### Articulation Agreement Between

# ROCHESTER INSTITUTE OF TECHNOLOGY B. Thomas Golisano College of Computing & Information Sciences Department of Computer Science

#### AND

#### SUNY ADIRONDACK COMMUNITY COLLEGE Department of Computer Science

#### I. PURPOSE

The intention of this articulation agreement is to set forth the principles of mutual understanding that is necessary to form, maintain and communicate transfer articulation information between RIT's Department of Computer Science and Adirondack Community College. This information will allow community college students to make informed course selections which facilitate transfer mobility and baccalaureate degree completion. The established course equivalencies recognize the inherent quality of education at both institutions and provide students with the opportunity to efficiently and effectively complete baccalaureate degree requirements. This new agreement shows how courses will now transfer to RIT's new semester calendar beginning fall 2013. The goal of this agreement is to meet the educational needs of transfer students, and to facilitate access for all qualified students.

A review of Adirondack Community College's current catalog (2012-13) has been conducted to determine the transferability of academic courses. This agreement establishes procedures to ensure admission of qualified transfer students from <u>Adirondack Community College's Associate's in Science degree in Computer Science and RIT's Baccalaureate degree in Computer Science</u>.

#### II. OBJECTIVES

- 1. To enable Adirondack Community College students who meet admissions requirements a prescribed sequence of courses to transfer to RIT.
- 2. To ensure transferability of credit for comparable coursework and credit equivalent learning applicable to the Computer Science program at RIT.

- 3. To encourage academic coordination and administrative interactions, including curricular and administrative collaboration.
- 4. To provide for the exchange of information on success and failures of this transfer program in order to improve this agreement.

#### III. TERMS of the AGREEMENT

- 1. Admissions. Students are expected to follow the application procedures for transfer students as outlined in RIT's current undergraduate catalog. Students applying to the Computer Science program must meet the minimum grade point average of a 2.8, as calculated by RIT grading policy. Students who do not meet the minimum grade point average will be reviewed on an individual basis.
- 2. <u>Transfer Credit</u>. All courses accepted for transfer as specified in the transfer credit equivalency table will be applied to baccalaureate degree requirements as specified in this agreement at the point of transfer. Transfer credit can only be granted for courses completed with a grade of "C" or better. Completed courses below this level may affect the year standing of the applicant as described on the transfer credit equivalency tables.
- 3. <u>Year Level</u>. Providing all course equivalencies have been met as outlined in the attached materials, students will be granted third year status.
- 4. <u>Program and Course Changes</u>. Each institution shall communicate to the other any changes affecting this agreement and mutually manage any resultant change in articulation documents to facilitate its continuation.
- 5. <u>Time Limits</u>. This agreement will expire three years from the date of signing. At that time, new transfer equivalency tables will be reviewed and replaced if necessary.
- 6. <u>Maintenance</u>. Appointed liaison officials will explore as appropriate the possibility to forming additional articulation programs that are mutually agreeable and in keeping with the basic components of this articulation agreement.

- 7. <u>Communication</u>. When specifically referring to this agreement and/or the corresponding institution by name in publications, electronic or print advertising, the initiating institution will secure in advance the prior written approval of the other.
- 8. <u>Policy</u>. Should the precepts of this agreement come in conflict with established policy at either institution, the established policy will take precedent and the agreement will be reviewed for possible modification as appropriate and mutually agreeable.
- 9. <u>Termination</u>. This agreement may be terminated by either institution with six months prior written notice, or sooner by mutual consent. Students in progress (enrolled) at Rochester Institute of Technology under the terms of this agreement at the point of its termination would be permitted to continue under the terms set forth.

#### V. APPROVAL

This agreement is executed by the authorized representatives of Adirondack Community College and Rochester Institute of Technology.

RIT

Adirondack Community College

Michael Yacci

Associate Dean

B. Thomas Golisano College

Brian Durar

Vice President Academic Affairs

of Computing & Information Sciences

Paul Tymann

Chairman

Computer Science Department

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Louis C. Musto

Professor

Department of Mathematics, Science, and Technology

Marian M. Nicoleffi

Director of Transfer Admissions

## Draft Course Mappings for Articulation Agreement (\*\*) Between

SUNY Adirondack (Computer Science) and RIT (Computer Science)

This is a proposed mapping of courses that uses the BS Degree in Computer Science at RIT under semesters, which will be offered in its entirety starting fall, 2013. Included at the end of this document is a display of the five-year BS Degree in Computer Science at RIT under semesters that has been approved by the state of New York. Information for SUNY Adirondack was taken from the official 2010-2012 college catalog.

Completed By: Henry A Etlinger, Undergraduate Program Coordinator Date: April 16, 2012

(\*\*) Some aspects of the semester conversion process are not finalized. See notes after the table.

Typical Semester Plan for SUNY Adirondack				
Course	Credits	RIT Course	Credits	
First Semester			Ol cults	
Freshman Experience	1-4			
Writing I	3	Liberal Arts and	3	
		Sciences (Gen Ed)		
MAT 129 Discrete	3	MATH 190 Discrete	3	
Mathematics		Mathematics for		
272		Computing		
CIS 143 Introduction	3	CS Elective	3	
to Programming	te 530 Lingue (AD y Christeen and St Tolling Linguistics and an acceptance of the state of the s		e .	
SUNY Gen Ed Social	3	Liberal Arts and	3	
Science		Sciences (Gen Ed)		
Liberal Arts Elective	3 .	Liberal Arts and	3	
DED		Sciences (Gen Ed)		
PED		Wellness Education	0	
Second Semester	I			
Writing II	3	Liberal Arts and	3	
	STATE OF THE SAME OF THE PARTY OF THE SAME	Sciences (Gen Ed)		
MAT Liberal Arts	3	Liberal Arts and	3	
Elective		Sciences (Gen Ed)		
CIS 144 Intermediate	3	(used with CIS 243 to		
Programming in		provide 4 semester		
Windows		hours of transfer		
Company of the control of the contro	an emperor and a second	credit for CSCI 141)		
CIS 150 Topics in	3	CS Elective	3	
Computing				
History	3	Liberal Arts and	3	
		Sciences (Gen Ed)	£	

PED.	11	Wellness Education	10
Third Semester	all and outside the control of the control of a section will be		CIPACES AND A CONTRACTOR OF CONTRACTOR
CIS 243 Data	3	CSCI 141 Computer	4
Structures and Objects		Science I	
in C++			
MAT 131 Calculus I	4	Calculus (Gen Ed)	4
Lab Science	3-4	Lab Science (Gen Ed)	4.5
SUNY Gen Ed	3	Liberal Arts and	3
Humanities		Sciences (Gen Ed)	
History	3	Liberal Arts and	3
		Sciences (Gen Ed)	
CLUSSESSES CONTRACTOR AND AND AND ALL OF	the Control of the Co		
Fourth Semester	Г-		
CIS 244 Computer	3	CSCI 250 Concepts of	3
Systems and		Computer Systems	
Programming			Franchis established the resident of the residence of the control
CIS or MAT Elective	3	Calculus (Gen Ed)	4
		(student advised to	
		complete their calculus sequence by	
		taking MAT 132)	
Math or Science	3	Lab Science (Gen Ed)	4
course		(student advised to	T 000 1
10		complete their lab	
¥	,	science sequence)	
Elective	3	Free Elective	3
Elective	3	Free Elective	3
TOTAL	64-68		62
SEMESTER			
CREDITS			

#### NOTES:

- The minimum GPA for students transferring from SUNY Adirondack to RIT in Computer Science is 2.8. Only courses for which a student earns grades of "C" or higher may be considered for transfer credit. Under no circumstances can a recipient of a twoyear associate's degree from another institution receive more than two years' transfer credit for that degree.
- 2) In all likelihood, students who complete the Associates degree at SUNY Adirondack in Computer Science who transfer to RIT will start with third-year standing. It is most desirable for students who transfer from SUNY Adirondack to enter RIT during fall semester so that they may take CSCI 242 (Computer Science for Transfer Students). Transfer students who enter with programming and data structures background will be

- given credit for CSCI 141 and CSCI 242 will be used in place of CSCI 142. Students who enter RIT with third-year standing should normally be able to complete their remaining coursework as well as their co-op requirements in six semesters plus one summer.
- 3) Liberal Arts at RIT evaluates courses in the Social Sciences/English/Humanities and typically awards transfer credit on a one-for-one basis. Liberal Arts at RIT should be consulted for specific recommendations, when choices are available, regarding Liberal Arts courses that should be taken at SUNY Adirondack and how they map to the new RIT General Education Framework.
- 4) Transfer students who enter RIT with third year standing or higher are required to complete two different wellness activity courses. Students who take appropriate physical education courses at SUNY Adirondack will be able to transfer such courses to satisfy the RIT wellness requirement. (The RIT wellness requirement under semesters has not yet been finalized.)
- 5) No credit is given for MATH 123. MAT 131 and MAT 132 (Calculus I and II) transfer in as MATH 181 and 182 (Project-based Calculus I and II) and complete the calculus requirement for CS majors. Students are strongly encouraged to complete both MAT 131 and MAT 132. MAT 220 (Linear Algebra) will transfer in for MATH 241 (Linear Algebra). MAT 127 (Intro Stats/Probability) does not transfer in for MATH 251 (Probability and Statistics I).
- 6) Appropriate lab science sequences that students may take at SUNY Adirondack include:
  - CHM 111 and 112 (General Chemistry I and II)
  - EGR 105 and 106 (Engineering Physics I and II)

Students are strongly encouraged to complete both courses in one of these two sequences. PHY 111 and 112 (General Physics I and II) does not count as a lab science; credits may be applied to science electives provided a student completes either chemistry or biology for their lab science sequence.

- 7) CIS 222 (Programming in Java) or CIS 237 (Database Management Systems) will transfer in as CS electives or Free Electives.
- 8) The maximum number of semester hours that may be transferred to RIT from a two-year program has not yet been defined. If the number shown must be reduced, credits will first be removed by eliminating transfer credits for free electives.

Year	Plan of Study Fall Semester		Spring Semester		Summe	r Term
	Course	Credits	Course	Credits	Course	Credit
1.	CSCI 141 Computer Science I	4	CSCI 142 Computer Science II	4		Credit
	LAS Perspective 7A: MATH 181 Project-Based Calculus I	4	LAS Perspective 7B: MATH 182 Project-Based Calculus II	4		
	LAS Foundation 1: First- Year Seminar	3	LAS Elective: MATH 190 Discrete Mathematics for Computing	3	1	:
	LAS Perspective 2	3	LAS Foundation 2: ENGL 150 Writing Seminar	3		,
	LAS Perspective 3	3	LAS Perspective 4	3		T.
	Wellness Education	0	Wellness Education	0		
2	CSCI 243 The Mechanics of Programming	3	CSCI 250 Concepts of Computer Systems	3	Co-op	0
	CSCI 262 Introduction to Computer Science Theory or CSCI 263 Honors Introduction to Computer Science Theory	3	SWEN 261 Introduction to Software Engineering	3		
	LAS Elective: MATH 251 Probability and Statistics I	3	LAS Elective: MATH 241 Linear Algebra	3		
	LAS Perspective 5 (*)	4	LAS Elective (*)	4		
	CSCI 371 Professional Communications (Writing Intensive)	3	LAS Perspective 6	3		2
3	CSCI 251 Concepts of Parallel and Distributed Systems	3	Co-op	0		42
	CSCI 320 Principles of Data Management	3				
	CS Elective	3	9			
	LAS Elective (*)	3				
	LAS Immersion 1	3				
	CSCI 261 Analysis of Algorithms	1	CSCI 331 Introduction to Intelligent Systems	3.		
	CS Elective		CS Elective (#)	3		
	CSCI 344 Programming Language Concepts		LAS Elective (*)	3		
	Free Elective	3   I	Free Elective	3		
	LAS Perspective 1	3 I	LAS Immersion 2	3		

Plan of Study – BS Degree (Semesters) – Computer Science (RIT)							
Year	Fall Semester		Spring Semester		Summer Term		
	Cou	urse	Credits	Course	Credits	Course	Credits
5	Co-op	A GO TOR	0	CS Elective (#)	3		
				LAS Immersion 3	3	<del></del>	
				LAS Elective	3		
				Free Elective	3		
				Free Elective	3		

(\*) Students must complete one of the following lab science sequences: (a) PHYS 211 and 212 (University Physics I and II), (b) CHMG 141/145 and 142/146 (General & Analytical Chemistry I/General & Analytical Chemistry I Lab and General & Analytical Chemistry II/General & Analytical Chemistry II Lab), or (c) BIOL 101/103 and 102/104 (General Biology I/General Biology I Lab and General Biology II/General Biology II Lab). Students must also choose two science electives from a list of approved electives that either extend or complement their lab science selection. Lab science courses and science electives fulfill LAS requirements.

(#) Two CS Electives must be chosen from the same cluster.

Category Summaries – BS Degree (Semesters) – Computer Science (RIT)					
Category	Total Number of Courses	Total Semester Credits			
Required Computer Science	12	38			
(includes one Software	- September - Sept	50			
Engineering course)					
Computer Science Electives	4	12			
Liberal Arts and Sciences	20	64			
(LAS) (*)	4	04			
Free Electives	4	12			
Wellness Education	2	0			
Cooperative Education (co-op)	minimum two semesters and	0			
	one summer	Ü			
Overall totals	40 + 2 wellness education +	126			
2	co-op	-			

(\*) RIT has adopted a General Education Framework. Courses from Liberal Arts and Science, as well as courses from other units within RIT that receive General Education approval, are used to satisfy this framework. The framework places courses in categories: Foundation; Perspectives; Immersion; Electives. Individual programs, such as Computer Science, are permitted to designate specific courses that students must take to fulfill LAS Perspectives and LAS Electives.