

Fanshawe College

## FIRST: Fanshawe Innovation, Research, Scholarship, Teaching

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Documentation (Approvals etc...)

Manufacturing Engineering Technology

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2018

### MEY1 Curriculum Modification for 2018-19

Fanshawe College

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# CURRICULUM MODIFICATION REQUEST FORM

*COURSE OR PROGRAM CURRICULUM "RATIONALE FOR CHANGE"*

**RECEIVED**

JAN 05 2018

Program Requiring Changes

*Office of the Registrar*

Program Title: Manufacturing Engineering Technology - COOP		
Program Number: MEY1	Date Submitted: Click here to enter a date.	
Dean responsible for program: Vertha Coligan	Chair: Dave Machacek	
Credential Provided: <input type="checkbox"/> Declaration of Academic Achievement <input type="checkbox"/> Local Certificate <input type="checkbox"/> Ontario College Certificate <input type="checkbox"/> Diploma <input checked="" type="checkbox"/> Advanced Diploma <input type="checkbox"/> Grad Certificate <input type="checkbox"/> Degree <input type="checkbox"/> Apprenticeship		
Program Intakes: <input checked="" type="checkbox"/> F <input type="checkbox"/> W <input type="checkbox"/> S                    Other:	Catalogue Year(s) Impacted: 2018/19	
Residency Requirement: <input checked="" type="checkbox"/> Met or <input type="checkbox"/> Not Met	Date of Last Program Review: 6/1/2015	
<i>I have read the reasons for the change and...</i>		<i>Signature and date</i>
Dean of Faculty (Lead program):	<input checked="" type="checkbox"/> Approve <input type="checkbox"/> Do Not Approve	<i>Vertha Coligan Jan 5/18</i>
Dean of Faculty (Affiliate program-impacted by change):	<input type="checkbox"/> Approve <input type="checkbox"/> Do Not Approve	
Dean of Faculty (Affiliate program-impacted by change):	<input type="checkbox"/> Approve <input type="checkbox"/> Do Not Approve	
Senior Vice President Academic (required for major changes and late DAs):	<input type="checkbox"/> Approve <input type="checkbox"/> Do Not Approve	
Director, Centre for Academic Excellence:	<input checked="" type="checkbox"/> Supports <input type="checkbox"/> Does Not Support	<i>Julie Geddes Jan 12/18</i>
Office of the Registrar:	<input type="checkbox"/> Supports <input type="checkbox"/> Does Not Support	
Notes:		

*Please answer each of the questions below, if applicable. Missing or incomplete information may delay review of the proposed changes.*

**1.0 Describe proposed change(s). Complete Appendix A (if necessary) and amend SDAR (Refer to Appendix C).**

MECH-3039 moves to level 5 and METH-3024 moves to level 6

**2.0 Reason/Rationale for Changes**

2.1 The reason for the change is based on:

- A recent program review
- Program Advisory Committee feedback
- Student feedback
- KPI results
- Accreditation or other regulatory requirements
- Shared curriculum
- Trends in the field/industry
- Other (please describe):

2.2 Does the change support the College's Strategic Framework (mission, vision, values)?

- Yes
- No (If no, please explain)

2.3 What strategic goal(s) does the proposed change support?

- Goal 1 - Enhance innovative practices for exceptional student learning
- Goal 2 - Manage enrolment growth
- Goal 3 - Optimize use of resources
- Goal 4 - Build sustainable sources of alternative revenue

**3.0 Students**

3.1 Will the change affect the cost of the program for students?

- Yes
- No

3.2 If yes, there will be an additional cost for:

- Materials (Include details):
- Equipment (Include details):
- Other (Please describe):

#### 4.0 Program Learning Outcomes

4.1 Will the proposed change meet the Program Vocational Learning Outcomes? (Complete Appendix B and mark the changes in the mapping [e.g. red font])

Yes

No

4.2 Are there any implications related to progression because of pre-requisite courses (and/or co-requisite courses)?

No

Yes (If yes, please explain)

#### 5.0 Relationships with Other Programs

5.1 Are any of the courses impacted by the change provided by another School (e.g., SLLS, LKSB) and/or delivered at another campus?

No

Yes

5.2 What Schools/Campuses will be impacted by the proposed change?

- Lawrence Kinlin School of Business
- School of Information Technology
- School of Tourism, Hospitality and Culinary Arts
- School of Community Studies
- School of Health Sciences
- School of Nursing
- School of Public Safety
- School of Contemporary Media
- School of Design
- School of Language and Liberal Studies
- Donald J. Smith School of Building Technology
- Norton Wolf School of Aviation Technology
- School of Applied Sciences and Technology
- School of Transportation Technology and Apprenticeship
- Continuing Education
- Simcoe/Norfolk Regional Campus
- St Thomas/Elgin Regional Campus
- Woodstock/Oxford Regional Campus
- Huron/Bruce Regional Sites

5.3 Will the change affect pathway agreements (e.g., bridging, articulations, laddering, advanced standing) with other Fanshawe program(s) and/or other institution(s)?  
(Refer to the pathway agreements listed here: <http://transferagreements.fanshawec.ca/>)

- No
- Yes (If yes, indicate when you will notify the other Fanshawe program(s) and/or other institution(s) and the Pathways Coordinator in the Centre for Academic Excellence of the change)

5.4 If this program is a Co-Operative Education program, will the proposed change impact Co-op?

- No
- Yes (If yes, consult with the Co-op office prior to submission)

**6.0 Resource Implications of Proposed Changes**

6.1 Will the proposed change have staffing implications?

- No
- Yes (If yes, please explain)

6.2 Will the proposed change impact any of the Enabling areas?

- No
- Yes (If yes, please explain)

6.3 Will the proposed change affect space and/or technology requirements?

- No
- Yes (If yes, please explain)

**7.0 General College Requirements**

7.1 Are changes consistent with Colleges policies?

- Yes
- No (If no, please explain)

7.2 Will the program meet the General Education requirements (Policy 2-B-02) as listed below?

- No
- Yes

<p><b>Local Certificate, Ontario College Certificate and Graduate Certificate</b> - none required)</p>	<p><b>Diploma</b> - 3 required (minimum of 1 must be an elective)</p>	<p><b>Advanced Diploma</b> - 4 required (minimum of 2 must be electives)</p>
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7.3 Will the program have 25% distinct curriculum to meet the Residency Requirement of 25% credit units? Consider all pathway agreements (e.g., bridging, internal articulations, laddering, advanced standing) with other Fanshawe programs and/or other institutions.

- No  
 Yes

**Note:** In accordance with POLICY NUMBER: 2-B-17 Graduation from Approved College Programs

...to be eligible for any College Credential a student must be enrolled and complete at least 25% of that program's credit units at Fanshawe College, unless stipulated differently by other approving bodies such as the Postsecondary Education Quality Assessment Board (PEQAB).

7.4 Indicate:

- i) Total program hours before proposed change: 2061  
 ii) Total program hours after proposed change: 2061  
 iii) Level(s) in which the proposed change(s) occurs: level 1 and level 2

7.4.1 Are the total program hours consistent with the requirements as listed below?

- Yes  
 No (If no, please explain)

<b>Local Certificate</b> - 300 hours	<b>Ontario College Certificate</b> - 600 hours
<b>Diploma</b> - 1200 to 1400 hours	<b>Advanced Diploma</b> - 1800 to 2100 hours
<b>Graduate Certificate</b> - 600 hours	

APPENDIX A: PROPOSED CURRICULUM MODIFICATION

Course Code	Existing DA Courses	Total Hours	Total Credits		Course Code	Proposed DA Courses	Total Hours	Total Credits
<b>Level 1</b>								
<b>TOTAL</b>		345	19.5		<b>TOTAL</b>		345	19.5
<b>Level 2</b>								
<b>TOTAL</b>		351	20.5		<b>TOTAL</b>		351	20.5
<b>Level 3</b>								
<b>TOTAL</b>		345	18.5		<b>TOTAL</b>		345	18.5
<b>Level 4</b>								
<b>TOTAL</b>		345	16		<b>TOTAL</b>		345	16
<b>Level 5</b>								
MGMT-3072	Production Planning & Inventory Control	45	3		MGMT-3072	Production Planning & Inventory Control	45	3
MANF-5003	Automation Programming & Control-Adv.	45	2		MANF-5003	Automation Programming & Control-Adv.	45	2
MGMT-3075	Capstone 1 Manufacturing Technology	30	2		MGMT-3075	Capstone 1 Manufacturing Technology	30	2
COMP-3100	Computer Applications	30	1.5		COMP-3100	Computer Applications	30	1.5
METH-5019	Quality Assurance 3	60	4		METH-5019	Quality Assurance 3	60	4
METH-3024	Facilities Planning	60	4	Switch courses between level 5 & level 6	MECH-3039	Statics & Strengths of Mterials	60	4
<b>TOTAL</b>		345	16.5		<b>TOTAL</b>		345	16.5
<b>Level 6</b>								
GEN ED		45	3		GEN ED		45	3
MGMT-5077	Capstone 2 Manufacturing Technology	45	3		MGMT-5077	Capstone 2 Manufacturing Technology	45	3
MECH-3039	Statics & Strengths of Materials	60	4	Switch courses between level 5 & level 6	METH-3024	Facilities Planning	60	4
MGMT-3073	Operations Management	60	4		MGMT-3073	Operations Management	60	4
MECH-3018	Quality Systems	45	3		MECH-3018	Quality Systems	45	3
ENGR-5013	Applied Engineering Principles	75	4		ENGR-5013	Applied Engineering Principles	75	4
<b>TOTAL</b>		330	21		<b>TOTAL</b>		330	21

PROGRAM TOTAL 2061 112

PROGRAM TOTAL 2061 112

Degree Audit Report

Catalog: 2018/2019

Program: MEY1

Name: Manufacturing Engineering Technology (Co-op)

Department: MAN - Applied Science and Technology

Academic Level: PS

CCD: 9 - 6AcadSem/1800-2100hrs

Credential: Ontario College Advanced Dipl

Grade Scheme: LG2

Major: MEY1 - Manufacturing Eng Technology

Div: MAN - Manufacturing Sciences Division

Co-Op Indicator: Mandatory Co-op

Academic Program Requirement

Total Credits: 119.00

Residency Reqmt: 30.00

GPA Requirement: 2.00

Residency Reqmt GPA: 2.00

Minimum Grade: D

Academic Requirement: MEY1.18 Manufacturing Engineering Technology (co-Op)

Major: MEY1

Grade Scheme: LG2

Minimum GPA: 2.00

Minimum Grade:

Subrequirement: Level 1

Take all of the following Mandatory Courses:

		Total Hours	Total Credits	GE
WRIT-1039	Reason & Writing 1-Technology	45.00	3.00	
LAWS-1038	Law, Ethics & Occupational H&S	45.00	3.00	**
ENGR-1024	Engineering Graphics	75.00	3.50	
MATH-1185	Math 1	90.00	6.00	
MACH-1154	Machining 1	45.00	2.00	
WELD-1054	Welding	45.00	2.00	

Subrequirement: Level 2

Take all of the following Mandatory Courses:

		Total Hours	Total Credits	GE
PSYC-1027	Human Relations	45.00	3.00	**
MACH-3056	Machining 2/Intro to CNC Processes	75.00	3.50	
MATH-1186	Engineering Fundamentals	60.00	4.00	
MATS-1026	Materials Engineering	45.00	2.50	
ENGR-1025	Engineering Design 1	45.00	2.50	
METH-1044	Quality Assurance 1	75.00	4.00	
COOP-1020	Co-operative Education Employment Prep	6.00	1.00	

Subrequirement: Level 3

Take all of the following Mandatory Courses:

		Total Hours	Total Credits	GE
MGMT-1007	Project Management	45.00	3.00	**
MECH-1104	Robotics & Automation Fundamentals	45.00	2.50	
ENGR-3015	Engineering Design 2	60.00	3.50	
METH-3023	Quality Assurance 2	60.00	3.00	
ELEC-1127	Electrical Devices & Instrumentation	60.00	3.00	
MACH-3057	CNC Applications & Intro to CAD/CAM	75.00	3.50	



Degree Audit Report

**Subrequirement: Level 4**

Gen Ed - Take a 3 credit General Education elective course Take all of the following Mandatory Courses:

		Total Hours	Total Credits	GE
CADD-3032	CAD/CAM Apps & Automated Processes	75.00	3.50	
ENGR-5012	Engineering Design 3	45.00	2.50	
MECH-3038	Fluid Power Machine Control	60.00	3.00	
MGMT-3074	Capstone Project Technician	30.00	2.00	
COMM-3069	Technical Communication for Technicians	45.00	3.00	
WELD-5007	Manufacturing Processes & Welding-Adv	45.00	2.00	

**Subrequirement: Level 5**

Take all of the following Mandatory Courses:

		Total Hours	Total Credits	GE
MGMT-3072	Production Planning & Inventory Control	45.00	3.00	
MANF-5003	Automation Programming & Control-Adv	45.00	2.00	
MGMT-3075	Capstone 1 Manufacturing Technology	30.00	2.00	
COMP-3100	Computer Applications	30.00	1.50	
METH-5019	Quality Assurance 3	60.00	4.00	
<del>METH-3024</del>	<del>Facilities Planning</del>	<del>60.00</del>	<del>4.00</del>	Remove
MANF-5004	Materials & Processes- Adv	75.00	4.00	
MECH-3039	Statics & Strengths of Materials	60.00	4.00	Add

**Subrequirement: Level 6**

Gen Ed - Take a 3 credit General Education elective course Take all of the following Mandatory Courses:

		Total Hours	Total Credits	GE
MGMT-5077	Capstone 2 Manufacturing Technology	45.00	3.00	
MECH-3039	Statics & Strengths of Materials	60.00	4.00	Remove
MGMT-3073	Operations Management	60.00	4.00	
MECH-3018	Quality Systems	45.00	3.00	
ENGR-5013	Applied Engineering Principles	75.00	4.00	
METH-3024	Facilities Planning	60.00	4.00	Add

**Subrequirement: Gen Ed - Electives**

Take 6 General Education Credits - Normally taken in Levels 4 and 6

**Subrequirement: Program Residency**

Students must complete a minimum of 30 credits in this program at Fanshawe College to meet the Program Residency requirement and graduate from this program

[Signature]  
Approved By Chair/Manager:

[Signature]  
Approved by Dean:

Jan 5 / 2017  
Department and Date:

Jan 5 / 18  
Date:

General Education Approved By (as appropriate):

Date:

[Signature]  
Jan 12 / 18