

Fanshawe College

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

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Documentation (Approvals etc...)

Electrical Engineering Technology (co-op / non  
co-op)

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2018

### ELY7 Curriculum Modification for 2018-19

Fanshawe College

Follow this and additional works at: [https://first.fanshawec.ca/cae\\_appliedscienceandtech\\_electricalengtechnology\\_documentation](https://first.fanshawec.ca/cae_appliedscienceandtech_electricalengtechnology_documentation)

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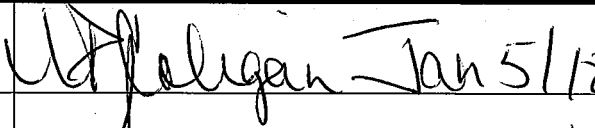
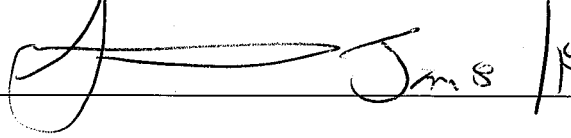
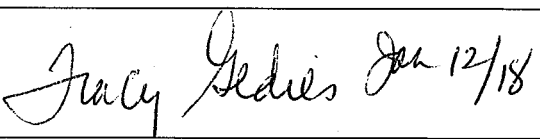
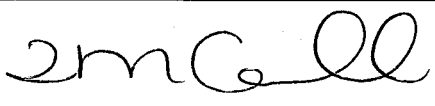
JAN 10 2018

# CURRICULUM MODIFICATION REQUEST FORM

COURSE OR PROGRAM CURRICULUM "RATIONALE FOR CHANGE"

Office of the Registrar

## Program Requiring Changes

Program Title: Electrical Engineering Technology	
Program Number: ELY7	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: Click here to enter a date.
<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  Jan 5/18
Dean of Faculty (Affiliate program-impacted by change):	<input checked="" type="checkbox"/> Approve <input type="checkbox"/> Do Not Approve  Jan 8/18
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  Jan 12/18
Office of the Registrar:	<input checked="" 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).**

CADD-1072 move to level 2 and LAWS-1038 to level 1

**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

<b>Local Certificate, Ontario College Certificate and Graduate Certificate</b> - none required)	<b>Diploma</b> - 3 required (minimum of 1 must be an elective)	<b>Advanced Diploma</b> - 4 required (minimum of 2 must be electives)
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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: 2086  
 ii) Total program hours after proposed change: 2086  
 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)

Local Certificate - 300 hours	Ontario College Certificate - 600 hours
Diploma - 1200 to 1400 hours	Advanced Diploma - 1800 to 2100 hours
Graduate Certificate - 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>								
MATH-1188	Math 1	60	4		MATH-1188	MATH 1	60	4
ELEC-1130	DC Electricity	90	5		ELEC-1130	DC Electricity	90	5
COMP-1471	Programming & Analytical Techniques	45	3		COMP-1471	Programming & Analytical Techniques	45	3
CADD-1072	Computer Aided Design	45	3	switch courses between level 1 & level 2	LAWS-1038	Law, Ethics & Occupational H&S	45	3
WRIT-1039	Reason & Writing 1 - Technology	45	3		WRIT-1039	Reason & Writing 1 - Technology	45	3
SKLS-1021	Applied Project	45	1.5		SKLS-1021	Applied Project	45	1.5
<b>TOTAL</b>		<b>330</b>	<b>19.5</b>		<b>TOTAL</b>		<b>330</b>	<b>19.5</b>
<b>Level 2</b>								
MATH-1189	Calculus 1	60	4		MATH-1189	Calculus 1	60	4
ELEC-3068	AC Electricity	75	4		ELEC-3068	AC Electricity	75	4
DIGL-1024	Digital 1-Fundamentals	75	4		DIGL-1024	Digital 1-Fundamentals	75	4
ELNC-1107	Electronics Devices	90	5		ELNC-1107	Electronic Devices	90	5
LAWS-1038	Law, Ethics & Occupational H&S	45	3	switch courses between level 1 & level 2	CADD-1072	Computer Aided Design	45	3
<b>TOTAL</b>		<b>345</b>	<b>20</b>		<b>TOTAL</b>		<b>345</b>	<b>20</b>
<b>Level 3</b>								
<b>TOTAL</b>		<b>196</b>	<b>11</b>		<b>TOTAL</b>		<b>196</b>	<b>11</b>
<b>Level 4</b>								
<b>TOTAL</b>		<b>330</b>	<b>19</b>		<b>TOTAL</b>		<b>330</b>	<b>19</b>
<b>Level 5</b>								
<b>TOTAL</b>		<b>360</b>	<b>21</b>		<b>TOTAL</b>		<b>360</b>	<b>21</b>
<b>Level 6</b>								
<b>TOTAL</b>		<b>165</b>	<b>10</b>		<b>TOTAL</b>		<b>165</b>	<b>10</b>
<b>Level 7</b>								
<b>TOTAL</b>		<b>360</b>	<b>21</b>		<b>TOTAL</b>		<b>360</b>	<b>21</b>
<b>PROGRAM TOTAL</b>		<b>2086</b>	<b>121.5</b>		<b>PROGRAM TOTAL</b>		<b>2086</b>	<b>121.5</b>

Degree Audit Report

Catalog: 2018/2019

**Program:** ELY7 **Name:** Electrical Engineering Technology  
**Department:** MAN - Applied Science and Technology  
**Academic Level:** PS  
**CCD:** 9 - 6AcadSem/1800-2100hrs  
**Credential:** Ontario College Advanced Dipl  
**Grade Scheme:** LG2  
**Major:** ELY7 - Electrical Eng Technology **Div:** MAN - Manufacturing Sciences Division  
**Co-Op Indicator:** N/A

Academic Program Requirement

**Total Credits:** 121.50 **Residency Reqmt:** 31.00  
**GPA Requirement:** 2.00 **Residency Reqmt GPA:** 2.00  
**Minimum Grade:** D

Academic Requirement: ELY7.18 Electrical Engineering Technology

**Major:** ELY7  
**Grade Scheme:** LG2  
**Minimum GPA:** 2.00  
**Minimum Grade:**

Subrequirement: Level 1

Take all of the following Mandatory Courses:

		Total Hours	Total Credits	GE
MATH-1188	Math 1	60.00	4.00	
ELEC-1130	DC Electricity	90.00	5.00	
COMP-1471	Programming & Analytical Techniques	45.00	3.00	
GADD-1072	Computer-Aided-Design	45.00	3.00	Remove
WRIT-1039	Reason & Writing 1-Technology	45.00	3.00	
SKLS-1021	Applied Project	45.00	1.50	
LAWS-1038	Laws, Ethics & Occupational H&S	45.00	3.00	Add

Subrequirement: Level 2

Take all of the following Mandatory Courses:

		Total Hours	Total Credits	GE
MATH-1189	Calculus 1	60.00	4.00	
ELEC-3068	AC Electricity	75.00	4.00	
DIGL-1024	Digital 1-Fundamentals	75.00	4.00	
ELNC-1107	Electronic Devices	90.00	5.00	
LAWS-1038	Law, Ethics & Occupational H&S	45.00	3.00	** Remove
LADD-1072	Computer Aided Design	45.00	3.00	Add

Subrequirement: Level 3

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

		Total Hours	Total Credits	GE
CNTL-1015	Automation	60.00	3.00	
ELEC-1133	Applied Electrical Code	38.00	1.50	
ELEC-1131	Electrical Machines 1	53.00	3.50	

Subrequirement: Level 4

Take all of the following Mandatory Courses:



## Degree Audit Report

		Total Hours	Total Credits	GE
MATH-3074	Calculus 2	60.00	4.00	
TELE-1022	Telecommunications	75.00	4.00	
ELEC-3069	Electrical Machines 2	75.00	4.00	
DIGL-3024	Digital 2-Digital Systems	75.00	4.00	
MGMT-1007	Project Management	45.00	3.00	**

**Subrequirement: Level 5**

Take all of the following Mandatory Courses:

		Total Hours	Total Credits	GE
MATH-5020	Calculus 3	60.00	4.00	
ELEC-1132	Electrical Systems Design E-Code	90.00	5.00	
CNTL-5015	PLC Applications-Adv	75.00	4.00	
ELNC-3035	Power Electronics	75.00	4.00	
ELEC-3070	Electrical Power Systems	60.00	4.00	

**Subrequirement: Level 6**Gen Ed - Take a 3 credit General Education elective course  
Take all of the following Mandatory Courses:  
Group 1

		Total Hours	Total Credits	GE
TELE-3013	Structured Cabling	30.00	1.50	
MGMT-3076	Capstone 1 Electrical Technology	15.00	1.00	
INST-1009	Instrumentation	30.00	1.50	

## Group 2

Take CNTL-3017, ELEC-3071 or CNTL-3018

		Total Hours	Total Credits	GE
CNTL-3017	Industrial Robots	45.00	3.00	
ELEC-3071	Renewable Energy	45.00	3.00	
CNTL-3018	Circuit Design & Fabrications	45.00	3.00	

**Subrequirement: Level 7**Take all of the following Mandatory Courses:  
Group 1

		Total Hours	Total Credits	GE
CNTL-1016	Process Control-Intro	90.00	5.00	
METH-3025	Quality Assurance	45.00	3.00	
MGMT-5078	Capstone 2 Electrical Technology	45.00	3.00	
COMM-3070	Technical Comm for Technologists	30.00	2.00	

## Group 2

Take TELE-5008 or CNTL-3019

		Total Hours	Total Credits	GE
TELE-5008	Telecommunications-Adv	75.00	4.00	
CNTL-3019	Integrated Automation Systems	75.00	4.00	

## Group 3

Take COMP-3099 or ELEC-3072

Total Hours	Total Credits	GE
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Degree Audit Report

COMP-3099	Embedded Systems	75.00	4.00
ELEC-3072	Variable Frequency Drive	75.00	4.00

**Subrequirement:** Gen Ed - Electives

Take 6 General Education Credits - Normally taken in Levels 3 and 6

**Subrequirement:** Program Residency

Students must complete a minimum of 31 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:

\_\_\_\_\_  
General Education Approved By(as appropriate):

AST - SAS S  
Department and Date:  
Jan 5/18  
Date:

\_\_\_\_\_  
Date:

TG  
Jan 12/18