# TRANSFER ARTICULATION AGREEMENT

## **AMENDMENT (2022)**

# Quinsigamond Community College and Fitchburg State University

Electronics Technology – Mechatronics
Associate in Science

to

Engineering Technology - Electronics Engineering Technology

Bachelor of Science

#### **Statement of Purpose**

The purpose of this document, pursuant to the existing articulation agreement, is to serve as written notice and approval of curricular changes in the Fitchburg State University Engineering Technology - Electronics Engineering Technology program.

#### **Amended Items**

MATH 1700 Applied Statistics has been removed from the Fitchburg State University Engineering Technology - Electronics Engineering Technology program. Two course are now under different discipline codes: ENGT 3030 MEP and HVAC Systems is now under CMGT 3030 and ENGT 3035 OSHA: Safety & Risk Management is now under CMGT 3035. Also, effective with the Fall 2022 semester, transfer students will follow our new general education program at Fitchburg State University. These changes will result in less credits for students to complete after transferring.

The attached curriculum grid presents the revised curricula, acceptance equivalency and courses left to complete.

This course revision does not affect pre-established terms and conditions of the existing articulation agreement. All provisions, previously agreed to by the two institutions, remain in force. Refer to the 2020 articulation agreement document for details and conditions.

Fitchburg State University and Quinsigamond Community College agree that this Amendment becomes effective on July 1, 2022 and is applicable to eligible students in the next semester of enrollment.

Approvals

DocuSigned by:

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Betty Lauer

Dean of the School of Business, Engineering & Technology

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James Heffernan

Coordinator of the Electronics Engineering Technology Program

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Daniel de la Torre

Dr. Daniel de la Torre

Coordinator of Transfer & Articulation

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Dr. Margaret Hoey

Dean of Health and Natural Sciences

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Dr. Nirajan Mani

Chair of Engineering Technology

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**Heather Thomas** 

MassTransfer Coordinator

### **Quinsigamond Community College and Fitchburg State University**

# QCC Electronics Technology – Mechatronics to Engineering Technology Electronics Engineering Technology Program Articulation Table

QCC Course	Course #	Credits	Fitchburg State Course	Course #	Credits
Electronics I	ELT 103	4	Electrical Systems and Circuits + ENGT elective	ENGT 1000	3 + 1
Digital Circuits	ELT 121	4	Transfer Elective or Digital Electronics	ENGT 1990 or CSC 1650	4
Composition I	ENG 101	3	Writing I	ENGL 1100	3
College Mathematics I: Pre-Calculus or Mathematics for Technicians I- Recommend MAT 147 Mathematics for Technicians I	MAT 123 or MAT 147	3-4	Substitute MAT 147 for Pre-Calculus	MATH 1300	4
		Semest	ter 2		
Windows Client Operating Systems	CSC 141	4	Evolution of Technology + ENGT elective	ENGT 1700	3 + 1
Electronics II	ELT 104	4	Electronics I + ENGT elective	ENGT 2050	3 + 1
Embedded Microcontrollers	ELT 130	4	Software Appl in ET + ENGT elective	ENGT 1040	3 +1
Composition II <b>or</b> Technical Writing	ENG 102 or ENG 105	3	Recommend ENG 102 = Writing II	ENGL 1200	3
College Mathematics II: Trigonometry or Mathematics for Technicians II	MAT 124 or MAT 148	3-4	Transfer Elective or Substitute for Applied Statistics	MATH 1990 or MATH 1700 + MATH 1990	4
		Semest	ter 3		
Networking Technologies	CSC 234	4	Electronics II + ENGT elective	ENGT 2055	3 + 1
Instrumentation and Control Technology	ELM 251	4	MEP & HVAC Sys + ENGT elective	CMGT 3030	3 + 1
Introduction to Programmable Logic Controllers	ELM 257	4	Engr Design Fab I + ENGT elective	ENGT 3025	3 + 1
Lab Science Elective – rec CHM 105 General Chemistry I (PL, SI) or PHY 101 General Physics I (PL, SI)		4	General Education Elective		4
		Semest	ter 4		
Cooperative Work Experience	EET 299	3	Engineering Project Management	ENGT 4700	3
Mechatronic Systems	ELM 258	4	Engr Design Fab II + ENGT elective	ENGT 3026	3+1
Industrial Robotics	ELM 260	4	Digital Electronics + ENGT elective	ENGT 3015	4
Liberal Arts Elective – recommend SOC 101 (CV, DP) or PSY 101/121 (DP, PL)		3-4	General Education Elective		3-4
Social Science Elective – recommend ECO 215 Principles of Macroeconomics (PL)		3	General Education Elective		3
Total credits		65-68			68

# **Courses left to complete at Fitchburg State University**

Course #	Course Title	Credits	Comments
	Courses in Major		
ENGT 1020	Engineering Graphics	3	
ENGT 1050	Technical Analysis	3	
ENGT 2000	Fluid Mechanics & Thermodynamics Lab	3	
ENGT 2020	Statics & Dynamics	3	
ENGT 2025	Strength of Materials	3	
ENGT 2030	Materials Testing	3	
ENGT 3000	Energy & Sustainable Practice	3	
CMGT 3035	OSHA: Safety & Risk Management	3	
ENGT 4093	Engineering Tech Capstone	3	Seeking approval through governance to cover the IHIP requirement.
ENGT 3016	Advanced Digital Electronics	4	'
ENGT 3900	Device Interface Design	3	
ENGT 4050	Embedded Systems	4	
ENGT 4100	Control Theory	3	
	Major Specific Liberal Arts & Science Courses		
CHEM 1300 or PHYS 2300	General Chemistry I (SI) or General Physics I (SI)	4	Depending upon which course student selects at QCC
PHYS 2400	General Physics II	4	
ECON 1100	Macroeconomics (PL)	(0-3)	Covered by ECO 215 at QCC
MATH 1300	Pre-Calculus	(0-4)	Covered by MAT 147 or both MAT 123 & 124
MATH 1900	Discrete Mathematics	3	
MATH 2300	Calculus I (QR)	4	Course is replacing MATH 2100 Technical Calculus, pending approval through governance.
	General Education Courses		
ENGL 1200	Writing II	(0-3)	Covered by ENG 102 at QCC
	World Languages, Speaking and Listening (WS)	, ,	
	Exploration course	(0-3)	Covered by SOC 101 (CV, DP) or PSY 101/121 (DP, PL)
	Integrative High Impact Practice (IHIP)	(0-3)	Will be covered by ENGT 4093 pending approval.
Total credits		59	As little as 59 credits if students follow agreement.