ARTICULATION AGREEMENT

Between the

Associate in Science Degree in Computer & Information Sciences: Information Technology Option

Of

Northern Essex Community College

and the

Bachelor of Science in Computer Information Systems: Information Technology Concentration

Of

Northern Vermont University—Lyndon
Lawrence, MA Campus

Fall 2018

This articulation agreement has been established between Northern Essex Community College (NECC) and Northern Vermont University—Lyndon (NVU-L). This agreement was developed with the intent of facilitating the transfer process from NECC to the established Bachelor Degree Completion program offered by NVU-L on the Lawrence campus of NECC. These agreements will serve as a guideline for those who desire to transfer from NECC into the Bachelor of Science in Computer Information Systems offered by NVU-L.

Students completing the AS Computer & Information Sciences degree with the Information Technology (IT) Option, in accordance with the minimum standards as set in this agreement by NVU-L, will be admitted to NVU-L as juniors. Such students will qualify for the Vermont In-State tuition rate for courses taken through NVU-L. Students who do not meet the aforementioned minimum standards will be considered for admission on a case-by case basis.

OBJECTIVES:
1. To encourage the transfer of qualified students from NECC to a NVU-L Bachelor Completion Program situated on the Lawrence campus of NECC.
2. To award academic credit for courses completed at NECC that meet the terms of the Associate in Science degree as stated in the agreement for transfer to the Bachelor in Computer Information Systems.
3. To provide effective and concise guidelines for students intending to transfer to a Bachelor Completion Program at NVU-L. Students will have accurate and clear information regarding the transfer of their coursework.

TERMS OF THE TRANSFER ARTICULATION AGREEMENT:

1. Northern Vermont University—Lyndon guarantees the acceptance of students who complete the Computer & Information Sciences Associates degree with the IT option and have an overall GPA of 2.0 or higher to the Bachelor of Science in Computer Information Systems.
2. Northern Vermont University—Lyndon 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. Northern Vermont University—Lyndon requires that a minimum total of 120 credits must be completed to earn a Bachelor degree with at least 30 credits at the 3000/4000 level awarded from Northern Vermont University—Lyndon. NVU-L agrees to accept up to 90 transfer credits from NECC into the program.
3. NECC students who have also completed the Mass Transfer Block will have the NVU-L General Education Unit requirements waived.
4. This document is based upon the evaluation of course descriptions presented to NVU-L. Courses as listed in this agreement will transfer to NVU-L provided a grade of C- or higher was earned.
5. Northern Essex Community College students interested in participating in this agreement should be advised to take suggested math courses as well as liberal arts electives that fulfill the Mass Transfer Block whenever possible. These recommended courses are listed on the program of study sheet.

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 Associate in Science Computer & Information Sciences, IT option 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 NECC's Associate in Science degree program prior to such notification shall be admitted to NVU-L on the basis of this agreement.
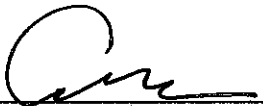
Signatures

Northern Essex Community College

(signature)

Lane A. Glenn, PhD
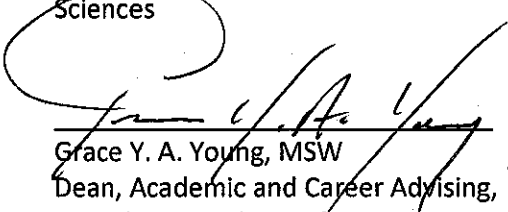President

(signature)

William Heineman, EdD
Vice President, Academic and Student Affairs

(signature)

Carolyn Knoepfler, PhD
Assistant Dean of Science, Technology and
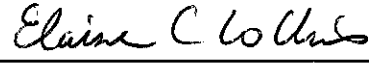Engineering

(signature)

Jason Termini, MS
Department Chair, Computer and Information
Sciences

(signature)
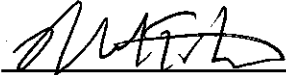
Grace Y. A. Young, MSW
Dean, Academic and Career Advising,
Articulation and Transfer

Northern Vermont University—Lyndon

(signature)
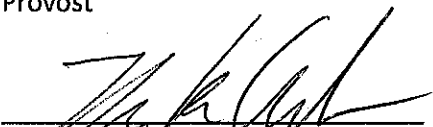
Elaine C. Collins, PhD
President

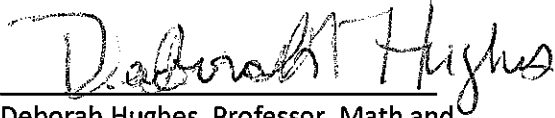_(signature)_

Nolan T. Atkins, PhD
Provost

(signature)

Thomas K. Anderson, MS
Associate Dean of Academic Programs

(signature)

Daniel Daley, Chair, Math and Computer
Science

(signature)

Deborah Hughes, Professor, Math and
Computer Science

Northern Vermont University—Lyndon
BS Computer Information Systems with a Concentration in Information Technology

In order to graduate from Northern Vermont University—Lyndon with a Bachelor of Science in Computer Information Systems, students must have a **minimum of 120 credits (40 credits hours must be from Northern Vermont University-Lyndon)**. Students who graduate with an Associate Degree in Computer & Information Sciences: Information Technology from Northern Essex Community College may enter the Bachelor of Science in Computer Information Systems program. All college-level courses from an accredited institution will be accepted by Northern Vermont University—Lyndon (non-credit courses and remedial/developmental courses will not be accepted) and applied where possible to the credits required to reach the 120 credits necessary to complete a bachelor's degree.

Year 1 at NECC			Northern Vermont-Lyndon Equivalent		
First Semester	*Course Name*	*Credits*	*First Semester*	*Course Name*	*Credits*
CIS 117	Introduction to Linux	1	CIS 2101	Introduction to Unix	1
CIS 140	Introduction to Computer Science	4	CIS 1090	Problem Solving with Computers	3
CTN 110	Intro to Information Technology	3	Elective	Elective	3
ENG 101	English Composition I	3	ENG 1081	Writing and Reading Strategies for College	3
MAT 120 or MAT 130	College Algebra or Pre-calculus for Bus/Soc/Life Sciences	3/4	MAT 1020	Intermediate Algebra	3
		14/15			13
Second Semester	*Course Name*	*Credits*	*Second Semester*	*Course Name*	*Credits*
CIS 112	Integrated Computer Applications	4	CIS 1050	Computer Operation Systems and Spreadsheets	1
CIS 114	Help Desk and Soft Skills	3	CIS 2360	Computer User Support	3
CTN 201	Computer Networks I	3	CIS 3110	Networking	3
ENG 102	English Composition II	3	ENG 1082	Academic Inquiry	3
MAT 145 OR MAT 171	Pre-calculus or Calculus for Bus/Soc/Life Sciences	4	MAT 1410	Pre-Calculus	4
		17			13
Year 2 at NECC			NVU-Lyndon Equivalent		
Third Semester	*Course Name*	*Credits*	*Third Semester*	*Course Name*	*Credits*
CIS 113	Database Management	4	CIS 1060	Introduction to Databases	1
CIS 115	Information Security	4	Elective	Elective	4
CIS 153	Programming for IT	4	CIS 2290	Introduction to Python	1
	Humanities Elective	3		Appropriate Equivalent	3
		15			9

Fourth Semester	Course Name	Credits	Fourth Semester	Course Name	Credits
CIS 245	Linux Administration	4		Elective	4
	Humanities or Fine Arts Elective	3		Elective	3
	Social Science Elective	3		Elective	3
		10			13

Choose courses from the list of additional course to be taken at NECC

Additional Courses to be taken at NECC			NVU-Lyndon Equivalent		
CIS 130	Web Development I (Elective for NVU-L)	4	CIS 2141	Programming Internet and Web Applications Part I	3
CIS 160	Computer Science 1	4	CIS 2271	Java Programming	3
CIS 210	Advanced Database Management (Program Elective)	4	CIS 2330	Database Systems	3
Transfer Block	2 Additional Behavioral and/or Social Sciences	6	Gen Ed	Self and Social Interactions or Cross Cultural Awareness	6
Transfer Block	1 Additional Humanities and/or fine Arts	3	Gen Ed	The Human Experience: Written Language or The Human Experience: Art and Design	3
Transfer Block	Natural or Physical Science	7	Gen Ed	Natural Resources and Sustainability or Scientific and Empirical Reasoning	7
		28			22

NVU-Lyndon Year 3

Fifth Semester	Course Name	Credits	Sixth Semester	Course Name	Credits
MAT 2210	Sets, Logic, and Proof	3	CIS 2850	System Administration Essentials	4
CIS 2112	Computer Hardware and Organization	3	CIS 3120	Programming Internet and Web Applications Part II	3
CIS 3240	Computer Security	3	CIS 3710	Object Oriented Design and Programming	3
		9			10

NVU-Lyndon Year 4

Seventh Semester	Course Name	Credits	Eighth Semester	Course Name	Credits
CIS 3750	Cloud Computing	4	CIS 4120	System Analysis & Design	3
CIS 4330	Advanced Networking	4	CIS 4810	Internship in Computer Science	3
CIS 4350	Advanced Computer Security	4	CIS 4950	CIS Capstone	3
		12			9

Total NECC Credits		87/88
Total LSC Credits		40
Total Credits		124/125

BACHELOR OF SCIENCE IN COMPUTER INFORMATION SYSTEMS with a Concentration in Information Technology

Required (Core) Courses in the Major (Total # courses required = 27)		
Course Number	Course Title	Credit Hours
CIS 112	Integrated Computer Application	4
CIS 113	Database Management	4
CIS 114	Help Desk and Soft Skills	3
CIS 115	Information Security	4
CIS 117	Introduction to Linux	1
CIS 130	Web Development I (Elective for NVU-L)	4
CIS 140	Introduction to Computer Science	4
CIS 153	Programming for IT	4
CIS 160	Computer Science I	4
CIS 210	Advanced Database Management (Program Elective)	4
CIS 245	Linux Administration	4
CTN 110	Introduction to Information Technology (prereq for CIS 112)	3
CTN 201	Networks I	3
MAT 145 or MAT 171	Pre-Calculus or Calculus for Bus/Soc/Life Sciences	4
CIS 2112	Computer Hardware & Organization	3
CIS 2850	System Administration Essentials	4
CIS 3710	Advanced Object Oriented Programming	3
CIS 3120	Programming Internet and Web Applications Part II	3
CIS 3240	Computer Security	3
CIS 3750	Cloud Computing	4
CIS 4120	Sys Analysis & Design	3
CIS 4330	Advanced Networks	4
CIS 4350	Advanced Computer Security	4
CIS 4810	Internship in Computer Science	3
CIS 4950	CIS Capstone	3
MAT 2210	Sets, Logic, and Proof	3
	Sub Total Required Credits	**90**

Elective Courses (Total # courses required =varies)	
Students must have a total of 120 credits. The minimum number of required elective credits is 0. Students are encouraged to select electives which round out their career interests.	
Sub Total Required Credits	**0**

General Education Courses (Total # courses required = 11)	
Indicate Distribution of General Education Requirements Below Attach or Insert Link to List of General Education Offerings (Course Numbers, Titles, and Credits)	# of Gen Ed Credits
Behavioral and Social Sciences (courses may be in either subject area)	9
Humanities and Fine Arts (Courses may be in either subject area)	9
Natural or Physical Science (Must include at least one course with a lab)	7
English Compostion/Writing	6
Mathematics/Quantitiative Reasoning	3
Sub Total General Education Credits	**34**

Curriculum Summary	
Total number of courses required for the degree	38
Total credit hours required for degree	**124**

Prerequisite, Concentration or Other Requirements:A total of 40 credits must be from Lyndon for the BS degree in CIS.