ARTICULATION AGREEMENT

Between the

ENGINEERING SCIENCE: TECHNOLOGY(Electronic) CURRICULUM

(Evening Program)

Of

NORTHERN ESSEX COMMUNITY COLLEGE

And the

UNIVERSITY OF MASSACHUSETTS LOWELL
Bachelor of Science of Engineering Technology in the
Electronic Engineering Technology Program –
Francis College of Engineering

Fall 2016

This articulation agreement has been established between Northern Essex Community College and the University of Massachusetts Lowell, College of Engineering-Electronic Engineering Technology Program. This agreement was developed with the intent of facilitating the transfer process from Northern Essex Community College (NECC) to the University of Massachusetts Lowell. This agreement will serve as a guideline for those who desire to transfer from NECC into the Electronic Engineering Technology program at the University of Massachusetts Lowell.

Students completing the AS Engineering Science-Technology (Electronic Engineering Technology Concentration) program at Northern Essex Community College, in accordance with the minimum standards as set in this agreement by the College of Engineering Electronic Engineering Technology Program at the University of Massachusetts Lowell, will be admitted to that College and qualify for limited benefits of the General Education Foundation Courses (Mass Transfer Block). Such students will qualify for limited benefits of the General Education Foundation Courses (Mass Transfer Block). Students who do not meet the aforementioned minimum standards will be considered for admission to the University of Massachusetts Lowell on a case-by-case basis.

OBJECTIVES:

- To encourage the transfer of qualified students from Northern Essex
 Community College to the University of Massachusetts Lowell Electronic
 Engineering Technology Program.
- 2. To award academic credit for courses completed at Northern Essex Community College that meet the terms of the AS Engineering Science-Technology (Electronic Engineering Technology Concentration) degree as stated in this agreement for transfer to the Bachelor of Science of Engineering Technology degree in the Electronic Engineering Technology Program at the University of Massachusetts Lowell.
- 3. To provide effective and concise guidelines for students seeking to transfer to the University of Massachusetts Lowell. Students will have accurate and clear information regarding the transfer of their coursework from NECC to the Bachelor's Degree at the University of Massachusetts Lowell.

TERMS OF THE TRANSFER ARTICULATION AGREEMENT:

- The University of Massachusetts Lowell guarantees the acceptance of students who complete the AS Engineering Science-Technology (Electronic Engineering Technology Concentration degree program at Northern Essex Community College with an overall GPA of 2.5 or higher to the Bachelor of Science of Engineering Technology Degree Program in Electronic Engineering Technology.
- 2. The University of Massachusetts Lowell guarantees the transfer of credit as stipulated in the attached Program of Study. This agreement assumes the completion of the Associate Degree and completion of the courses

listed on the attached Program of Study. The University of Massachusetts Lowell may accept courses taken beyond the Associate Degree (60 credits); however, students are encouraged to contact the Online and Continuing Education transfer advisor at the University of Massachusetts Lowell for approval.

- 3. Northern Essex Community College transfer students will be subject to all general education requirements of the University of Massachusetts Lowell as set forth in the University of Massachusetts Lowell catalog. Students meeting the requirement of the General Education Foundation Courses (Mass Transfer Block) will be exempt from 34 credits of University general education requirements, but will be required to meet any specific College of Engineering general education requirements.
- 4. This document is based upon the evaluation of course descriptions presented to the University of Massachusetts Lowell. Courses as listed in this agreement will transfer to the University of Massachusetts Lowell provided a grade of C- or higher has been earned. When appropriate, the requirements of the General Education Foundation Courses (Mass Transfer Block) will be honored.
- Northern Essex Community College students interested in participating in this agreement should be advised to take the suggested liberal arts courses. These courses are required at the University of Massachusetts Lowell and students are advised to complete them as part of their Associate Degree.

This agreement shall remain in effect for a period of three years from the date listed below, with the provision that the terms specified herein will continue to apply to students admitted from Northern Essex Community College's AS Engineering Science-Technology (Electronic Engineering Technology Concentration) degree within one year of the expiration of the agreement. Each institution agrees to provide timely notice to the other in the event of any modification to the curriculum that might affect compatibility for admission and transfer of coursework. This agreement may be subject to change, with notification, if curriculum requirements change at either institution. Students admitted to the Northern Essex Community College's AS Engineering Science-Technology Electronic Engineering Technology Concentration degree program prior to such notification shall be admitted to the University of Massachusetts Lowell Electronic Engineering Technology Program on the basis of this agreement. This agreement is conditional upon the College of Engineering maintaining its' program approval from the Massachusetts Board of Higher Education.

Signatures

Northern Essex Community College	University of Massachusetts Lowell
Lane A. Glenn, Ph. D President William Heineman Ed. D	Jacqueline/F. Moloney, Ed.D. Chancellof Michael E. Vayda, Ph.D
Vice President, Academic and	Provost
Student Affairs	Ogh C. WA
Kelly Sullivan, J. D.	Jøseph C. Hartman, Ph. D
Dean, Technology, Arts	⊅¢an, College of Engineering
and Professional Studies	V
/	
M	
Carolyn Knoepfler, Ph. D	
Assistant Dean, Science, Technology, E	ngineering
and Advanced Manufacturing	
Paul Chul	sh) & S
Paul Chanley, BSEE, MSÉ	Director of Engineering/Technology
Department Chair,	Glenn J. Sundberg, Ph./D
Engineering Science and Physics	Gerald Jurhin
Grace Y. A. Young, MSW	Gerald Durkin
Dean, Academic Support Services,	Associate Dean of Enrollment and
Articulation and Transfer	Director of Transfer Admissions

UMass Lowell Transfer Agreement

Northern Essex Community College (NECC) – Engineering Science-Technology (Electronic Engineering Technology Concentration)

UMass Lowell (UML) – College of Engineering – Bachelor of Science of Engineering Technology in the Electronic Engineering Technology Program

NECC Course Requirements

UMass Lowell Equivalent

CIS205 C Programming	4	COMP.1010 Computing I	4
COM 111 Public Speaking	3	ENGL.2220 Oral Communication	3
ECO201 Micro Economics	3	ECON.2010 Economics I (Microeconomics)	3
ECO20 Macro Economics	3	ECON.2020 Economics II(Macroeconomics)	3
ENG101 English Composition I	3	ENGL.1010 College Writing I	3
ENG102 English Composition II	3	ENGL.1020 College Writing II	3
ENG103 Technical Writing	3	ENGL.2260 Tech & Science Writing	3
EST104 Engineering Essentials &	3	No Equivalent	0
Design		No Equivalent	
CTE101 Fundamentals of Digital	3	No Equivalent	0
Logic Logic		No Equivalent	
CTE103 Digital Design Lab	2	ETEC.3410 Logic Design I and Lab in	3
CTETO3 Digital Design Lab	_	combination with NECC CTE101	
CTE111 Circuit Analysis I	4	ETEC.2130 Circuits I	3
		The second secon	
CTE1 12 Circuit Analysis II	4	ETEC.2140 Circuits II and Lab	2
CTE201 Electronics I	4	ETEC.2990 EET Level 200 Elective	2
CTE202 Electronics II	4	ETEC.2990 EET Level 200 Elective	2
MAT 240 Calculus IA	2	MATH.1310 Calculus I	4
and	2		
MAT 241 Calculus IB	2		
OR	4		
MAT 251 Calculus I			.
MAT 242 Calculus IIA	2	MATH.1320 Calculus II	4
and			
MAT 243 Calculus IIB	2		
OR			
MAT 252 Calculus II	. 4		
MAT253 Calculus III	4	MATH.2310 Calculus III	4
MAT254 Differential Equations	4	MATH.2360 Differential Equations	4
PHS131 Engineering Physics I	4	PHYS.1410 Physics I	3
		PHYS.1410L Physics I lab	1
PHS132 Engineering Physics II	4	PHYS.1440 Physics II	3
2000 g 2001		PHYS.1440 Physics II lab	1
TOTAL	70	TOTAL	58