

Fanshawe College

FIRST: Fanshawe Innovation, Research, Scholarship, Teaching

Documentation (Approvals etc...)

Aviation Technician - Avionics Maintenance

2017

AVM3, AVM4 Curriculum Modification for 2018-19

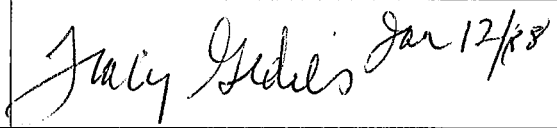
Fanshawe College

Follow this and additional works at: https://first.fanshawec.ca/cae_aviationtech_aviationtechavionicsmaintenance_documentation

CURRICULUM MODIFICATION REQUEST FORM

COURSE OR PROGRAM CURRICULUM "RATIONALE FOR CHANGE"

Program Requiring Changes

Program Title: Avionics Maintenance		
Program Number: AVM3 and AVM4	Date Submitted: 12/21/2017	
Dean responsible for program: Vertha Coligan	Chair: Kelly Moffatt	
Credential Provided: <input type="checkbox"/> Declaration of Academic Achievement <input type="checkbox"/> Local Certificate <input type="checkbox"/> Ontario College Certificate <input checked="" type="checkbox"/> Diploma <input 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: 9/1/2017	
<i>I have read the reasons for the change and...</i>		<i>Signature and date</i>
Dean of Faculty (Lead program):	<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	
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	
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).

Re-ordering courses to align with advanced diploma deliveries

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

Local Certificate, Ontario College Certificate and Graduate Certificate - none required)	Diploma - 3 required (minimum of 1 must be an elective)	Advanced Diploma - 4 required (minimum of 2 must be electives)
---	--	---

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: 1800
 ii) Total program hours after proposed change: 1800
 iii) Level(s) in which the proposed change(s) occurs: 2, 3, 4

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

- Yes
 No (If no, please explain) Transport Canada requirements

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	Describe proposed changes	Course Code	Proposed DA Courses	Total Hours	Total Credits
Level 1								
AVIA-1002	Avionics & WHMIS-Intro	30	2.5		AVIA-1002	Avionics & WHMIS-Intro	30	2.5
AVIA-1057	Avionics Electrical Fundamentals	195	10.5		AVIA-1057	Avionics Electrical Fundamentals	195	10.5
AVIA-1004	Avionics Electronic Fundamentals	150	7.5		AVIA-1004	Avionics Electronic Fundamentals	150	7.5
MATH-1180	Mathematics for Avionics Maintenance	30	2		MATH-1180	Mathematics for Avionics Maintenance	30	2
PHYS-1042	Physics for Avionics Maintenance	45	3		PHYS-1042	Physics for Avionics Maintenance	45	3
TOTAL		450	25.5		TOTAL		450	25.5
Level 2								
AVIA-1058	Avionics Digital Fundamentals	120	6	moving to level 3				
AVIA-1006	Avionics Radio Theory	120	5.5	moving to level 3				
AVIA-1059	Aviation Maintenance Practices	90	4.5		AVIA-1059	Aviation Maintenance Practices	90	4.5
AVIA-1008	Aircraft Aerodynamics	60	3		AVIA-1008	Aircraft Aerodynamics	60	3
AVIA-1009	Aircraft Structures	60	3		AVIA-1009	Aircraft Structures	60	3
					AVIA-1010	Aircraft Materials & Hardware	60	2.5
					AVIA-1012	Aircraft Propulsion	30	1.5
					AVIA-1013	Aircraft Engine Instruments	60	3
					AVIA-1014	Aircraft Fuels Systems	30	1.5
					AVIA-1061	Hydraulic/Pneumatic/Landing Gear Systems	30	1.5
					AVIA-1060	Aircraft Environmental & Safety Systems	30	1.5
TOTAL		450	22		TOTAL		450	22
Level 3								
AVIA-1010	Aircraft Materials & Hardware	60	2.5	moving to level 2				
AVIA-1011	Aircraft Electrical Power	90	4.5		AVIA-1011	Aircraft Electrical Power	90	4.5
AVIA-1012	Aircraft Propulsion	30	1.5	moving to level 2				
AVIA-1013	Aircraft Engine Instruments	60	3	moving to level 2				
AVIA-1014	Aircraft Fuels Systems	30	1.5	moving to level 2				
AVIA-1061	Hydraulic/Pneumatic/Landing Gear Systems	30	1.5	moving to level 2				
AVIA-1060	Aircraft Environmental & Safety Systems	30	1.5	moving to level 2				

APPENDIX A: PROPOSED CURRICULUM MODIFICATION

AVIA-1017	Aircraft Flight Instruments	90	4		AVIA-1017	Aircraft Flight Instruments	90	4
AVIA-1018	Aircraft Internal Communications	30	1.5		AVIA-1018	Aircraft Internal Communications	30	1.5
					AVIA-1058	Avionics Digital Fundamentals	120	6
					AVIA-1006	Avionics Radio Theory	120	5.5
TOTAL		450	21.5		TOTAL		450	21.5
Level 4								
AVIA-1062	Aircraft Wireless Communications Systems	60	3		AVIA-1062	Aircraft Wireless Communications Systems	60	3
AVIA-1020	Aircraft Radio Navigation Systems	90	4.5		AVIA-1020	Aircraft Radio Navigation Systems	90	4.5
AVIA-1063	Aircraft Automatic Flight Control System	60	3		AVIA-1063	Aircraft Automatic Flight Control System	60	3
AVIA-1022	Avionics Installations & Standard Prac.	120	4.5		AVIA-1022	Avionics Installations & Standard Prac.	120	4.5
AVIA-1023	Flight Line Maintenance Practices	120	4.5		AVIA-1023	Flight Line Maintenance Practices	120	4.5
TOTAL		450	19.5		TOTAL		450	19.5
Level 5								
TOTAL		0	0		TOTAL		0	0
Level 6								
TOTAL		0	0		TOTAL		0	0

PROGRAM TOTAL 1800 67

PROGRAM TOTAL 1800 67

COMMS - Essential Employability Skills by Program, Level and Course

Program Name: Aviation Technician - Avionics Maintenance

Program Code: AVM3 (AVM3-AVI-20178)

Academic Year: 2017-2018

Date Generated: 10/5/2017 10:06:01 AM

Level 1

Course Number	Course Name	1	2	3	4	5	6	7	8	9	10
AVIA-1002	Avionics & WHMIS-Intro				X	X	X	X	X	X	X
AVIA-1004	Avionics Electronic Fund.			X	X	X	X	X	X	X	X
AVIA-1057	Avionics Electric Fundamentals	X	X	X	X	X	X	X	X	X	X
MATH-1180	Math for Avionics Maintenance			X	X	X	X	X	X	X	X
PHYS-1042	Physics for Avionics Maint		X	X	X	X	X	X	X	X	X
COOP-1020	Co-op Education Employment Prep.	X	X				X	X	X		X

Level 2

Course Number	Course Name	1	2	3	4	5	6	7	8	9	10
AVIA-1010	Aircraft Materials & Hardware	X	X	X	X	X	X	X	X	X	X
AVIA-1008	Aircraft Aerodynamics				X	X	X	X	X	X	X
AVIA-1009	Aircraft Structures			X	X	X	X	X	X	X	X
AVIA-1059	Aviation Maintenance Practices			X	X	X	X	X	X	X	X
AVIA-1013	Aircraft Engine Instruments	X	X	X	X	X	X	X	X	X	X
AVIA-1014	Aircraft Fuels Systems	X	X	X	X	X	X	X	X	X	X
AVIA-1012	Aircraft Propulsion	X	X		X	X	X	X	X	X	X
AVIA-1060	Aircraft Environ/Safety System	X	X	X	X	X	X	X	X	X	X
AVIA-1061	Hydraulic/Pneumatic/Land Gear	X	X	X	X	X	X	X	X	X	X

Level 3

Course Number	Course Name	1	2	3	4	5	6	7	8	9	10
AVIA-1011	Aircraft Electrical Power	X	X	X	X	X	X	X	X	X	X
AVIA-1058	Avionics Digital Fundamentals			X	X	X	X	X	X	X	X
AVIA-1006	Avionics Radio Theory			X	X	X	X	X	X	X	X
AVIA-1017	Aircraft Flight Instruments	X	X	X	X	X	X	X	X	X	X
AVIA-1018	Internal Communications	X	X	X	X	X	X	X	X	X	X

Level 4

Course Number	Course Name	1	2	3	4	5	6	7	8	9	10
AVIA-1020	Aircraft Navigation Systems	X	X		X	X	X	X	X	X	X
AVIA-1022	Installation Practices	X	X	X	X	X	X	X			X
AVIA-1023	Flight Line Maint. Practices			X	X	X	X	X			X
AVIA-1062	Aircraft Wireless Systems		X	X	X	X	X	X	X	X	X
AVIA-1063	Automatic Flight Controls	X	X	X	X	X	X	X	X	X	X

Essential Employability Skills

1	Communicate clearly, concisely and correctly in the written, spoken and visual form that fulfills the purpose and the needs of the audience.
2	Respond to written, spoken or visual messages in a manner that ensures effective communication.
3	Execute mathematical operations accurately.
4	Apply a systematic approach to solve problems.
5	Use a variety of thinking skills to anticipate and solve problems.
6	Locate, select, organize and document information using appropriate technology and information systems.
7	Analyze, evaluate and apply relevant information from a variety of sources.
8	Show respect for diverse opinions, values, belief systems and contributions of others.
9	Interact with others in groups or teams in ways that contribute to effective working relationships and the achievement of goals.
10	Manage the use of time and other resources to complete projects.

Degree Audit Report

Catalog: 2017/2018

Program: AVM4
 Department: AVI - Norton Wolf Sch of Aviation
 Academic Level: PS
 CCD: 8 - 4AcadSem/1200-1400hrs
 Credential: Ontario College Diploma

Name: Aviation Technician - Avionics Maintenance (Co-op)

Grade Scheme: LG2
 Major: AVM1 - Aviation Tech'n-Avionics Mtnce
 Co-Op Indicator: Mandatory Co-op

Div: AVI - School of Aviation Technology

Academic Program Requirement

Total Credits: 89.50
 GPA Requirement: 2.00
 Minimum Grade: D
 Residency Reqmt: 23.00
 Residency Reqmt GPA: 2.00

Academic Requirement: AVM4.17 Aviation Technician - Avionics Maintenance

Major: AVM4
 Grade Scheme: LG2
 Minimum GPA: 2.00
 Minimum Grade:

Subrequirement: Level 1

Take all of the following Mandatory Courses:

		Total Hours	Total Credits	GE
AVIA-1002	Avionics & WHMIS-Intro	30.00	2.50	
AVIA-1057	Avionics Electrical Fundamentals	195.00	10.50	
AVIA-1004	Avionics Electronic Fundamentals	150.00	7.50	
MATH-1180	Mathematics for Avionics Maintenance	30.00	2.00	
PHYS-1042	Physics for Avionics Maintenance	45.00	3.00	
COOP-1020	Co-operative Education Employment Prep	6.00	1.00	

No Change

Subrequirement: Level 2

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

		Total Hours	Total Credits	GE
AVIA-1058	Avionics-Digital-Fundamentals	120.00	6.00	X
AVIA-1006	Avionics-Radio-Theory	120.00	5.50	X
AVIA-1059	Aviation Maintenance Practices	90.00	4.50	✓
AVIA-1008	Aircraft Aerodynamics	60.00	3.00	✓
AVIA-1009	Aircraft Structures	60.00	3.00	✓

AVIA-1061 (30hrs)
 AVIA-1010 (60hrs)
 AVIA-1012 (30hrs)
 AVIA-1013 (60hrs)
 AVIA-1014 (30hrs)
 AVIA-1060 (30 hrs)

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
AVIA-1010	Aircraft Materials & Hardware	60.00	2.50	
AVIA-1011	Aircraft Electrical Power	90.00	4.50	
AVIA-1012	Aircraft Propulsion	30.00	1.50	
AVIA-1013	Aircraft Engine Instruments	60.00	3.00	
AVIA-1014	Aircraft Fuels Systems	30.00	1.50	
AVIA-1061	Hydraulic/Pneumatic/Landing Gear Systems	30.00	1.50	
AVIA-1060	Aircraft Environmental & Safety Systems	30.00	1.50	

AVIA-1058 (120hrs)
 AVIA-1006 (120hrs)

remove <

Degree Audit Report

AVIA-1017	Aircraft Flight Instruments	90.00	4.00
AVIA-1018	Aircraft Internal Communications	30.00	1.50

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
AVIA-1062	Aircraft Wireless Communications Systems	60.00	3.00	
AVIA-1020	Aircraft Radio Navigation Systems	90.00	4.50	
AVIA-1063	Aircraft Automatic Flight Control System	60.00	3.00	
AVIA-1022	Avionics Installations & Standard Prac.	120.00	4.50	
AVIA-1023	Flight Line Maintenance Practices	120.00	4.50	

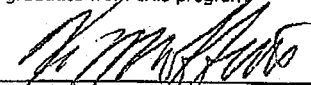
No changes

Subrequirement: Gen Ed - Electives

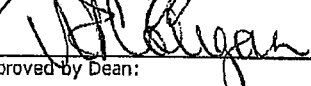
Take 9 General Education Credits - Normally taken in Levels 2, 3 and 4

Subrequirement: Program Residency

Students Must Complete a Minimum of 23 credits in this program at Fanshawe College to meet the Program Residency requirement and graduate from this program.


 Approved By Chair/Manager:

AVI 3/1/2018
 Department and Date:


 Approved by Dean:

Jan 5/18
 Date:

General Education Approved By(as appropriate):

Date:

TJ
 Jan 2/18

Degree Audit Report

Catalog: 2017/2018

Program: AVM3
 Department: AVI - Norton Wolf Sch of Aviation
 Academic Level: PS
 CCD: 8 - 4AcadSem/1200-1400hrs
 Credential: Ontario College Diploma

Name: Aviation Technician - Avionics Maintenance

Grade Scheme: LG2
 Major: AVM1 - Aviation Tech'n-Avionics Mtnce
 Co-Op Indicator: N/A

Div: AVI - School of Aviation Technology

Academic Program Requirement

Total Credits: 88.50
 GPA Requirement: 2.00
 Minimum Grade: D
 Residency Reqmt: 23.00
 Residency Reqmt GPA: 2.00

Academic Requirement: AVM3.17 Aviation Technician - Avionics Maintenance

Major: AVM3
 Grade Scheme: LG2
 Minimum GPA: 2.00
 Minimum Grade:

Subrequirement: Level 1

Take all of the following Mandatory Courses:

		Total Hours	Total Credits	GE
AVIA-1002	Avionics & WHMIS-Intro	30.00	2.50	No change
AVIA-1057	Avionics Electrical Fundamentals	195.00	10.50	
AVIA-1004	Avionics Electronic Fundamentals	150.00	7.50	
MATH-1180	Mathematics for Avionics Maintenance	30.00	2.00	
PHYS-1042	Physics for Avionics Maintenance	45.00	3.00	

Subrequirement: Level 2

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

		Total Hours	Total Credits	GE
AVIA-1058 remove	Avionics Digital Fundamentals	120.00	6.00	X
AVIA-1006 remove	Avionics Radio Theory	120.00	5.50	X
AVIA-1059	Aviation Maintenance Practices	90.00	4.50	✓
AVIA-1008	Aircraft Aerodynamics	60.00	3.00	✓
AVIA-1009	Aircraft Structures	60.00	3.00	✓
				AVIA-1061 (30hrs)
				AVIA-1010 (60hrs)
				AVIA-1012 (30hrs)
				AVIA-1013 (60hrs)
				AVIA-1014 (30hrs)
				AVIA-1060 (30hrs)

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
AVIA-1010 remove	Aircraft Materials & Hardware	60.00	2.50	
AVIA-1011	Aircraft Electrical Power	90.00	4.50	✓
AVIA-1012	Aircraft Propulsion	30.00	1.50	
AVIA-1013	Aircraft Engine Instruments	60.00	3.00	
AVIA-1014	Aircraft Fuels Systems	30.00	1.50	
AVIA-1061	Hydraulic/Pneumatic/Landing Gear Systems	30.00	1.50	
AVIA-1060	Aircraft Environmental & Safety Systems	30.00	1.50	
AVIA-1017	Aircraft Flight Instruments	90.00	4.00	✓
				AVIA-1058 (120hrs)
				AVIA-1006 (120hrs)

Degree Audit Report

AVIA-1018 Aircraft Internal Communications 30.00 1.50 ✓

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
AVIA-1062	Aircraft Wireless Communications Systems	60.00	3.00	
AVIA-1020	Aircraft Radio Navigation Systems	90.00	4.50	
AVIA-1063	Aircraft Automatic Flight Control System	60.00	3.00	
AVIA-1022	Avionics Installations & Standard Prac.	120.00	4.50	
AVIA-1023	Flight Line Maintenance Practices	120.00	4.50	

No changes

Subrequirement: Gen Ed - Electives

Take 9 General Education Credits - Normally taken in Levels 2, 3 and 4

Subrequirement: Program Residency

Students Must Complete a Minimum of 23 credits in this program at Fanshawe College to meet the Program Residency requirement and graduate from this program

[Signature]
 Approved By Chair/Manager:

AVI 3/1/2018
 Department and Date:

[Signature]
 Approved by Dean:

Jan 5/18
 Date:

General Education Approved By (as appropriate):

Date:

[Handwritten note]
 TG
 Jan 12/18