# **Business & Entrepreneurship**

# Construction Management (AACMG)

Associate in Arts Degree

Program Effective Term: Winter 2026

High Demand Occupation High Skill Occupation High Wage Occupation

This program prepares students for entry-level jobs in the construction industry as well as for transfer to a bachelor's degree program in construction management at a four-year college or university. Students who transfer will continue developing the skills needed to work for construction contractors, engineering/architectural firms, public agencies, or trade associations in positions such as office engineer, field engineer, safety engineer, project engineer, foreman, estimator, scheduler, expeditor, quality control engineer, inspector, material representative or independent contractor. The program transfers to Eastern Michigan University. In addition to the required courses within the degree program, students may transfer additional courses taken at WCC that will be applied to technical, business and math/science requirements for the bachelor's degree program at Eastern Michigan University.

#### **Articulation:**

Eastern Michigan University, several BS degrees

Copies can be obtained from the Counseling Office, a program advisor, or from the Curriculum and Assessment Office Web site: https://www.wccnet.edu/learn/transfer-wcc-credits/articulation-agreements.php .

This program meets MTA. Students must have their transcripts certified for MTA completion by the WCC Student Records Office.

#### **Program Admission Requirements:**

A Math Level of 5 is required to enroll in MTH 178.

First Semester		(16 credits)
CMG 130	Construction Site Safety and OSHA Regulations	3
CMG 150	Introduction to Construction Management	3
ENG 111 or	Composition I	
ENG 111X	Composition 1	4
MTH 178	General Trigonometry	3 3
Elective	Arts/Human. Elective(s) 1	3
Second Semes	iter	(16 credits)
BMG 240	Human Resources Management	3
CMG 180	Application of Construction Materials	3
ECO 211	Economic Principles I - Macro	3
MTH 160 or	Basic Statistics	
MTH 160X	Basic Statistics*	4
Elective	Speech/Comp. Elective(s)	3
Third Semeste	r	(16 credits)
Third Semeste ACC 111	Principles of Financial Accounting	<b>(16 credits)</b> 3
	-	(16 credits) 3 3
ACC 111	Principles of Financial Accounting	3
ACC 111 BMG 207	Principles of Financial Accounting Business Communication	3
ACC 111 BMG 207 CMG 170	Principles of Financial Accounting Business Communication Construction Graphics	3 3 3
ACC 111 BMG 207 CMG 170 GLG 114	Principles of Financial Accounting Business Communication Construction Graphics Physical Geology and Lab Arts/Human. Elective(s) 2	3 3 3 4
ACC 111 BMG 207 CMG 170 GLG 114 Elective	Principles of Financial Accounting Business Communication Construction Graphics Physical Geology and Lab Arts/Human. Elective(s) 2	3 3 4 3 (12 credits)
ACC 111 BMG 207 CMG 170 GLG 114 Elective	Principles of Financial Accounting Business Communication Construction Graphics Physical Geology and Lab Arts/Human. Elective(s) 2	3 3 4 3 (12 credits)
ACC 111 BMG 207 CMG 170 GLG 114 Elective Fourth Semest BMG 111	Principles of Financial Accounting Business Communication Construction Graphics Physical Geology and Lab Arts/Human. Elective(s) 2  ter Business Law I	3 3 3 4 3
ACC 111 BMG 207 CMG 170 GLG 114 Elective Fourth Semest BMG 111 CMG 200	Principles of Financial Accounting Business Communication Construction Graphics Physical Geology and Lab Arts/Human. Elective(s) 2  ter Business Law I Construction Systems	3 3 4 3 (12 credits)

#### Notes:

\*MTH 160 or MTH 160X should be completed at WCC to satisfy EMU's Quantitative Reasoning Requirement. If completed at EMU, MATH 110 will be required unless waived by ACT/SAT or math placement score.

Completion of MTH 160X will not raise the student's Academic Math Level to 3, which is required for at lease one course or prerequisite in this program.

# Skilled Trades

# **Construction Management (AACMG)**

Associate in Arts Degree

Program Effective Term: Winter 2026

High Demand Occupation High Skill Occupation High Wage Occupation

This program prepares students for entry-level jobs in the construction industry as well as for transfer to a bachelor's degree program in construction management at a four-year college or university. Students who transfer will continue developing the skills needed to work for construction contractors, engineering/architectural firms, public agencies, or trade associations in positions such as office engineer, field engineer, safety engineer, project engineer, foreman, estimator, scheduler, expeditor, quality control engineer, inspector, material representative or independent contractor. The program transfers to Eastern Michigan University. In addition to the required courses within the degree program, students may transfer additional courses taken at WCC that will be applied to technical, business and math/science requirements for the bachelor's degree program at Eastern Michigan University.

#### **Articulation:**

Eastern Michigan University, several BS degrees

Copies can be obtained from the Counseling Office, a program advisor, or from the Curriculum and Assessment Office Web site: https://www.wccnet.edu/learn/transfer-wcc-credits/articulation-agreements.php .

This program meets MTA. Students must have their transcripts certified for MTA completion by the WCC Student Records Office.

#### **Program Admission Requirements:**

A Math Level of 5 is required to enroll in MTH 178.

First Semester		(16 credits)
CMG 130	Construction Site Safety and OSHA Regulations	3
CMG 150	Introduction to Construction Management	3
ENG 111 or	Composition I	
ENG 111X	Composition 1	4
MTH 178	General Trigonometry	3
Elective	Arts/Human. Elective(s) 1	3
Second Semes		(16 credits)
BMG 240	Human Resources Management	3
CMG 180	Application of Construction Materials	3
ECO 211	Economic Principles I - Macro	3
MTH 160 or	Basic Statistics	
MTH 160X	Basic Statistics*	4
Elective	Speech/Comp. Elective(s)	3
Third Compete		(16 avadita)
Third Semeste		(16 credits)
ACC 111	Principles of Financial Accounting	3
ACC 111 BMG 207	Principles of Financial Accounting Business Communication	3
ACC 111 BMG 207 CMG 170	Principles of Financial Accounting Business Communication Construction Graphics	3 3 3
ACC 111 BMG 207 CMG 170 GLG 114	Principles of Financial Accounting Business Communication Construction Graphics Physical Geology and Lab	3 3 3 4
ACC 111 BMG 207 CMG 170	Principles of Financial Accounting Business Communication Construction Graphics	3 3 3
ACC 111 BMG 207 CMG 170 GLG 114 Elective	Principles of Financial Accounting Business Communication Construction Graphics Physical Geology and Lab Arts/Human. Elective(s) 2	3 3 3 4 3
ACC 111 BMG 207 CMG 170 GLG 114	Principles of Financial Accounting Business Communication Construction Graphics Physical Geology and Lab Arts/Human. Elective(s) 2	3 3 3 4
ACC 111 BMG 207 CMG 170 GLG 114 Elective	Principles of Financial Accounting Business Communication Construction Graphics Physical Geology and Lab Arts/Human. Elective(s) 2  ter Business Law I	3 3 3 4 3 (12 credits)
ACC 111 BMG 207 CMG 170 GLG 114 Elective Fourth Semest BMG 111	Principles of Financial Accounting Business Communication Construction Graphics Physical Geology and Lab Arts/Human. Elective(s) 2	3 3 3 4 3 (12 credits)
ACC 111 BMG 207 CMG 170 GLG 114 Elective Fourth Semest BMG 111 CMG 200	Principles of Financial Accounting Business Communication Construction Graphics Physical Geology and Lab Arts/Human. Elective(s) 2  ter Business Law I Construction Systems	3 3 3 4 3 (12 credits)
ACC 111 BMG 207 CMG 170 GLG 114 Elective  Fourth Semest BMG 111 CMG 200 Elective Elective	Principles of Financial Accounting Business Communication Construction Graphics Physical Geology and Lab Arts/Human. Elective(s) 2  ter Business Law I Construction Systems Nat. Sci. Elective(s)	3 3 4 3 (12 credits) 3 3

#### Notes:

\*MTH 160 or MTH 160X should be completed at WCC to satisfy EMU's Quantitative Reasoning Requirement. If completed at EMU, MATH 110 will be required unless waived by ACT/SAT or math placement score.

Completion of MTH 160X will not raise the student's Academic Math Level to 3, which is required for at lease one course or prerequisite in this program.

#### Transfer

# **Construction Management (AACMG)**

**Associate in Arts Degree** 

Program Effective Term: Winter 2026

High Demand Occupation High Skill Occupation High Wage Occupation

This program prepares students for entry-level jobs in the construction industry as well as for transfer to a bachelor's degree program in construction management at a four-year college or university. Students who transfer will continue developing the skills needed to work for construction contractors, engineering/architectural firms, public agencies, or trade associations in positions such as office engineer, field engineer, safety engineer, project engineer, foreman, estimator, scheduler, expeditor, quality control engineer, inspector, material representative or independent contractor. The program transfers to Eastern Michigan University. In addition to the required courses within the degree program, students may transfer additional courses taken at WCC that will be applied to technical, business and math/science requirements for the bachelor's degree program at Eastern Michigan University.

#### Articulation:

Eastern Michigan University, several BS degrees

Copies can be obtained from the Counseling Office, a program advisor, or from the Curriculum and Assessment Office Web site: https://www.wccnet.edu/learn/transfer-wcc-credits/articulation-agreements.php .

This program meets MTA. Students must have their transcripts certified for MTA completion by the WCC Student Records Office.

#### **Program Admission Requirements:**

A Math Level of 5 is required to enroll in MTH 178.

First Semeste	r	(16 credits)
CMG 130	Construction Site Safety and OSHA Regulations	3
CMG 150	Introduction to Construction Management	3
ENG 111 or	Composition I	
ENG 111X	Composition 1	4
MTH 178	General Trigonometry	3
Elective	Arts/Human. Elective(s) 1	3
Second Semes		(16 credits)
BMG 240	Human Resources Management	3
CMG 180	Application of Construction Materials	3
ECO 211	Economic Principles I - Macro	3
MTH 160 or	Basic Statistics	
MTH 160X	Basic Statistics*	4
Elective	Speech/Comp. Elective(s)	3
Third Semeste		(16 credits)
ACC 111	Principles of Financial Accounting	3
BMG 207	Business Communication	3
CMG 170	Construction Graphics	3
GLG 114	Physical Geology and Lab	4
Elective	Arts/Human. Elective(s) 2	3
<b>Fourth Semes</b>	tor	(12 credits)
BMG 111	Business Law I	(12 credits)
CMG 200	Construction Systems	3
Elective	Nat. Sci. Elective(s)	3
Elective	Soc. Sci. Elective(s)	3
LIECTIVE	30c. 3ci. Liective(3)	3
Minimum Cred	dits Required for the Program:	60
	•	

#### Notes:

\*MTH 160 or MTH 160X should be completed at WCC to satisfy EMU's Quantitative Reasoning Requirement. If completed at EMU, MATH 110 will be required unless waived by ACT/SAT or math placement score.

Completion of MTH 160X will not raise the student's Academic Math Level to 3, which is required for at lease one course or prerequisite in this program.

#### **PROGRAM CHANGE FORM**

Division Dean/Administrator

Reviewer

Program Code: AACMG	Current Program Name: C Management	onstruction	Effective Term: \	Winter 2026
Division Code: ATP	Department: PSCD			
Directions:  1. Attach the current program listing from the WCC catalog or website and indicate any changes to be made.  2. Draw lines through any text that should be deleted and write in additions. Extensive narrative changes can be included on a separate sheet.  3. Check the boxes below for each type of change being proposed. Changes to courses, discontinuing a course, or adding new courses as part of the proposed program change, must be approved separately using CurricUNET, but should be submitted at the same time as the program change form.  4. If changes affect the program assessment plan or if program outcomes are updated, please submit a Program Assessment Plan Change form. These changes must be approved separately from the program change form and should be submitted at the same time. Current program assessment plans can be found on the Curriculum and Assessment Program Information page.				
Requested Changes:				
Remove course(s):  Add course(s):  Program outcomes (may also result from removing or adding a course)*  Program assessment plan*  Advisors  Program admission requirements  Continuing eligibility requirements  Note: A change to the Award Type requires the submission of a new program proposal form and a separate program inactivation form. Contact the Director of Curriculum & Assessment for more information.				
* Please submit a <u>Program Assessment Plan Change</u> form.				
Rationale for proposed changes:  ENG 111S will no longer be offered; ENG 111X will be added as an "OR" option.  Financial/staffing/equipment/space implications:				
List departments that have been consulted regarding their use of this program.				
Signatures:				
Reviewer	Print Name	Sign	nature	Date
Initiator	Matt Hagood	Matt Hagood		05/30/2025
Department Chair	Brian Martindale	Brian Martindal	e	05/30/2025

Please return completed form to the Office of Curriculum & Assessment, SC 257 or by e-mail to curriculum.assessment@wccnet.edu

Once reviewed by the appropriate faculty committees we will secure the signature of the VPI.

Eva Samulski

Signature

05/30/2025

Date

Eva Samulski

**Print Name** 

# WASHTENAW COMMUNITY COLLEGE

# **PROGRAM CHANGE FORM**

Curriculum Committee Chair	Randy Van Wagnen	<u>RVanWagnen</u>	6/10/25
Assessment Committee Chair	Jessica Hale	JAare	6/10/25
Executive Vice President for Instruction	Dr. Brandon Tucker	Brandon Roderick Tucker Digitally signed by Brandon Roderick Tucker PhD Date: 2025.06.13 14:14:55 -04'00'	6/13/25
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Reviewed by C&A Committee 6/5/25

# **Business & Entrepreneurship**

# **Construction Management (AACMG)**

Associate in Arts Degree

Program Effective Term: Winter 2025

High Demand Occupation High Skill Occupation High Wage Occupation

This program prepares students for entry-level jobs in the construction industry as well as for transfer to a bachelor's degree program in construction management at a four-year college or university. Students who transfer will continue developing the skills needed to work for construction contractors, engineering/architectural firms, public agencies, or trade associations in positions such as office engineer, field engineer, safety engineer, project engineer, foreman, estimator, scheduler, expeditor, quality control engineer, inspector, material representative or independent contractor. The program transfers to Eastern Michigan University. In addition to the required courses within the degree program, students may transfer additional courses taken at WCC that will be applied to technical, business and math/science requirements for the bachelor's degree program at Eastern Michigan University.

#### Articulation:

Eastern Michigan University, several BS degrees

Copies can be obtained from the Counseling Office, a program advisor, or from the Curriculum and Assessment Office Web site: https://www.wccnet.edu/learn/transfer-wcc-credits/articulation-agreements.php .

This program meets MTA. Students must have their transcripts certified for MTA completion by the WCC Student Records Office.

#### **Program Admission Requirements:**

A Math Level of 5 is required to enroll in MTH 178.

<b>First Semester</b>		(16 credits)
CMG 130	Construction Site Safety and OSHA Regulations	3
CMG 150	Introduction to Construction Management	3
ENG 111	Composition I	4
MTH 178	General Trigonometry	3
Elective	Arts/Human. Elective(s) 1	3
Second Semest	ter	(16 credits)
BMG 240	Human Resources Management	3
CMG 180	Application of Construction Materials	3
ECO 211	Principles of Economics I	3
MTH 160 or	Basic Statistics	
MTH 160X	Basic Statistics*	4
Elective	Speech/Comp. Elective(s)	3
Third Semester	r	(16 credits)
ACC 111	Principles of Financial Accounting	3
BMG 207	Business Communication	3
CMG 170	Construction Graphics	3
GLG 114	Physical Geology and Lab	4
Elective	Arts/Human. Elective(s) 2	3
		(40 8)
Fourth Semest		(12 credits)
BMG 111	Business Law I	3
CMG 200	Construction Systems	3
Elective	Nat. Sci. Elective(s)	3
Elective	Soc. Sci. Elective(s)	3

#### Minimum Credits Required for the Program:

Notes:

<sup>\*</sup>MTH 160 or MTH 160X should be completed at WCC to satisfy EMU's Quantitative Reasoning Requirement. If completed at EMU,

MATH 110 will be required unless waived by ACT/SAT or math placement score.

Completion of MTH 160X will not raise the student's Academic Math Level to 3, which is required for at lease one course or prerequisite in this program.

# Skilled Trades

# **Construction Management (AACMG)**

Associate in Arts Degree

Program Effective Term: Winter 2025

High Demand Occupation High Skill Occupation High Wage Occupation

This program prepares students for entry-level jobs in the construction industry as well as for transfer to a bachelor's degree program in construction management at a four-year college or university. Students who transfer will continue developing the skills needed to work for construction contractors, engineering/architectural firms, public agencies, or trade associations in positions such as office engineer, field engineer, safety engineer, project engineer, foreman, estimator, scheduler, expeditor, quality control engineer, inspector, material representative or independent contractor. The program transfers to Eastern Michigan University. In addition to the required courses within the degree program, students may transfer additional courses taken at WCC that will be applied to technical, business and math/science requirements for the bachelor's degree program at Eastern Michigan University.

#### Articulation:

Eastern Michigan University, several BS degrees

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This program meets MTA. Students must have their transcripts certified for MTA completion by the WCC Student Records Office.

#### **Program Admission Requirements:**

A Math Level of 5 is required to enroll in MTH 178.

CMG 130 Construction Site Safety and OSHA Regulations CMG 150 Introduction to Construction Management ENG 111 Composition I MTH 178 General Trigonometry Elective Arts/Human. Elective(s) 1  Second Semester BMG 240 Human Resources Management CMG 180 Application of Construction Materials ECO 211 Principles of Economics I MTH 160 or Basic Statistics
ENG 111 Composition I MTH 178 General Trigonometry Elective Arts/Human. Elective(s) 1  Second Semester BMG 240 Human Resources Management CMG 180 Application of Construction Materials ECO 211 Principles of Economics I
MTH 178 General Trigonometry Elective Arts/Human. Elective(s) 1  Second Semester BMG 240 Human Resources Management CMG 180 Application of Construction Materials ECO 211 Principles of Economics I
Elective Arts/Human. Elective(s) 1  Second Semester  BMG 240 Human Resources Management  CMG 180 Application of Construction Materials  ECO 211 Principles of Economics I
Second Semester  BMG 240 Human Resources Management  CMG 180 Application of Construction Materials  ECO 211 Principles of Economics I
BMG 240 Human Resources Management CMG 180 Application of Construction Materials ECO 211 Principles of Economics I
CMG 180 Application of Construction Materials ECO 211 Principles of Economics I
ECO 211 Principles of Economics I
MTH 160 or Rasic Statistics
TITI 100 01 Dasic Statistics
MTH 160X Basic Statistics*
Elective Speech/Comp. Elective(s)
Third Semester (16 credits
ACC 111 Principles of Financial Accounting
BMG 207 Business Communication
CMG 170 Construction Graphics
GLG 114 Physical Geology and Lab
Elective Arts/Human. Elective(s) 2
Fourth Semester (12 credits
BMG 111 Business Law I
CMG 200 Construction Systems
Elective Nat. Sci. Elective(s) Elective Soc. Sci. Elective(s)
Elective Soc. Sci. Elective(s)

# Minimum Credits Required for the Program:

Notes:

\*MTH 160 or MTH 160X should be completed at WCC to satisfy EMU's Quantitative Reasoning Requirement. If completed at EMU,

MATH 110 will be required unless waived by ACT/SAT or math placement score.

Completion of MTH 160X will not raise the student's Academic Math Level to 3, which is required for at lease one course or prerequisite in this program.

# Transfer

# **Construction Management (AACMG)**

Associate in Arts Degree

Program Effective Term: Winter 2025

High Demand Occupation High Skill Occupation High Wage Occupation

This program prepares students for entry-level jobs in the construction industry as well as for transfer to a bachelor's degree program in construction management at a four-year college or university. Students who transfer will continue developing the skills needed to work for construction contractors, engineering/architectural firms, public agencies, or trade associations in positions such as office engineer, field engineer, safety engineer, project engineer, foreman, estimator, scheduler, expeditor, quality control engineer, inspector, material representative or independent contractor. The program transfers to Eastern Michigan University. In addition to the required courses within the degree program, students may transfer additional courses taken at WCC that will be applied to technical, business and math/science requirements for the bachelor's degree program at Eastern Michigan University.

#### **Articulation:**

Eastern Michigan University, several BS degrees

Copies can be obtained from the Counseling Office, a program advisor, or from the Curriculum and Assessment Office Web site: https://www.wccnet.edu/learn/transfer-wcc-credits/articulation-agreements.php .

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#### **Program Admission Requirements:**

A Math Level of 5 is required to enroll in MTH 178.

First Semeste	r	(16 credits)
CMG 130	Construction Site Safety and OSHA Regulations	3
CMG 150	Introduction to Construction Management	3
ENG 111	Composition I	4
MTH 178	General Trigonometry	3
Elective	Arts/Human. Elective(s) 1	3
Second Semes	ster Ster	(16 credits)
BMG 240	Human Resources Management	3
CMG 180	Application of Construction Materials	3
ECO 211	Principles of Economics I	3
MTH 160 or	Basic Statistics	
MTH 160X	Basic Statistics*	4
Elective	Speech/Comp. Elective(s)	3
Third Semeste	er	(16 credits)
ACC 111	Principles of Financial Accounting	3
BMG 207	Business Communication	3
CMG 170	Construction Graphics	3
GLG 114	Physical Geology and Lab	4
Elective	Arts/Human. Elective(s) 2	3
Fourth Semes	ter	(12 credits)
BMG 111	Business Law I	3
CMG 200	Construction Systems	3
Elective	Nat. Sci. Elective(s)	3
Elective	Soc. Sci. Elective(s)	3

# Minimum Credits Required for the Program:

Notes:

\*MTH 160 or MTH 160X should be completed at WCC to satisfy EMU's Quantitative Reasoning Requirement. If completed at EMU,

MATH 110 will be required unless waived by ACT/SAT or math placement score.

Completion of MTH 160X will not raise the student's Academic Math Level to 3, which is required for at lease one course or prerequisite in this program.

# **PROGRAM CHANGE FORM**

Program Code: AACMG	Current Program Name: Con	struction Management	Effective Term: WI 2025	
Division Code: ATP	Department: HVAC			
<ol> <li>Directions:         <ol> <li>Attach the current program listing from the WCC catalog or website and indicate any changes to be made.</li> <li>Draw lines through any text that should be deleted and write in additions. Extensive narrative changes can be included on a separate sheet.</li> <li>Check the boxes below for each type of change being proposed. Changes to courses, discontinuing a course, or adding new courses as part of the proposed program change, must be approved separately using CurricUNET, but should be submitted at the same time as the program change form.</li> </ol> </li> <li>If changes affect the program assessment plan or if program outcomes are updated, please submit a Program Assessment Plan Change form. These changes must be approved separately from the program change form and should be submitted at the same time. Current program assessment plans can be found on the Curriculum and Assessment</li> </ol>				
Program Information page.				
Remove course(s):  Add course(s): MTH 160X  Program title (new title is  Description  Advisors  Program admission requirements  Continuing eligibility requirements			ding a course)* sment plan* formation MTH 160X as a math option and otnote.	
Show all changes on the <u>catalog page you attach</u> .  Note: A change to the Award Type requires the submission of a new program proposal form and a separate program inactivation form. Contact the Director of Curriculum & Assessment for more information.			proposal form and a separate on form. Contact the Director of	
Rationale for proposed changes:				
Adding MTH 160X as an alternative option for the math requirement in the degree and updating the footnote. Adding note about level requirement for MTH 178 to program admission requirements.				
Financial/staffing/equipment	/space implications:			
NA				
List departments that have been consulted regarding their use of this program.				

Signatures:

**HVAC** 

Reviewer	Print Name	Signature	Date		
Initiator	Eva Samulski	Eva Samulski	10/16/2024		
Department Chair	Brian Martindale	Brían Martindale	10/16/2024		
Division Dean/Administrator	Eva Samulski	Eva Samulski	10/16/2024		
Please return completed form to the Office of Curriculum & Assessment, SC 257					
or by e-mail to curriculum.assessment@wccnet.edu					
Once reviewed by the appropriate faculty committees we will secure the signature of the VPI.					
Reviewer Print Name Signature Date					

# $\label{eq:Received by C&A 10/16/24}$ Washtenaw Community College

# **PROGRAM CHANGE FORM**

Curriculum Committee Chair	Randy Van Wagnen	Randy Van Wagnen Date: 2024.10.31 09:23:50 -04'00'
Assessment Committee Chair	Jessica Hale	Jessica Hale Date: 2024.11.06 14:21:25-05'00'
Executive Vice President for Instruction	Dr. Brandon Tucker	Brandon Roderick Tucker Digitally signed by Brandon Roderick Tucker Date: 2024.11.08 09:03:57 -06'00'
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Reviewed by C&A Committee 10/24/24

# Business & Entrepreneurship

# **Construction Management (AACMG)**

**Associate in Arts Degree** 

Program Effective Term: Fall 2024

High Demand Occupation High Skill Occupation High Wage Occupation

This program prepares students for entry-level jobs in the construction industry as well as for transfer to a bachelor's degree program in construction management at a four-year college or university. Students who transfer will continue developing the skills needed to work for construction contractors, engineering/architectural firms, public agencies, or trade associations in positions such as office engineer, field engineer, safety engineer, project engineer, foreman, estimator, scheduler, expeditor, quality control engineer, inspector, material representative or independent contractor. The program transfers to Eastern Michigan University. In addition to the required courses within the degree program, students may transfer additional courses taken at WCC that will be applied to technical, business and math/science requirements for the bachelor's degree program at Eastern Michigan University.

#### **Articulation:**

Eastern Michigan University, several BS degrees

This program meets MTA. Students must have their transcripts certified for MTA completion by the WCC Student Records Office.

Copies can be obtained from the Counseling Office, a program advisor, or from the Curriculum and Assessment Office Web site:  $https://www.wccnet.edu/learn/transfer-wcc-credits/articulation-agreements.php \ . \\$ 

#### **Program Admission Requirements:**

Two years of high school algebra is recommended.

<b>First Semest</b>	er	(16 credits)
CMG 130	Construction Site Safety and OSHA Regulations	3
CMG 150	Introduction to Construction Management	3
ENG 111	Composition I	4
MTH 178	General Trigonometry	3
Elective	Arts/Human. Elective(s) 1	3
Second Seme	ester	(16 credits)
BMG 240	Human Resources Management	3
CMG 180	Application of Construction Materials	3
ECO 211	Principles of Economics I	3
MTH 160	Basic Statistics*	4
Elective	Speech/Comp. Elective(s)	3
Third Semest	ter	(16 credits)
ACC 111	Principles of Financial Accounting	3
BMG 207	Business Communication	3
CMG 170	Construction Graphics	3
GLG 114	Physical Geology	4
Elective	Arts/Human. Elective(s) 2	3
<b>Fourth Seme</b>	ester	(12 credits)
BMG 111	Business Law I	3
CMG 200	Construction Systems	3
Elective	Nat. Sci. Elective(s) 2	
Elective	Soc. Sci. Elective(s) 2	3

#### Notes:

\*MTH 160 should be completed at WCC to satisfy EMU's Quantitative Reasoning Requirement. If completed at EMU, MATH 110 will be required unless waived by ACT/SAT or math placement score.

Minimum Credits Required for the Program:

# Skilled Trades

# **Construction Management (AACMG)**

**Associate in Arts Degree** 

Program Effective Term: Fall 2024

High Demand Occupation High Skill Occupation High Wage Occupation

This program prepares students for entry-level jobs in the construction industry as well as for transfer to a bachelor's degree program in construction management at a four-year college or university. Students who transfer will continue developing the skills needed to work for construction contractors, engineering/architectural firms, public agencies, or trade associations in positions such as office engineer, field engineer, safety engineer, project engineer, foreman, estimator, scheduler, expeditor, quality control engineer, inspector, material representative or independent contractor. The program transfers to Eastern Michigan University. In addition to the required courses within the degree program, students may transfer additional courses taken at WCC that will be applied to technical, business and math/science requirements for the bachelor's degree program at Eastern Michigan University.

#### **Articulation:**

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ENG 111	Composition I	4
MTH 178	General Trigonometry	3
Elective	Arts/Human. Elective(s) 1	3
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ECO 211	Principles of Economics I	3
MTH 160	Basic Statistics*	4
Elective	Speech/Comp. Elective(s)	3
Third Semest	er	(16 credits)
ACC 111	Principles of Financial Accounting	3
BMG 207	Business Communication	3
CMG 170	Construction Graphics	3
GLG 114	Physical Geology	4
Elective	Arts/Human. Elective(s) 2	3
Fourth Semes	ster	(12 credits)
BMG 111	Business Law I	3
CMG 200	Construction Systems	3
Elective	Nat. Sci. Elective(s) 2	3
Elective	Soc. Sci. Elective(s) 2	3

#### Notes:

\*MTH 160 should be completed at WCC to satisfy EMU's Quantitative Reasoning Requirement. If completed at EMU, MATH 110 will be required unless waived by ACT/SAT or math placement score.

Minimum Credits Required for the Program:

#### Transfer

# **Construction Management (AACMG)**

Associate in Arts Degree

Program Effective Term: Fall 2024

High Demand Occupation High Skill Occupation High Wage Occupation

This program prepares students for entry-level jobs in the construction industry as well as for transfer to a bachelor's degree program in construction management at a four-year college or university. Students who transfer will continue developing the skills needed to work for construction contractors, engineering/architectural firms, public agencies, or trade associations in positions such as office engineer, field engineer, safety engineer, project engineer, foreman, estimator, scheduler, expeditor, quality control engineer, inspector, material representative or independent contractor. The program transfers to Eastern Michigan University. In addition to the required courses within the degree program, students may transfer additional courses taken at WCC that will be applied to technical, business and math/science requirements for the bachelor's degree program at Eastern Michigan University.

#### **Articulation:**

Eastern Michigan University, several BS degrees

This program meets MTA. Students must have their transcripts certified for MTA completion by the WCC Student Records Office.

Copies can be obtained from the Counseling Office, a program advisor, or from the Curriculum and Assessment Office Web site: https://www.wccnet.edu/learn/transfer-wcc-credits/articulation-agreements.php .

#### **Program Admission Requirements:**

Two years of high school algebra is recommended.

First Semester		(16 credits)		
CMG 130	Construction Site Safety and OSHA Regulations	3		
CMG 150	G 150 Introduction to Construction Management			
ENG 111	Composition I	4		
MTH 178	General Trigonometry	3		
Elective	Arts/Human. Elective(s) 1	3		
Second Semes		(16 credits)		
BMG 240	Human Resources Management	3		
CMG 180	Application of Construction Materials	3		
ECO 211	Principles of Economics I	3		
MTH 160	Basic Statistics*	4		
Elective	Speech/Comp. Elective(s)	3		
Third Semeste		(16 credits)		
ACC 111	Principles of Financial Accounting	3		
		3		
ACC 111	Principles of Financial Accounting Business Communication Construction Graphics	3		
ACC 111 BMG 207	Principles of Financial Accounting Business Communication	3		
ACC 111 BMG 207 CMG 170	Principles of Financial Accounting Business Communication Construction Graphics	3 3 3		
ACC 111 BMG 207 CMG 170 GLG 114 Elective	Principles of Financial Accounting Business Communication Construction Graphics Physical Geology Arts/Human. Elective(s) 2	3 3 3 4 3		
ACC 111 BMG 207 CMG 170 GLG 114 Elective Fourth Semest	Principles of Financial Accounting Business Communication Construction Graphics Physical Geology Arts/Human. Elective(s) 2	3 3 3 4		
ACC 111 BMG 207 CMG 170 GLG 114 Elective Fourth Semest BMG 111	Principles of Financial Accounting Business Communication Construction Graphics Physical Geology Arts/Human. Elective(s) 2	3 3 4 3 (12 credits)		
ACC 111 BMG 207 CMG 170 GLG 114 Elective Fourth Semest	Principles of Financial Accounting Business Communication Construction Graphics Physical Geology Arts/Human. Elective(s) 2  Ter Business Law I Construction Systems	3 3 4 3 (12 credits)		
ACC 111 BMG 207 CMG 170 GLG 114 Elective Fourth Semest BMG 111	Principles of Financial Accounting Business Communication Construction Graphics Physical Geology Arts/Human. Elective(s) 2  Ser Business Law I	3 3 3 4 3 (12 credits)		
ACC 111 BMG 207 CMG 170 GLG 114 Elective Fourth Semest BMG 111 CMG 200	Principles of Financial Accounting Business Communication Construction Graphics Physical Geology Arts/Human. Elective(s) 2  Ter Business Law I Construction Systems	3 3 4 3 (12 credits)		

#### Notes:

\*MTH 160 should be completed at WCC to satisfy EMU's Quantitative Reasoning Requirement. If completed at EMU, MATH 110 will be required unless waived by ACT/SAT or math placement score.

Minimum Credits Required for the Program:

# WASHTENAW COMMUNITY COLLEGE

# **PROGRAM CHANGE FORM**

Program Code: AACMG	rogram Code: AACMG Current Program Name: Construction Management					
Division Code: ATP	Department: HVAD					
<ol> <li>Directions:         <ol> <li>Attach the current program listing from the WCC catalog or website and indicate any changes to be made.</li> <li>Draw lines through any text that should be deleted and write in additions. Extensive narrative changes can be included on a separate sheet.</li> <li>Check the boxes below for each type of change being proposed. Changes to courses, discontinuing a course, or adding new courses as part of the proposed program change, must be approved separately using CurricUNET, but should be submitted at the same time as the program change form.</li> </ol> </li> <li>If changes affect the program assessment plan or if program outcomes are updated, please submit a Program Assessment Plan Change form. These changes must be approved separately from the program change form and should be submitted at the same time. Current program assessment plans can be found on the Curriculum and Assessment Program Information page.</li> </ol>						
Requested Changes:						
Add course(s): Program title (new title is Description Advisors Program admission require Continuing eligibility require Show all changes on the catalo * Please submit a Program Asse	□ Remove course(s): □ Program outcomes (may also result from removing or adding a course)*   □ Program title (new title is □ Program assessment plan*   □ Description □ Accreditation information					
Division is updating layouts to alig	gn with forthcoming part-time ia	youts				
Financial/staffing/equipment	/space implications:					
List departments that have b	List departments that have been consulted regarding their use of this program.					
Signatures:						
Reviewer	Print Name	Signa	ature	Date		
Initiator	Brian Martindale	"/s/ Brian Martind	ale"	1/8/24		
Department Chair	Brian Martindale	"/s/ Brian Martind	ale"	1/8/24		
Division Dean/Administrator	Jimmie Baber	Jimmis &	Baber	1/8/2024		
	completed form to the Office					
	or by e-mail to curriculum.as the appropriate faculty committ			1 <mark>.</mark>		
Reviewer	Print Name	Sign		Date		

#### **WASHTENAW COMMUNITY COLLEGE**

# **PROGRAM CHANGE FORM**

Curriculum Committee Chair	Randy Van Wagnen			
Assessment Committee Chair	Jessica Hale			
Interim Vice President for Instruction	Dr. Brandon Tucker			
Do not write in shaded are	a. Entered in: Banner	C&A Database	Log File	

Reviewed by C&A Committees 2/29/24

Program layout updated due to course resequencing. Change made to facilitate data migration for new Course Leaf software. Per 2/1/24 C&A committees' meeting, resequencing with minimal effect to credit hours/per semester does not require C&A Committee review.

# WCC General Education Requirements Effective Fall 2018

Associate degree programs were updated to meet the revised WCC general education requirements below.

# Course Distribution Requirements

Associate degree students must complete courses from each of six General Education content areas. The requirements vary, depending on which degree is being earned. The number of general education credit hours required for each degree is as follows.

	AA	AS	AAS
Writing/Composition	3-4 credits	3-4 credits	3-4 credits
2nd Writing/Composition or Communication	3-4 credits	3 credits	3 credits
Mathematics	3-4 credits	3-4 credits	3-4 credits
Natural Sciences <sup>1</sup>	7-8 credits	7-8 credits	3-4 credits
Social & Behavioral Science <sup>2</sup>	6 credits	6 credits	3 credits
Arts and Humanities <sup>3</sup>	6 credits	6 credits	3 credits
General Education Electives to reach 30 credits	0-2 credits	0-2 credits	N/A
Minimum	30 credits	30 credits	18 credits

<sup>&</sup>lt;sup>1</sup> Two courses in Natural Science including one with laboratory experience (from two disciplines)

<sup>&</sup>lt;sup>2</sup> From two disciplines

<sup>&</sup>lt;sup>3</sup> From two disciplines

# Construction Management (AACMG) Associate in Arts Degree

Program Effective Term: Fall 2018

High Demand Occupation High Skill Occupation High Wage Occupation

This program prepares students for entry-level jobs in the construction industry as well as for transfer to a bachelor's degree program in construction management at a four-year college or university. Students who transfer will continue developing the skills needed to work for construction contractors, engineering/architectural firms, public agencies, or trade associations in positions such as office engineer, field engineer, safety engineer, project engineer, foreman, estimator, scheduler, expeditor, quality control engineer, inspector, material representative or independent contractor. The program transfers to Eastern Michigan University. In addition to the required courses within the degree program, students may transfer additional courses taken at WCC that will be applied to technical, business and math/science requirements for the bachelor's degree program at Eastern Michigan University.

#### Articulation:

Eastern Michigan University, several BS degrees.

This program meets MACRAO. Students must have their transcripts certified for MACRAO completion by the WCC Student Records Office.

Copies can be obtained from the Counseling Office, a program advisor, or from the Curriculum and Assessment Office Web site: http://www.wccnet.edu/curriculum/articulation/levelone/colleges/.

#### **Program Admission Requirements:**

Students must have an Academic Math Level of 4 to enroll in CMG 150. Two years of high school algebra is recommended,

First Semes	ter made the selection of the first term of the selection	(11 credits)
CMG 150	Introduction to Construction Management	3
ENG 111	Composition I	4
MTH 160	Basic Statistics*	4
Second Sem	ester	(15 credits)
ACC 111	Principles of Accounting I	3
CMG 130	Construction Site Safety and OSHA Regulations	3
MTH 178	General Trigonometry	3
	Arts/Human. Elective(s) 1	3 3 3
	Speech/Comp. Elective(s)	3
Third Semes	iter	(12 credits)
BMG 240	Human Resources Management	3
CMG 180	Application of Construction Materials	3
ECO 211	Principles of Economics I	3
	Nat. Sci. Elective(s) 1	3
Fourth Seme	ester 10 7 10 cm Steels 100 200 200 200 200 200 200 200 200 200	(16 credits)
BMG 207	Business Communication	3
CMG 170	Construction Graphics	3
GLG 114	Physical Geology	4
	Soc. Sci. Elective(s) 2	3
	Arts/Human. Elective(s) 2	3
Fifth Semest		(6 credits)
BMG 111	Business Law I	3
CMG 200	Construction Systems	3
Minimum Cr	edits Required for the Program:	60

#### Notes:

\*MTH 160 should be completed at WCC to satisfy EMU's Quantitative Reasoning Requirement. If completed at EMU, MATH 110 will be required unless waived by ACT/SAT or math placement score.

Doru 1/16/18

# WASHTENAW COMMUNITY COLLEGE GENERAL EDUCATION REVISION PROGRAM CHANGE FORM FOR AA AND AS PROGRAMS 2018-2019

Program Code:	AACMG	Program Name: Construction	Mangement
Division Code:	ANS MSE	Department: CIND	

This form is to be used only for General Education Revision Program Changes for Associate in Arts (AA) and Associate in Science (AS) programs. Any other program changes should be submitted separately using a standard Program Change Form.

#### Directions:

- 1. Review each general education area under Requested Changes below and respond as needed.
- 2. Attach the semester program layout showing the current program listing from the WCC catalog.
  - a. Indicate any changes to be made on the semester layout.
  - b. Draw a line through any courses that should be removed on the semester layout.
  - c. Write in any courses that need to be added on the semester layout.
- 3. Submit this form and semester program layout to the Office of Curriculum and Assessment (SC 257).

Current General Education Requirements		Revised General Education Requirements 2018-2019		
AA and AS		AA and AS		
Writing	6 - 7 credits	English Composition	3 - 4 credits	
Speech	3 credits	2 <sup>nd</sup> Course in English Composition or one	3 - 4 credits	
Mathematics	3 - 4 credits	course in Communication	5 . creates	
Natural Sciences	3 - 4 credits	Mathematics	3 - 4 credits	
Social & Behavioral Sciences	6 credits	Natural Sciences from 2 disciplines including	7 - 9 credits	
Arts & Humanities	6 credits	one lab course		
Critical Thinking	0 credits	Social & Behavioral Sciences from 2 disciplines	6 credits	
Computer & Information		Arts & Humanities from 2 disciplines	6 credits	
Literacy	3 credits	Elective Credits to reach a minimum of 30	0 - 3 credits	
Total 30 - 33 credits		credit hours	erak i paratevari	
	F-11-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-	Total	30 credits	

Please review each General Education Area in the chart below, and record the needed changes in the chart and on the attached semester layout.

REQUESTED CHANGES						
Gener	ral Education Area					
chang	h Composition – The requirement for one writing/English composition course remains the same. No es will be made unless specifically requested below. (Use Writing Elective or ENG 111) hal Change:					
	Allow students to select any course that meets composition/writing or communication (recommended).  Require students to take a specific composition course (identify course below and on semester layout)					

	Requested Change:							
	<ul> <li>2<sup>nd</sup> Course in English Composition or one course in Communication Credit Hours         Because of this change, an extra 3 – 4 credit hours may be available in the program. Please specify how you would like to use those credit hours. Your options are:         <ol> <li>Reduce the number of credit hours if the program total is over 60 (recommended).</li> <li>Replace the course with elective credits as needed to reach a minimum of 60 credit hours.</li> <li>Add a specific program-related course (please add the course in the semester it should be taken on the semester layout).</li> </ol> </li> <li>Requested Change:</li> </ul>							
		nave changed slightly	y. MTH 148, 149 and 167 do	ne. However, the courses that not meet the general education Math elective".				
	Natural Sciences from 2 disciplines including one lab course  WCC previously required one natural science course. Your options are:  1. No change needed – a second natural science course is already included in my program.  2. Add a second natural science course in the semester shown on the semester layout attached. Unless specific courses are required, include one course identified as a lab science course.  Requested Change:							
	Social & Behavioral Sciences courses remains the same. N Optional Change:							
	same. No changes will be ma	ide unless specificall	irement for two arts and hum y requested below. (Note: A cannot be counted in two are	department can designate a COM				
	Computer and Information Literacy The requirement for computer and information literacy has been removed. Your options are:  1. Continue to require a specific computer course. If a specific course is required in your program, we will leave it there. If you previously used "Computer and Information Literacy Course," you will need to specify either a specific course or a list of courses from which to choose.  2. Remove the computer and information literacy course if the program will still meet the minimum of 6 credit hours.  3. Remove the computer and information literacy course and replace the course with elective or other credits as needed to meet the minimum of 60 credit hours.  Required Change:							
	Elective Credits to reach a minimum of 30 credit hours – A course titled "General Education Credit(s) to Reach a Minimum of 30 Credit Hours" will be created and then added as needed to the program.							
Re	eviewer	Print Name	Signature	Date				
lni	nitiator							

Initiator				
Department Chair				
Division Dean/ Administrator				
Vice President for Instruction	Kimberly Hum	15 =	1	- 1/9/18
		- /		111

# PROGRAM CHANGE OR DISCONTINUATION FORM

Program Code: AACMG	Program Name: Construction Mana	agement Effective Term: SS09	
Division Code: VCT	Department: Construction		
Directions:			······································
1. Attach the current program	n listing from the WCC catalog or Web si	ite and indicate any changes to be made.	
2. Draw lines through any tex sheet.	t that should be deleted and write in addi	litions. Extensive narrative changes can be included on a separ	rate
3. Check the boxes below for part of the proposed progretime as the program change	am change, must be approved separately	Changes to courses, discontinuing a course, or adding new course using a Master Syllabus form, but should be submitted at the	ses as same
Requested Changes:			
Review Remove course(s): COM101,CEM105,PLS112,P Add course(s): GLG114,N Program title (title was Description Type of award Advisors Articulation information	SY100,ENG181,PHL205ARC117 ATH176,PHY111,alternatives	<ul> <li>✓ Program admission requirements</li> <li>☐ Continuing eligibility requirements</li> <li>☐ Program outcomes</li> <li>☐ Accreditation information</li> <li>☐ Discontinuation (attach program discontinuation plan includes transition of students and timetable for phase out courses)</li> <li>✓ Othernotes</li> </ul>	
Show all changes on the attack	hed page from the catalog.		
Rationale for proposed char Eastern Michigan University	nges or discontinuation: changes to the Articulation agreement w	rith Washtenaw Community College	
Financial/staffing/equipme	ent/space implications:		
List departments that have Drafting	been consulted regarding their use of	this program.	
Signatures:		^	
Reviewer	Print Name	/ Signature Date	
Initiator	Cristy Lindemann	Jun 1.30.	09
Department Chair	Cristy Lindemann	(45) M 1.30.	09
Division Dean/Administrator	Bruce Greene	1 2/2/00	7
Vice President for Instruction	Roger Palay	Mage M. Talay, 2/241	19
President	Larry Whitworth		
Do not write in shaded area.	Entered in: Banner C&A D	Database 426 Log File 2/2/09 & Board Approval	

Please submit completed form to the Office of Curriculum and Assessment and email an electronic copy to sjohn@wccnet.edu for posting on the website.

Washtenaw Community College.

# Certificates and Degrees.

http://www.wccnet.edu/academicinfo/creditofferings/programs/degree.php?code=AACMG

Return to web format »

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# Construction Management (AACMG)

Associate in Arts Degree

Program requirements shown below are for catalog year: 2008 - 2009 ▼ Change Year

#### Description:

This program prepares students for entry-level jobs in the construction industry as well as for transfer to a bachelor's degree program in construction management at a four-year college or university. Students who transfer will continue developing the skills needed to work for construction contractors, engineering/architectural firms, public agencies, or trade associations in positions such as office engineer, field engineer, safety engineer, project engineer, foreman, estimator, scheduler, expeditor, quality control engineer, inspector, material representative or independent contractor. The program transfers to Eastern Michigan University. In addition to the required courses within the degree program, students may transfer additional courses taken at WCC that will be applied to technical, business and math/science requirements for the bachelor's degree program at Eastern Michigan University.

#### **Contact Information:**

Division: Vocational Technologies

School: School of Construction Technology

Department: Construction Institute

Advisors: Cristy Lindemann

#### **Articulation:**

Eastern Michigan University, several BS degrees.

Construction Materials

This program meets MACRAO. Students must have their transcripts certified for MACRAO completion by the WCC Student Records Office.

Copies can be obtained from the Counseling Office, a program advisor, or from the Curriculum and Assessment Office Web site: <a href="http://www.wccnet.edu/departments/curriculum/articulation.php?">http://www.wccnet.edu/departments/curriculum/articulation.php?</a> levelone=colleges.

**Admission Requirements:** 

		r better is required to enrell in CMG 15	<u>0</u> . Two years of
-	bra is recommended.	- x - TICULATION	a Lagreement:
Englishwa	iting Regurnate	= ARICUMION	1 Aggreement (30 Credits) ATTACHED
General Educa	tion Requirements		(30 Credits) A I TO I CO
ENG 111	Composition I	1ATH&Science:	4
ENG 226	Composition II	AHAZIONE.	3
-COM 101	Fundamentals of Speaking (	GLG114 Physical Geology	3
MTH 160	Basic Statistics		40 A
CEM 105 or	Fundamentals of Chemistry	- Humanuties Requir	ement (8-9)
CEM 111	General Chemistry I	- Humanuties Requirement 5-6 credits to	se vale h 4
-PLS 112	Introduction to American Go	wernment 5-6 creduts to	s comprere
PSY 100	Introductory Psychology	Socialscien	3 (a) 3
ENG 181 or	* African-American Literature		10(1)
ENG 214	Literature of the Non - West	ern World ECUZII 2 COURSES	- Lacredis
PHL 205	Ethics	·	ર
		secnotes	
Major/Area Re	equirements		(15 Credits)

WCC Certificates	and Degrees: Construction Management Associate in Arts De	gree (AACMG)	Page 2 of 2
· <u>CMG 130</u>	Construction Site Safety and MIOSHA Regulations	3	
CMG 150 °	Introduction to Construction Management	3	
CMG 170	Construction Graphics	3	
CMG 200	Construction Systems	3	
Required Supp	port Courses	(21 Credits)	
ACC 111	Principles of Accounting I	3	
BMG 207	Business Communication	3	
BMG 240	Human Resources Management	3	
CIS 100	Introduction to Computers and Software Applications	3	
ECO 211	Principles of Economics I	3	
MTH 178	General Trigonometry	3	
BMG 106 or	Legal Basics in Business		
BMG 111	Business Law T	2	

Minimum Credits Required for the Program:
Notes: MTH 160 should be Compresed of WCC to Satisfy Emu's Quantitative
Reasoning Requirement. If completed at Emu, MATTHID will be required
Footnotes: Unitess waived by ACTISAT or math placement score.

Students must meet the Computer and Information Literacy Graduation Requirement. See General Education Graduation Requirements in the WCC Bulletin.

This website is for informational purposes only and is not to be construed as a binding offer or contract between WCC and the student. The information presented here is believed accurate, but is NOT guaranteed and is subject to change without notice.

For official information, see an Advisor.

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# School of Construction Technology

Become part of the growing global community of Skilled Trades professionals or Skilled Trades managers. Design, plan, construct and complete structures for your home or for your career. You can earn a certificate or degree in Residential Construction, Construction Management or Heating, Ventilation and Air Conditioning. These programs offer the perfect blend of classroom education and hands-on training. At the Henry S. Landau Design and Construction Training Center, you will be taught construction skills from the ground up. You can learn classic

skills such as woodworking or modern techniques needed to maintain or improve your own structure. On the main campus, the HVAC program offers a wide range of training to equip high-end technicians with the knowledge and skills needed for successful entry into the field.

Washtenaw Community College offers programs at several levels for students who want to begin new careers, or advance in their existing careers. The first level is the certificate, which can vary from nine to thirty-six credits, depending on the field. Certificates generally prepare students for entry-level jobs.

After completing a certificate, students can progress to the next level, the advanced certificate. The credit hours required for these programs also vary. This type of certificate provides a more specialized level of skill development, and often allows students to upgrade their positions at their places of employment.

The next level, an Associate in Applied Science, is available for some programs. For some career fields, it is possible to earn a certificate, advanced certificate, and an Associate in Applied Science degree in the same field. In these cases, the credit hours from the certificate and advanced certificate can be applied to the credit hours needed for the Associate in Applied Science degree.

Alternatively, students can earn an AAS in Occupational Studies by completing a certificate, advanced certificate and General Education requirements.

# Construction Management

Prepare for work in the construction management or property maintenance industries through the completion of these programs.

# Construction Management (AACMG)

#### Associate in Arts Degree

Program Effective Term: Fall 2009

This program prepares students for entry-level jobs in the construction industry as well as for transfer to a bachelor's degree program in construction management at a four-year college or university. Students who transfer will continue developing the skills needed to work for construction contractors, engineering/architectural firms, public agencies, or trade associations in positions such as office engineer, field engineer, safety engineer, project engineer, foreman, estimator, scheduler, expeditor, quality control engineer, inspector, material representative or independent contractor. The program transfers to Eastern Michigan University. In addition to the required courses within the degree program, students may transfer additional courses taken at WCC that will be applied to technical, business and math/science requirements for the bachelor's degree program at Eastern Michigan University.

#### **Articulation:**

Eastern Michigan University, several BS degrees.

This program meets MACRAO. Students must have their transcripts certified for MACRAO completion by the WCC Student Records Office.

Copies can be obtained from the Counseling Office, a program advisor, or from the Curriculum and Assessment Office Web site: http://www.wccnet.edu/departments/curriculum/articulation.php?levelone=colleges.

#### **Program Admission Requirements:**

Students must have an Academic Math Level of 4 to enroll in CMG 150. Two years of high school algebra is recommended.

	ation Requirements (33 credits)
ENG 111	Composition I 4
ENG 226	Composition II
Speech	Elective(s)*
MTH 160	Basic Statistics**
GLG 114	Physical Geology 4
ECO 211 and	Principles of Economics I
Soc. Sci.	Complete two additional courses, one in a subject other than ECO.
Arts/Human.	Elective(s) 6
	equirements (15 credits)
CMG 130	Construction Site Safety and MIOSHA Regulations

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# **Program Information Report**

CMG 150 CMG 170 CMG 180 CMG 200	Introduction to Construction Management Construction Graphics Application of Construction Materials Construction Systems	
Required Supp ACC 111 BMG 207 BMG 240 CIS 100 ECO 211 MTH 178 BMG 106 or BMG 111	Principles of Accounting I Business Communication Human Resources Management Introduction to Computers and Software Applications Principles of Economics I General Trigonometry Legal Basics in Business Business Law I	

# Minimum Credits Required for the Program:

#### Notes:

\*Choose any COM course that meets General Education Requirements.

Students transferring to EMU should see the articulation agreement for additional courses that can be taken at WCC.

Students must meet the Computer and Information Literacy Graduation Requirement. See General Education Graduation Requirements in the WCC Bulletin.

<sup>\*\*</sup>MTH 160 should be completed at WCC to satisfy EMU's Quantitative Reasoning Requirement. If completed at EMU, MATH 110 will be required unless waived by ACT/SAT or math placement score.

# Construction Management (AACMG) Associate in Arts Degree

Program Effective Term: Fall 2004

This program prepares you for entry-level jobs in the construction industry as well as for transfer to a bachelor's degree program in construction management at a four-year college or university. Students who transfer will continue developing the skills needed to work for construction contractors, engineering/architectural firms, public agencies, or trade associations in positions such as office engineer, field engineer, safety engineer, project engineer, foreman, estimator, scheduler, expeditor, quality control engineer, inspector, material representative or independent contractor. The program transfers to Eastern Michigan University and Ferris State University. In addition to the required courses within the degree program, students may transfer additional courses taken at WCC that will be applied to Technical, Business and Math/Science requirements for the bachelor's degree program at Eastern Michigan University.

#### Articulation:

This program has articulation agreements with:

- Eastern Michigan University, College of Technology, for the Bachelor of Science in Construction Management.
- Ferris State University, College of Technology, for the Bachelor of Science in Construction
- The program meets MACRAO plus EMU's additional four requirements. Students must have their WCC transcripts endorsed for MACRAO completion.
- Copies of articulation agreements can be obtained from the Counseling Office or a program advisor.

#### **Program Admission Requirements:**

A minimum COMPASS Algebra score of 66, or MTH 169 with a "C" or better is required to enroll in CMG 150 and MTH 160. Two years of high school algebra is recommended.

Continuing Eligibility Requirements:

Students must demonstrate basic computer literacy skills by successfully passing the Computer and Information Literacy Test. The test may be taken at any point during the program, but must be completed before graduating.

General E	ducation Requirements	(30 credits)
COM 101	Fundamentals of Speaking	3
ENG 111	Composition I	4
ENG 226	Composition II	3
MTH 160	Basic Statistics	4
PHL 205	Ethics	3
PLS 112	Introduction to American Government	3
PSY 100	Introductory Psychology	3
CEM 105 or	Fundamentals of Chemistry	
CEM 111	General Chemistry I	4
ENG 181 or	African American Literature	
ENG 214	Literature of the Non-Western World	3
Major/Are	(15 credits)	
ARC 117	Construction Materials	3
CMG 130	Construction Site Safety and MIOSHA Regulation	
CMG 150	Introduction to Construction Management	3
CMG 170	Construction Graphics	3
CMG 200	Construction Systems	3
Required	Support Courses	(21 credits)
ACC 111	Principles of Accounting I	3
BMG 207	Business Communication	3
BMG 240	Human Resources Management	3
CIS 100	Introduction to Software Applications	3
ECO 211	Principles of Economics I	3
MTH 178	General Trigonometry	3
BMG 106 or	Legal Basics in Business	
BMG 111	Business Law I	3



# Construction Management (AACMG) Associate in Arts Degree

Program Effective Term: Fall 2002

This program prepares you for entry-level jobs in the construction industry as well as for transfer to a bachelor's degree program in construction management at a four-year college or university. Students who transfer will continue developing the skills needed to work for construction contractors, engineering/architectural firms, public agencies, or trade associations in positions such as office engineer, field engineer, safety engineer, project engineer, foreman, estimator, scheduler, expeditor, quality control engineer, inspector, material representative or independent contractor. The program was specifically designed for transfer to Eastern Michigan University. However, this program also transfers to Ferris State University.

In addition to the required courses within the associate in arts degree, students may transfer additional courses taken at WCC that will be applied to Technical, Business and Math/Science requirements for the bachelor's degree program at Eastern Michigan University.

# Health and Applied Technologies Division Construction Institute Department

Advisor: Patricia Crider

#### Articulation:

This program has articulation agreements with

- Eastern Michigan University, Čollege of Technology, Bachelor of Science in Construction Management.
- -The program meets MACRAO plus EMU's additional four requirements. Students must have their WCC transcripts endorsed for MACRAO. For more on MACRAO, see Appendix A.

-Ferris State University, College of Technology, Construction and Technology Management Department, Bachelor of Science in Construction

#### **Program Admission Requirements:**

Two years of high school Algebra, or a minimum COMPASS Algebra score of 66, or MTH 169 with a "C" or better

#### **Continuing Education Requirements:**

Students must demonstrate basic computer literacy skills by successfully passing the Computer and Information Literacy Test. The test may be taken at any point during the program, but must be completed before graduating.

General E	Education Requirements	(30 Credits)
COM 101	Fundamentals of Speaking	3
ENG 111	Composition I	4
ENG 122	Composition II	3
MTH 160	Basic Statistics	4
PHL 205	Ethics	3
PLS 112	Introduction to American Government	3
PSY 100	Introductory Psychology	3
Choose:	CEM 105 Fundamentals of Chemistry or	
0110000.	CEM 111 General Chemistry I	4
Choose:	ENG 181 African American Literature or ENG 214 Literature of the Non-Western World	3

Major/Are	a Requirements	(17 Credits)
ARC 117	Construction Materials	3
CMG 130	Construction Site Safety and MIOSHA Regulations	3
CMG 150	Introduction to Construction Management	3
CMG 170	Construction Graphics	4
CMG 200	Construction Systems	4

Required	Support Courses	(21 Credits)
ACC 111	Principles of Accounting I	3
BMG 207	Business Communication	3
BMG 240	Human Resources Management	3
CIS 100	Introduction to Software Applications	3
ECO 211	Principles of Economics I	3
MTH 178	General Trigonometry	3

Choose:

BMG 106 Legal Basics in Business or BMG 111 Business Law I

3 68

Minimum Credits Required for the Program:

Footnotes: \*See your advisor to select appropriate electives

# Washtenaw Community College Program Change Request Form

Program Code: Program Title: Construction Management (Apeonm) Effective Year: Fall2002 1. Course Related Program Changes: Elective Group Course **Course Title** (if applicable) Credit Sem Change(s) Remove 🛛 GENERAL 1. Complete The General Education Add 🔲 Change Title 21.0 ☐ Change Credit **EDUCATION** Requirements For The Aas Degree (was: 0 ☐ Shift in Sequence (was: 2. Complete The Residential Remove X Add 🔲 Change Title **CTRCT** 19.0 ☐ Change Credit (was: Construction Certificate (CTRCT) 0 Shift in Sequence (was: 3. Complete The Management Remove 🛛 Add 🔲 Change Title 🔲 12.0 **CVMGTA** Supervision Advanced Certificate ☐ Change Credit (was: 0 (CVMGTA) ☐ Shift in Sequence (was: 4. Complete 11 Credit Hours As Free Remove X Add  $\square$ Change Title 11.0 **ELECTIVES** Electives To Bring The Program Total ☐ Change Credit (was: 0 To 60 Credits. ☐ Shift in Sequence (was: See Complete The General Education **GENERAL** Requirements For An Associate In Remove Add 🛛 Change Title 36.0 ☐ Change Credit **EDUCATION** Science Degree. The Attached Ppaf (was:\_ ☐ Shift in Sequence (was:\_ Which Lists The Specific Courses. See The Attached Ppaf Which Lists The Remove Add X Change Title 🔲 17.0 **MAJOR AREA** ☐ Change Credit (was: Major/Area Requirements. ☐ Shift in Sequence (was: See The Attached Ppaf Which Lists The REOUIRED Remove Add 🔯 Change Title 16.0 ☐ Change Credit **SUPPORT** (was: Required Support Courses. 0 ☐ Shift in Sequence (was: Remove Add 🗌 Change Title ☐ Change Credit (was: ☐ Shift in Sequence (was: **Total Credit Hours for Program: Before Proposed Changes: 60** After Proposed Changes: 69 Non-Course Related Program Changes: (description, advisors, admission criteria, title, etc.) Construction Management Fransfer, Associate in Science (AS) Degree Description: This program prepares you for transfer to a Bachelor's degree program in Construction Management at a four-year college or university, where you will continue developing the skills needed for middle and upper level management in general contracting. The program was specifically designed for transfer to Eastern Michigan University. Advisor: Patricia Crider 4. Rationale for Proposed Changes: Provide students with an alternative to the Residential Construction Certificate and Occupational Education AAS degree track with courses that articulate to four-year institutions. 5. Financial/Staffing/Equipment/Space Implications: None 6. Has the department consulted with all departments that may be impacted? Yes 🛛 No 🔲 NA □ 7. Signatures: Reviewer **Print Name** Signature Date Program Change Initiator: Patricia Crider Department Chair: Patricia Crider Division Dean: Granville Lee VP, Instruction/Student Services: Curriculum File 2000 Data File Catalog.

Curriculum and Articulation Services:

Curriculum Development\Forms\Program Change Form 12/2/98

Copies: Initiator, Department Chair, Dean, Curriculum File

New Listing to: Counseling; Admissions

	Major Area Requirements:
	ARC 117 Construction Materials3
	CMG 130 Construction Site Safety
	& MIOSHA Regulations3
	CMG 150 Introduction to Construction
	Management
	CMG 170 Construction Graphics4
	CMG 200 Construction Systems4
	17 Credits
	Required Support Courses:
	ACC 111 Principles of Accounting I3
	BMG 106 Legal Basics in Business3
	BMG 111 Business Law I3
	BMG 207 Business Communication
	DMC 240 II D
	CIS 100 Introductions to Software Applications3
	PEA 102 Cardiovascular Training1
	16 Credits
	10 Credits
Minimum credit required for the	program:
7. Program Development Plan (time	table, costs, personnel):
Courses to be available for Fall 2002	
Signatures:	$\mathcal{L} \cdot \mathcal{L} = \mathcal{L} \cdot \mathcal{L} \cdot \mathcal{L}$
Department Chair/Director: Patri	icia Crider Tatricia Ludu Date: April 8, 2002
Comments:	$\mathcal{A}_{i}$
Dean(s)/Administrator: <u>Granville</u>	Lee Date: 4/4/
Comments:	1/02
Executive Vice President of Instruction:	
Approved for development of	of PAD (Program Approval Document)
	ew/development of PPAF (details attached)
leaded = ================================	(would always)
☐ Not approved	$\mathcal{A}_{-}$
Signature:	Date: 4/20
Office of Commission and A. C. L. C. C.	2
Office of Curriculum and Articulation Services  Preliminary Program Approval Form/Original 9 25 91/	
Preliminary Program Approval Form/ Original 9-25-91/ Copies: IAC:, Curriculum	
	Department Chair/Director, Dean/Administrator, Curriculum Files
	The second secon



Propose	d Name of P	rogram: <u>Con</u> s	struction Ma	nagement <b>Timest</b> er	
Faculty/	Initiator(s):_	Patricia Crider			
Division	: HAT	Departmen	t: CIND	Estimated S	tart up Term: Fall 2002
Type of	Program:	A.A.	🛛 A.S.	A.A.S.	
Ce	tificate of Complet	ion 🔀 Certi	ficate	Advanced Certificate	Post Associate Certificate
1. Gen	eral Descript	ion of Program	(purpose, cu	ırriculum design, need	for new courses):
managen Michigan	college or un ent in general University.	liversity, where y	ou will contine program wa	nue developing the skill as specifically designed	Construction Management at a s needed for middle and upper for transfer to Eastern
Grad middle ar	luates of the C nd upper mana	Construction Mai agement position	nagement Tra s in the const	nsfer program can expo ruction industry.	ect to compete for positions in
3. Enr	ollment Proje	ctions:			
40-	0 students pe	r year			
4. Insti	uctional Res	ources and Spac	ce Needs (eq	uipment, labs, classroo	oms, consumable supplies):
\$20 <b>5. Fa</b>	000.00-\$5000 culty Resource	.00 annually for ces (full-time, pa	consumable s	supplies	,
6. Cur	icular Conne	ections (Other V	VCC instruc	tional units, articulatio	ons, accreditations):
Was	shtenaw Com	munity College			
		i	ENG 111 C ENG 122 C COM 101 I MTH 160 I MTH 178 C CEM 105 I CEM 111 C GLG 114 P ECO 211 P	ducation Requirement Composition I	

	H S	Health and Applied Technologies Division (HAT)	
Required		Inetitation Course Name	
Courses		Description (Credit Hours)	
	WCC-AAS Degree	Ferris State University (FSU):	Factorn Michigan University (FMID.
General	1. Writing:	COMM 121:	CHEM 119.
Education	ENG 111 Composition I (4)	Fundamentals of Public Speaking (3)	Fundamentals of Chemistry (4)
	ENG 122 Composition II (3)	ECON 221:	CTAS 121.
		Principles of Economics (3)	Fundamentals of Sneech (2)
	2. Speech:	ENGL 150:	ECON 201:
	COM 101- Fundamentals of Speaking (3)	English 1 (3)	Principles of Economics I (3)
		ENGL 250:	ECON 202:
	3. Mathematics:	English 2 (3)	Principles of Economics II (3)
		GEOL 160:	ENGL 121
	MTH 160 -Basic Statistics (4)	Physical Geology (4)	English Composition (3)
	MTH 169 Intermediate Algebra (4)	MATH 116:	NTF 105:
	MTH 178 – General Trigonometry (3)	Intermediate Algebra and	Committee Applications for Industry (2)
		Numerical Trigonometry (4)	MATH 107.
	4. Natural Science:	MATH 126;	Dlone Tricon com com. (2)
	CEM 105 Fundamentals of Chemistry (4)	Algebra and Analytic Trisomometry (4)	MATU 110/110.
	or	PHYS 211.	MAID 118/119;
	CEM 111 – General Chemistry I (4)	Introductory Physics 1 (4)	Mathematical Analysis for Social Sciences III (6)
	GLG 114 - Physical Geology (4)	General Education Credits (28)	Mechanics Sound and Heat (4)
			PLSC 112:
	5. Social/Behavioral Science:		American Government (3)
*****	ECO 211- Principles of Economics I (3)		PSY 101:
			General Psychology (3)
	o. Arts and rumanities:		General Education Credits (36)
	Canaral Education Credits (25)		
	Concient Education Citedits (30)		

Meion		D1 1 111 001	
iviajor	Certificate-Construction Management	BLAW 221:	ACC 130:
	ARC 11/:	Elementary Business Law (3)	Accounting for Non-Business Majors (3)
	Construction Materials (3)	CONM 111:	CNST 125:
	CMG 130:	Construction Practices (3)	Introduction to Construction (2)
,	Construction Site Safety & MIOSHA	CONM 112:	CNST 201:
	Regulations (3)	Plans and Specifications (3)	Construction Systems (3)
	CMG 150:	CONM 113:	CNST 206:
	Introduction to Construction Mgmt (3)	Computer Applications (3)	Surveying (3)
	CMG 170:	CONM 121:	CNST 213:
	Construction Graphics (4)	Materials Properties and Testing (3)	Construction Safety (3)
	CIMIC 200.	CONM 122:	CNST 229:
	Moise (Construction Systems (4)	Construction Surveying and Layout (3)	Planning and Scheduling (3)
	Major Certificate Credits (1/)	CONM 211:	DS 265:
		Construction Quantity Estimating (3)	Business Statistics (3)
		CONM 212:	GEOL 160:
		Soils and Foundations (3)	Physical Geology (4)
		COINM 221:	IS 215:
		Statics and Structures (4)	End-User Computing (3)
		Continue 222.	LAW 293:
		Meine Construction (3)	Legal Environment of Business (3)
Support	ACC 111:	iviajor Credits (31)	MGM1 202:
	Principles of Accounting (3)		Business Communications (3)
	BMG 106 or BMG 111:		Major Credits (33)
	Legal Basics in Business (3)		
	or		
	Business Law I (3)		
	BMG 207:		
	Business Communication (3)		
	Himan Resource Management (3)		
	CIS 100:		
	Introduction to Software Applications (3)		
	PEA 102 Cardiovascular training (1)		
	Support Credits (16)		
Commercial/		BCTM 213:	
Industrial Track		Wood and Steel Framing and Finishes (3)	
11878		BC1M 223:	
		Mechanical and Electrical Plans and Specifications (3)	
		DOLINI 223.	
		Field Engineering (3)	
		Commercial Industrial 1 rack Credits (9)	

Highway/		CETM 214:	
Bridge Track		Advanced Materials Properties and Resting (3)	
		CETM 215:	
		Pavement Design and Construction (3)	
		CETM 226:	
		Highway Technology (3)	
		CETM 227:	
		Hydraulics and Hydrology (3)	
		Highway/Bridge Track Credits (12)	
Program	Minimum Credits Required		
Totals	for Associate in Science (AS) Degree (69)		

#### 'PHASED OUT'

#### **Construction Management (APCONM)** Associate in Applied Science Degree

Program Effective Term: Fall 2002

Some employers require or prefer employees to have an associate degree as a condition for employment or for advancement. You can earn an Associate in Applied Science in Construction Management by completing the requirements listed below.

#### **Health and Applied Technologies Division Technical Education Department**

Advisor: Les Pierce

### **Continuing Education Requirements:**

Students must demonstrate basic computer literacy skills by successfully passing the Computer and Information Literacy Test. The test may be taken at any point during the program, but must be completed before graduating.

# Requirements

1.	Complete the General Education Requirements for the Associate in Applied Science (AAS) Degree	18-21
2.	Complete the Residential Construction Certificate (CTRCT)	19
3.	Complete the Management Supervision Advanced Certificate (CVMGTA)	12
4.	Complete 11 credit hours as free electives to bring the program total to 60 credits*	11
/linimum (	Credits Required for the Program:	60

## Minimum Credits Required for the Program:

<sup>\*</sup>See your advisor to select appropriate electives

## Washtenaw Community College Program Change Request Form

<b>Program Code</b>	e:
APCONM	_

**Program Name: Construction Management** 

Effective Term: F 2001

Document Code: Program Change Form v21.doc

submitted for this year. Please re Draw lines through anything that written on a separate sheet. Che	eview the program sheet careful t should be removed and write it ck the boxes below for each type	thould reflect any <u>approved</u> changes ly and indicate any changes that you any additions. Extensive narrative of change being proposed. If course-Syllabus Approval Form (CSAF).	u would like to make. e changes may be
1. Requested Changes:		A Probable to a second	
☐ Remove Course(s) ☐ Add Course(s) ☐ Increase/Decrease Credits ☐ Course Sequence ☐ Name (new name ☐ Major/Program Code (new code ☐ Description  Show all changes on the attached p		Advisors Articulation Agreements Program Admission Requires Continuing Eligibility Requires Footnotes Other	
		S FOR CON 104, AND AN INCREA	SE IN CREDITS FOR
204 AND 205 DUE TO CHANG	GES IN CONTENT AND CONT	ACT HOURS.	
		- PATOM	778016
		7.50 0 //	
	(46.094.70.70	SU CTRCT	
UPGRADE EXPENSE FOR SC	FTWARE OF APPROXIMATEI	Y \$5000.	
4. Has the department consulted Comments:	with all departments that may	be impacted? Yes ⊠ No □	NA 🗌
Signatures:			
Reviewer	Print Name	Signature	Date
Program Change Initiator:	L Pierce	Thur	01-19-07
Department Chair:	L Pierce	Than	01-19-01
Division Dean:		KR Outon	1/23/01
VP, Instruction/Student Services:		Run/III	Bel.
Access Program File 3   30   0 Copies: Initiator, Department Cha	Log_3 30/0/ ir, Dean, Curriculum File	Copied and Returned	

Curriculum Development\Forms\Programs\Program Change Form 1/9/01

## **Construction Management (APCONM)** Associate in Applied Science Degree

Some employers require or prefer employees to have an associate degree as a condition for employment or for advancement. You can earn an AAS in Construction Management, by completing the requirements listed below. **Technical Education Department** 

Advisors: Les Pierce	19				
Requirement	redit Hours	<b>-</b>			1.
Complete the Residential Construction Certificate (CTI	RTC)	Con	104	ر ک	ore
Complete the Management Supervision Advanced Certificate (CVMGTA)	12	CON	204	45	
Electives* Complete 10 credit hours as free elective	s10 [1		001-	11.58	
Complete the General Education Requirements for the Associate in Applied Science (AAS)	) 18-21	Con	205	7	
Credits Required for the Program: *See your advisor to select appropriate electives	60-684	conli	4-199		
	(el)-le3		2 H 1994	2	

#### Area

## **Construction Management (APCONM)** Associate in Applied Science Degree

Some employers require or prefer employees to have an associate degree as a condition for employment or for advancement. You can earn an AAS in Construction Management by completing the requirements listed below.

# **Technology Division**

**Technology Education Department** 

Advisors: Les Pierce

#### Requirements

1.	Complete the residential Construction Certificate (CTRCT)	19
2.	Complete the Management Supervision Advanced Certificate (CVMGTA)	12
3.	Complete the General Education Requirements for the Associate in Applied Science (AAS) Degree	18-21
4.	Complete 11 credit hours as free electives to bring the program total to 60 credits.	11
Minimum Footnotes:	Credits Required for the Program	60

Foo

See your advisor to select appropriate electives

from P. Crider

### Construction Management (APCONM) Associate in Applied Science Degree

3/2/0/

Some employers require or prefer employees to have an associate degree as a condition for employment or for advancement. You can earn an AAS in Construction Management by completing the requirements listed below.

Technology Division

**Technology Education Department** 

Advisors: Les Pierce

#### Requirements

1.	Complete the residential Construction Certificate (CTRCT)	19
2.	Complete the Management Supervision Advanced Certificate (CVMGTA)	12
3.	Complete the General Education Requirements for the Associate in Applied Science (AAS) Degree	18-21
4.	Complete 11 credit hours as free electives to bring the program total to 60 credits.	11

### Minimum Credits Required for the Program:

60

Footnotes:

'See your advisor to select appropriate electives

# Construction Supervision (APCNSP) Associate in Applied Science Degree

This program gives indentured apprentices and journeypersons of the United Association of Plumbers and Pipefitters the opportunity to apply their work in a trade specialty toward an associate's degree in Construction Supervision. In addition to four courses in Construction Supervision, students will complete general education courses and receive non-traditional credit for their work experience in an area of specialization such as plumbing, pipefitting, HVAC, or sprinklerfitting.

Technology Division
Technology Education Department

Advisors: Roger Bertoia, Patricia Crider

#### Program Admission Requirements:

Open only to United Association of Plumbers Apprentices

## **General Education Requirements (18 Credits)**

Elective *	Complete one course from each of the six General	18-20
	Education Areas for the AAS degree	

#### Major/Area Requirements (42 45 Credits)

	Apply for Non-Traditional credit for work	30
	experience in a specialization in plumbing,	
	pipefitting, HVAC, or sprinklerfitting	
UAS 111	Introduction to Construction Supervision I	3
UAS 122	Construction Supervision II	3
UAS 211	Construction Supervision III	3
UAS 222	Project Management in the Construction Industry	3
UAS 226	Legal Aspects of the Construction Industry	3

Minimum Credits	Required for the	Program:	60_	63
Millian Oldano			-	_

Footnotes: \*Credit for general education courses may be transferred from accredited colleges or universities in the United States

### UAS 226 Legal Aspects of the Construction Industry 3 credits

Preregs: UAS 111

Coreqs: None
45 contact hours

Ì

This course will provide an in-depth study of the legal aspects of the construction industry.

Students will explore the law of the contract at large, obligations of the parties, remedies under the contract, administration of the contract, warranties, bonds, payments, and 

> subcontracting. Operational liabilities will also be covered and includes topics such as:

liabilities for defective structures, limitations of actions, claims processing and dispute resolution.

## **United Association Training**

**UAT** 

**UAT 111: Apprentice Training 3 Credits** 

Prerequsites: Admission to the Industrial Training program

Corequisites: None

45 lecture, 0 lab, 0 clinical, 0 other, 45 total contact hours

Fullfills Core Elements: None

This course will focus on the principles of learning, elements of trade teaching and the methods of teaching an applied technical skill. Students must be admitted to the Industrial Training program before registering for this course.

#### **UAT 121: Apprentice Training II 3 Credits**

Prerequsites: Admission to the Industrial Training program

Corequisites: None

45 lecture, 0 lab, 0 clinical, 0 other, 45 total contact hours

Fullfills Core Elements: None

This course will focus on developing instructional objectives, planning and presenting related information lessons and the methods of teaching a second applied technical skill. Students must be admitted to the Industrial Training program before registering for this course.

### **UAT 131: Apprentice Training III 3 Credits**

Prerequsites: Admission to the Industrial Training program

Corequisites: None

45 lecture, 0 lab, 0 clinical, 0 other, 45 total contact hours

Fullfills Core Elements: None

This course will focus on the development of written tests, an elective professional skill, and a third teaching demonstration in a technical skill area. Students must be admitted to the Industrial Training program before registering for this course.

### UAT 141: Apprentice Training IV 3 Credits

Prerequsites: Admission to the Industrial Training program

Corequisites: None

45 lecture, 0 lab, 0 clinical, 0 other, 45 total contact hours

Fullfills Core Elements: None

This course will focus on discussion and interaction techniques, an elective professional skill and the teaching methods in a fourth technical skill area. Students must be admitted to the Industrial Training program before registering for this course.

# Washtenaw Community College Program Change Request Form

Program Code: CON Program Title: Construction Management Effective Bulletin Year: 98-99								
1. Course l	Related Program Chan	ges:						
	_		Restricted		Credit	Sem		
Course	Course 1	<u> </u>	Group (if ap	plicable)		Sem		nge(s)
							Remove Add_ Change Credit	Change Title (was: )
							Shift in Sequence	
					<u> </u>		Remove Add	Change Title
							Change Credit	(was:)
			· · · · · · · · · · · · · · · · · ·				Shift in Sequence	
							Remove Add Change Credit	Change Title
							Shift in Sequence	(was:) (was:)
	·						Remove Add	Change Title
							Change Credit	(was:)
							Shift in Sequence	
							Remove Add_ Change Credit	Change Title
							Change Credit Shift in Sequence	(was:) (was:)
							Remove Add	Change Title
							Change Credit	(was:)
							Shift in Sequence	(was:)
							RemoveAdd	Change Title
							Change Credit Shift in Sequence	(was:) (was:)
	W			<del></del>			Remove Add	Change Title
							Change Credit	(was:)
							Shift in Sequence	
					·		Remove Add	Change Title
	· ·						Change Credit Shift in Sequence	(was:) (was:)
2 Total Cu	edit Hours for Progran							(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
	re Proposed Changes:	<b>1</b> ;			Δftei	· Propo	sed Changes:	
	rse Related Program (			mission crit	eria, title	e, etc.)		
Program	description, advisors(add	i P. Stegall). See at	ttached.					
4. Rational	e for Proposed Change	es:						
				*				
£ 13::-	NCA - 60/El						·	
5. Financia	l/Staffing/Equipment/S	pace implications:						
6. Has the	department consulted w	vith all affected ins	tructional dep	artments?	Yes_		No NA	1
			····					
7. Signatur	es:							
	Reviewer	Print N	ame		Sig	nature		Date
		, , ,	<u>Cı</u>					1 6 50
Program Cha	ange Initiator:	tathicia	Tegate	Tat.	riero	- 7	Egall'	6-8-18
Department Chair:			\)	_				
Department	Doparison Ciam.							
Division Dean:					Du	160	2/6	>18/71
				11			1/K	11,135
VP, Instruct	ion/Student Services:	oo ottook a some seel	a most recent	Andro liction	from the	Collabor	a Bullatin with chore	pas marked on it
If significant changes are proposed, please attach a copy of the most recent program listing from the College Bulletin with changes marked on it.  If courses are being changed as part of this proposal, course changes must be approved using the Course/Syllabus Approval Form.								
Data File 6/18/97 Curriculum File Catalog (v/1/0/98								
Curriculum Services: C/Documents/PROGRAMSProgramchange.doc								
Docum	ent Code: CONPCAF.doc	Copies: Department Chair, L	zent, Curnculum Omice, I	PRINCEROLIST SELAIC				

4/11/98 VP155

## CATALOGUE REVISIONS/CORRECTIONS (CORRECTIONS UNDERLINED)

#### CONSTRUCTION MANAGEMENT

Associate in Applied Science Degree Program: Code CON

Advisors: L. Pierce, M. Pogliano, P. Stegall, J. Teevens

This program prepares students for supervisory and/or mid-management positions in the broad construction industry. Construction managers are responsible for a wide range of duties including project management and supervision, estimating and bid preparation, office supervision, scheduling jobsite supervision, and material procurement. This position interfaces with owners, contractors, subcontractors, vendors and inspectors. This program is designed as a two-year terminal degree program. Those students seeking to transfer to a baccalaureate program should confer with a program advisor to select courses that will meet transfer requirements.

## Journeyman\* Industrial

Associate in Technical Studies Degree Program: Code JMI

This Associate Degree can be awarded to skilled tradespersons upon earning 60 hours or more including the courses listed below. All credits earned in Trade Related Instruction may be applied to <a href="mailto:the Journeyman">the Journeyman</a> Industrial Degree. Credit earned at other institutions offering trade related instruction programs Are evaluated and may be applicable.

CIS 100 INTRO TO COMPUTERS	3
ENG 111 COMPOSITION I	4
MTH 151, 160, 169, OR 179	4
PLS 150 State and Local Government	3
SCI 100 INTRO TO NATURAL SCIENCE	1
ELECTIVE** RESTRICTED HUMANITIES ELECTIVE	1-3
<b>ELECTIVES*** TRADE RELATED INSTRUCTION ELEC.</b>	44

#### TOTAL CREDIT HOURS FOR PROGRAM: 60-62

- \*The term journeyman is a term universally accepted to indicate a gender-neutral level of competence.
- \*\* Choose from list of Humanities courses that meet elements 13 and 14 on page 64.
- \*\*\* See program advisor before choosing.

# Refrigeration and Air Conditioning

Associates in Technical Studies Degree Program: Code RAC

- ... The program is guided by an advisory committee consisting of journeymen\* and contractors and is offered...
- \* The term journeyman is a term universally accepted to indicate a gender-neutral level of competence

### TECHNICAL EDUCATION/CONSTRUCTION INSTITUTE

WCC representatives are available to assist int the development Of apprenticeship and other employee training programs. Trade Related Instruction can be provide for most apprenticeable Classifications with a College representative working directly With the employer and employee to meet the requirements. Assistance is also provided, when requested, to coordinate Activities with registering agencies such as the <u>US Department Of Labor-Bureau of Apprenticeship and Training(BAT)</u>. The Trade Related Instruction program is approved by both the Bureau Of Apprenticeship and Training and the Michigan State Department Of Education.

### Current apprenticeship programs include:

**Building Maintenance** 

#### ... Courses are also available for:

Management Personnel
Supervisors
Journeymen\*
Tradespersons (without Certificates)
Trainees and Journeyman\* Upgraders
Pre-Apprentices
Other employees seeking advancement

#### PROGRAMS OF STUDY

#### ASSOCIATE IN TECHNICAL STUDIES

**Architectural Drafting** 

Journeyman\* Industrial

\* The term journeyman is a term universally accepted to indicate a gender-neutral level of competence

## Personnel

# **Faculty and Professional Staff**