MINNESOTA STATE COLLEGES AND UNIVERSITIES* ARTICULATION AGREEMENT BETWEEN	Anoka Ramsey Community College AND St. Cloud State University

*The Board of Trustees of the Minnesota State Colleges and Universities is authorized by Minnesota Statutes, Chapter 136F to enter into Agreements and has delegated this authority to colleges and universities.

This Agreement is entered into between **Anoka Ramsey Community College** (hereinafter sending institution), and **St. Cloud State University** (hereinafter receiving institution). This Agreement and any amendments and supplements, shall be interpreted pursuant to the laws of the State of Minnesota.

The sending institution has established a **COMPUTER SCIENCE TRANSFER PATHWAY A.S.** (hereinafter sending program), and the receiving institution has established a **B.S. SOFTWARE ENGINEERING** (hereinafter receiving program), and will facilitate credit transfer and provide a smooth transition from one related program to another. It is mutually agreed:

Admission and Graduation Requirements

A. The receiving institution's admission and program admission requirements apply to both direct entry students and to students who transfer under this agreement.
B. Students must fulfill the graduation requirements at both institutions.
C. Students must complete the entire sending program and meet the receiving institution's admission requirements for the agreement to apply.

Transfer of Credits

A. The receiving institution will accept 60 credits from the sending program. A total of 67-68 credits remain to complete the receiving program.
B. Courses will transfer as described in the attached Program Articulation Table. For system institutions, once the courses are encoded, they will transfer as described in the uSelect Audit.

Implementation and Review

A. The Chief Academic Officers or designees of the parties to this agreement will implement the terms of this agreement, including identifying and incorporating any changes into subsequent agreements, assuring compliance with system policy, procedure and guidelines, and conducting a periodic review of this agreement.
B. This Articulation Agreement is effective on 07/01/2019 and shall remain in effect until the end date of 06/31/2024 or for five years, whichever occurs first, unless terminated or amended by either party with 90 days prior written notice.
C. The college and university shall work with students to resolve the transfer of courses should changes to either program occur while the agreement is in effect.
D. This Articulation Agreement will be reviewed by both parties beginning 04/01/2024 (within six months of the end date).
E. When a student notifies the receiving institution of their intent to follow this agreement, the receiving institution will encode course waivers and substitutions.

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PROGRAM ARTICULATION TABLE

	College (sending)	University (receiving)
Institution	Anoka Ramsey Community College	St. Cloud State University
Program name	Computer Science Transfer Pathway A.S.	Software Engineering
Award Type (e.g., AS)	AS	BS
Credit Length	60	122
CIP code (6-digit)	11.0701	14.0903
Describe program admission requirements (if any)	N/A	Admission to SCSU – Direct admit to major.

Instructions

- List all required courses in both academic programs.
- MnTC goal areas transfer to the receiving institution according to the goal areas designated by the sending institution.
- Do not indicate a goal area for general education courses that are not part of the MnTC.
- For restricted or unrestricted electives, list number of credits.
- Credits applied: the receiving institution course credit amount may be more or less than the sending institution credit amount. Enter the number of credits that the receiving institution will apply toward degree completion.
- Show equivalent university-college courses on the same row to ensure accurate DARS encoding.
- Equiv/Sub/Wav column: If a course is to be encoded as equivalent, enter Equiv. If a course is to be accepted by the university as a "substitution" only for the purposes of this agreement, enter Sub. If a course requirement is waived by the receiving institution, enter Wav. If a course is to be accepted by the university as a MnTC goal area, restricted elective or unrestricted elective, leave the cell blank.
  (To add rows, place cursor outside of the end of a row and press enter.)

SECTION A - Minnesota Transfer Curriculum-General Education

College (sending)			University (receiving)			
course prefix, number and name	Goal(s)[1]	Credits	course prefix, number and name	Goal(s)[1]	Credits Applied	Equiv Sub Wav
Minnesota Transfer Curriculum-General Education						
Complete at least 30 credits in courses from the Minnesota Transfer Curriculum (MnTC), including all course listed. You must complete at least 1 course in 6 of 10 goal areas. One course may satisfy more than 1 emphasis area, but the course credits may be counted only once.						
ENGL 1120: Cross Curr Coll Writ & Crit Read OR ENGL 1121: College Writing & Critical Reading	1, 2	4	ENGL 191: Intro to Rhetorical & Analytical Writing	1, 2	4	E
CMST 1110: Introduction to Comm OR CMST 2220: Interpersonal Communication OR CMST 2215: Public Speaking	1, 2 1, 7 1, 2	3 3 3	CMST 192: Intro to Comm Studies OR CMST 220: Interpersonal Comm OR CMST 211: Public Speaking	1, 2 1, 7 1, 2	3 3 3	E E E
Goal area elective, highly recommended: PHYS 1327: College Physics I	3	6	PHYS 234: Classical Physics I	3	6	E
Goal area elective, highly recommended: BIOL 1104: The Human Body – Structure and Function	3	4	BIOL 103: Human Biology	3	4	E
MATH 1400: Calculus I	4	5	MATH 221: Calculus I	4	5	E
Goal Area courses selected to address at least three additional areas. Each course should count in two or more of Goal Areas 5, 6, 7, 8, and 10. Examples: GEOG 1102, GEOG 1108.	5, 6, 7, 8, 10	8		5, 6, 7, 8, 10	8	E
MnTC/General Education Total		30				

[1] MnTC goal areas transfer to the receiving university according to the goal areas designated by the sending college

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Special Notes, if any: Other options to the 10 credits in Goal 3 are possible. Speak to an advisor for details on what may be substituted.

SECTION B - Major, Emphasis, Restricted and Unrestricted Electives or Other

(pre-requisite courses, required core courses, required courses in an emphasis, or electives (restricted or general) within the major). Restricted electives (in Major) fulfill a specific requirement within a major. Example A: "Chose two of the following three courses;" Example B: A Biology degree may require 40 science credits (20 credits of required courses + 20 credits of listed related courses, such as botany, genetics, sociobiology, etc. which students can select).

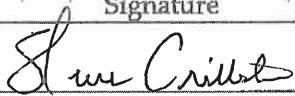| Major, Emphasis, Restricted, Unrestricted Electives or Other Courses				
CSCI 1101: Intro to Comp Sci & Prob Solving	3	CSCI 200: Elements of Computing	3	E
CSCI 1106: Fund of Computer Science I	4	CSCI 201: Computer Science 1	4	E
CSCI 1107: Fund of Computer Science II	4	CSCI 301: Computer Science 2	4	E
CSCI 2021: Machine Architecture	4	CSCI 220: Computer Architecture I	4	S
MATH 2100: Discrete Mathematics **OR** CSCI 2100: Discrete Mathematics	4	MATH 271: Discrete Mathematics	4	E
Computer/MnTC Electives (11 credits): Highly recommended: CNET 2101: Intro to Networks (CCNA I) CSCI 1125: Object-Oriented Prog using Java MATH 1401: Calculus II	3 3 5	SE 221: Introduction to Computer Networking CSCI 262: Programming in Java / University Elective MATH 222: Calculus II	3 3 5	S E E
Unrestricted elective credits (if none enter 0)	0	College's unrestricted elective credits accepted in transfer (if none enter 0)	0	
Major, Emphasis, Unrestricted Electives Total	*30*	**Total College Credits Applied (sum of sections A and B)**	60	

SECTION C - Remaining University (receiving) Requirements

	course prefix, number and name	Credits
	GENG 101: Ethics and the Engineering Profession (Goal 9)	3
	SE 210: Operating Systems and Applications	3
	SE 211: Introduction to Database Systems	3
	SE 231: Intro to Computer Security	3
	SE 240: Intro to Software Engineering	3
	SE 350: Software Engineering and Human Computer Interaction	4
	SE 460: Software Analysis	3
	SE 465: Software Design	3
	SE 470: Software Quality	3
	SE 475: Software Construction	3
	SE 480: Software Project Management	3
	SE 342: Applied Undergraduate Research	3
	SE 444: Internship	3
	SE 490: Software Project I	3
	SE 491: Software Project II	3
	ENGL 332: Writing in the Professions **OR** CMST 341: Communication in the Workplace	3-4
	STAT 353: Statistical Methods I for Engineers	3
	MATH Elective: Choose of the following: MATH 304 **OR** MATH 320 **OR** STAT 321	3
	SE Electives: Choose TWO courses from the following: CSCI 450; SE 412; SE 413; SE 466; SE 476; SE 477; SE 478; SE 479; SE 482	6
	PHYS 234: Classical Physics I	*(6)*
	* BIOL 103: Human Biology	*(4)*
	* SE 221: Introduction to Computer Networking	*(3)*
	* MATH 222: Calculus II	*(5)*
	Additional Goal Areas to fulfill MnTC	6
	University unrestricted elective credits not counted elsewhere (if none enter 0)	0
	Total Remaining University Credits	67-68

Special Notes, if any: MATH 2220 at Anoka Ramsey will transfer as equivalent to MATH 320 at SCSU. Students may it prior to transfer. In addition, GENG and SE courses offered by the university may be taken at Anoka Ramsey in an online or streaming format.
*These courses will be required at receiving institution if not completed as part of recommended electives at sending institution.

SECTION D – Summary of Total Program Credits

College (sending) Credits		University (receiving) Requirements	
MnTC/General Education	30		
Major, Emphasis, Unrestricted Electives or Other	30		
Total College Credits	60	**Total College Credits Applied**	60
		Remaining credit to be taken at the university (receiving institution)	67-68
		Total Program Credits	127-128

Special Notes, if any:

College	Name	Signature	Date
Chief Academic Officer	Steve Crittenden	*[signature]*	8/8/19
STEM Dean Title	Rebecca Krystyniak	*[signature]*	8/6/19

University	Name	Signature	Date
Chief Academic Officer	Dan Gregory	*[signature]*	7/29/19
Provost Title	Steve Crittenden		
DARS Encoder	Ashly Livingood	*[signature]*	7-25-19

Date when equivalencies were verified/encoded in DARS by the receiving MnSCU institution.

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