TRANSFER ARTICULATION AGREEMENT

Quinsigamond Community College

and

Fitchburg State University

Electronics Technology - Mechatronics to
Engineering Technology

(Electronics Concentration)

Quinsigamond Community College and Fitchburg State University agree to enter into a transfer agreement for the following academic disciplines:

Electronics Engineering Technology - Mechatronics Associate in Science (EEMO) to
Engineering Technology (Electronics Engineering Technology Concentration)

Purpose

This agreement is set forth by Quinsigamond Community College and Fitchburg State University in an effort to delineate a transfer student's best options in course selection. This document signifies the ongoing commitment between these institutions of higher education to promote coordinated curricula of the highest quality. As such, it bears with it the commitment of our respective faculty, and administrative staff to strengthen these ties and address the needs of our students in a mutually beneficial manner.

Terms and Conditions of Transfer

- A. Students graduating from the Quinsigamond Community College's Electronics Technology Mechatronics Associate in Science (EEMO) program, with a qualitative grade point average of 2.0 or greater, and upon completion of FSU's admissions requirements, are guaranteed acceptance into the Engineering Technology major.
- B. In addition, 65-68 credits of the completed QCC College's Electronics Engineering Technology Mechatronics degree will be accepted and applied to FSU's Engineering Technology (Electronics Engineering Technology Concentration) program. All coursework from the sending program must be completed with grades of C- or higher in order to transfer.
- C. Quinsigamond Students will be advised to complete the prescribed coursework, and electives, as listed in the attached program grid (Appendix A). Failure to follow these recommendations may affect guarantee of admission, and will result in additional coursework requirements and longer time to degree completion at Fitchburg State.
- D. Acknowledging that students may, and do transfer from a wide variety of majors, this agreement does not prohibit transfer to or from other programs of study at either institution. This agreement suggests optimal transfer routes from Quinsigamond Community College to Fitchburg State University.

This agreement is effective upon date of signature and will remain in effect for three (3) years from that date, with the provision that the terms specified herein will continue to apply to graduates who transfer from Quinsigamond Community College to Fitchburg State University within one year of the expiration of this agreement. The faculty at both institutions agrees to meet annually to review the agreement and discuss modifications.

For: Quinsigamond Community College	For: Fitchburg State University
DocuSigned by:	DocuSigned by:
S. Parl	Richard Lapidus
Dr. Luis G. Pedraja	Dr. Richard S. Lapidus
President	President St. Zapidas
DocuSigned by:	DocuSigned by:
James Leane	Alberto Cardelle
Dr. James Keane	Dr. Alberto J. F. Cardelle
Vice President of Academic Affairs	Provost and Vice President for
	Academic Affairs
DocuSigned by:	DocuSigned by:
Betty Lawer	KMW11-
507585984DDB4A8 Betty Lauer	Dr. Keith Williamson
Dean of the School of Business,	Dean of Business and Technology
Engineering, and Technology	
DocuSigned by:	DocuSigned by:
James Heffernan	Son my lad
James Heffernan	Dr. Sanjay Kaul
Coordinator of the Electronics Engineering	Department Chairperson, Engineering
Technology Program	Engineering Technology
DocuSigned by:	DocuSigned by:
Daniel de la Torre	Heather Thomas
Dr. Daniel de la Torre	Heather Thomas
Coordinator of Transfer & Articulation	MassTransfer Coordinator

Date of Signature:

Appendix A

Associate in Electronics Engineering Technology-Mechatronics to

Bachelor of Science in Engineering Technology

Engineering Technology – Electronics Quinsigamond Community College

LA&S - Writing

LA&S Social Science

Fitchburg State University	QCC	Cr	Fitchburg State University	QCC	Cr
ENGL 1100 Writing I	ENG 101	3	History Elective (HIST)		3
ENGL 1200 Writing II	ENG 102	3		SOC 101, PSY	3
			PSY/SOC LA&S Elective (HMN)	101/121 (Liberal	
				Arts Elective)*	
			ECON 1100 Macro-Economics	ECO 215 (Social	3
			ECON 1100 Macro-Economics	Science)**	

LA&S - Hum & Fine Arts***

Literature Elective (LIT)	3
Art or Music Elective (AOM)	3
ART Elective (ART)	3

LA&S- Science and Technology

CHEM 1300 Gen Chemistry	CHEM 1300 Gen Chemistry	CHM 105 (Lab	4
	CHEW 1500 Gen Chemistry	Science)****	
	PHYS 2300 Gen Physics I	PHY 101 (Lab	4
	FH 13 2300 Gell Fllysics I	Science) ****	
	PHYS 2400 Gen Physics II		4
	EXSS 1100 Health & Fitness		3

LA&S - Math

MATH 1300 Precalculus	MAT 147	4
MATH 1700 Applied Statistics	MAT 148	4
MATH 1900 Discrete Math		3
MATH 2100 Technical Calculus		3

LA&S - Advanced Option C

Covered by PHYS 2300, PHYS 2400 ECON 1100 and MATH 1900.	

Engineering Tech - Core

<u></u>		
ENGT 1700 Evolution of Tech	CSC 141	3
(CTW, GDAN)		
ENGT 1000 Elec Sys & Circuits	ELT 103	3
ENGT 1020 Engr Graphics		3
ENGT 2020 Statics & Dynamics		3
ENGT 2025 Strength of Materials		3
ENGT 1050 Tech Analysis		3
ENGT 1040 Software Appl in ET	ELT 130	3
ENGT 2030 Materials Testing		3
ENGT 3030 MEP & HVAC Sys	ELM 251	3
ENGT 3000 Energy & Sustainable		3
Practice		
ENGT 2000 Fluid Mechanics &		3
Thermo Lab		
ENGT 3035 OSHA Safety Lab		3
ENGT 4700 Proj Mgmt Lab	EET 299	3
ENGT 3025 Engr Design Fab I	ELM 257	3
ENGT 3026 Engr Design Fab II	ELM 258	3
ENGT 4093 Engr Tech Capstone		3

Electronics - Concentration

ENGT 2050 Electronics I	ELT 104	3
ENGT 2055 Electronics II	CSC 234	3
ENGT 3015 Digital Electronics	ELM 260	3
ENGT 3016 Adv Digital Electronics		4
ENGT 3900 Device Interface Design		3
ENGT 4050 Embedded Systems		4
ENGT 4100 Control Theory		3
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^{*}Recommend SOC 101, PSY 101 or PSY 121 for Liberal Arts Elective.

^{**}Recommend ECO 215 for Social Science Elective.

^{***}Students will need to choose a course in the Arts which will also meet the Global Diversity requirement GDAN.

^{****}Recommend CHM 105 or PHY 101 for Lab Science Elective..

Appendix A

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 for Precalculus	MATH 1300	4
Technicians i		Semest	tor 2		
Windows Client Operating Systems	CSC 141	4	Evolution of Technology + ENGT elective	ENGT 1700	3 + 1
Electronics II	ELT 104	4		ENGT 2050	3 + 1
Embedded Microcontrollers	ELT 130	4	Software Appl in ET + ENGT elective	ENGT 1040	3+1
Composition II or Technical Writing Recommend ENG 102 Composition II	ENG 102 or ENG 105	3	Recommend ENG 102 = Writing II	ENGL 1200	3
College Mathematics II: Trigonometry or Mathematics for Technicians II Recommend MAT 148 Mathematics for Technicians II	MAT 124 or MAT 148	3-4	Substitute for Applied Statistics	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	ENGT 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 or PHY 101 General Physics I		4			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 or PSY 101/121		3-4			3-4
Social Science Elective – recommend ECO 215 Principles of Macroeconomics		3			3
Total credits		65-68			68

Appendix A

Courses left to complete at Fitchburg State University

Course #	Course Title	Credits	Comments
	Courses in Major		
ENGT 1020	Engineering Graphics	3	
ENGT 2020	Statics & Dynamics	3	
ENGT 2025	Strength of Materials	3	
ENGT 1050	Tech Analysis	3	
ENGT 2030	Materials Testing	3	
ENGT 3000	Energy & Sustainable Practice	3	
ENGT 2000	Fluid Mechanics & Thermodynamics Lab	3	
ENGT 3035	OSHA Safety Lab	3	
ENGT 4093	Engineering Tech Capstone	3	
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 or General Physics I	4	Depending upon which course student selects at QCC
PHYS 2400	General Physics II	4	
ECON 1100	Macroeconomics	(0-3)	Covered by ECO 215 at QCC
MATH 1300	Precalculus	(0-4)	Covered by MAT 147 or both MAT 123 & 124
MATH 1700	Applied Statistics	(0-3)	Covered by MAT 148 at QCC
MATH 1900	Discrete Mathematics	3	
MATH 2100	Technical Calculus	3	
	General Education Courses		
EXSS 1100	Health and Fitness	3	
ENGL 1200	Writing II	(0-3)	Covered by ENG 102 at QCC
	Literature (LIT)*	3	
	Art or Music Elective (AOM)*	3	
	Art Elective (ART)*	3	
	History Elective (HIST)*	3	
	Human Behavior Elective(CTW, HMN)	(0-3)	Covered by PSY 101, PSY 121 or SOC 101 at QCC
	Global Diversity (GDAN)		*Students will need to choose a course in the Arts section which will also meet the Global Diversity requirement.
Total credits		70	As little as 70 credits if students follow agreement.