and identify the various regulations that impact an organic food producer;
- o effectively communicate with co-workers and customers through speaking, writing and computer technology;
- o pass the ODA Pesticide Laws & Safety exam.

Plant Heath Management

Career Pathway Certificate PROGRAM CODE: CC.PLANTHEALMGT

Upon successful completion of this program, students should be able to:

- o pass the ODA Pesticide Laws & Safety exam, and a Commercial Pesticide Applicator exam;
- o recognize and evaluate key pests in the landscape and propose solutions based on IPM strategies.