MINNESOTA STATE COLLEGES AND UNIVERSITIES* TRANSFER AGREEMENT BETWEEN

Rochester Community and Technical College AND Winona 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 Rochester Community and Technical College [851 30th Avenue Southeast, Rochester, MN 55904] (hereinafter sending institution), and Winona State University [175 West Mark Street, Winona, MN 55987] (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 **Bioinformatics Foundations Associate in Science A.S.** (hereinafter sending program), and the receiving institution has established an **Applied Computer Science** – **Bioinformatics Emphasis B.S.** (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, including grade requirements for courses and an overall GPA requirement.

Transfer of Credits

- A. The receiving institution will accept 60 credits from the sending program. A total of 60 credits remain to complete the receiving program.
- B. Courses will transfer as described in the attached Program Transfer Table. For system institutions, once the courses are encoded, they will transfer as described in the "Transferology" 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 Transfer Agreement is effective on 01/15/2023 and shall remain in effect until 01/15/2028 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 Transfer Agreement will be reviewed by both parties beginning 07/15/2027 (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.

PROGRAM ARTICULATION TABLE			
	College (sending)	University (receiving)	
Institution	Rochester Community and Technical College	Winona State University - Rochester	
Program name	Bioinformatics Foundations	Applied Computer Science – Bioinformatics	
Award Type (e.g., AS)	Associate in Science (A.S.) degree	Bachelor of Science (B.S.) degree	
Credit Length	60 credits	120	
CIP code (6-digit)	11.010101	11.0701	
Describe program admission requirements (if any)		All courses must be taken for grade, and only a minimum grade of "C" will be acceptable. To be considered for admission, students must have a minimum 2.5 GPA.	

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.

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						
ENGL 1117 Reading and Writing Critically I	1	4	ENG 111 College Reading & Writing	4	8	Е
ENGL 1118 Reading and Writing Critically II	1	4	(ENGL 1117 + 1118 = ENG 111)	1	0	
COMM 1114 Fundamentals of Speech	1	3	CMST 191 Intro to Public Speaking	1	3	Е
BIOL 1220 General Biology I	3 & 10	4	BIOL 241 Basics of Life	3 & 10	4	Е
BIOL 2300 Genetics	3	4	BIOL 310 Genetics	3	4	Е
CHEM 1127 Chemical Principles I	3	4	CHEM 212 Principles of Chemistry I	3	4	Е
MATH 1119 Applied Calculus (3 cr) or MATH 1127 Calculus I (5 cr) ²	4	3 or 5	MATH 140 Applied Calculus or MATH 212 Calculus 1 ²	4	3 or 5	Е
Goal 5: History and Social/Behavioral Science ² Choose a minimum of 3 credits from two different areas.	5	6	Goal 5: History and Social/Behavioral Science ²	5	6	E
Goal 6: Humanities and Fine Arts ² Choose a minimum of 3 credits from two different areas.	6	6	Goal 6: Humanities and Fine Arts ²	6	6	E
MnTC Electives: Choose credits from MnTC approved courses	MnTC	0-2	MnTC Electives	MnTC	0-2	E
MnTC/General Education Total		40			40	

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

¹ MnTC goal areas transfer to the receiving Minnesota State college/university according to the goal areas designated by the sending college/university. Goals 1-10 must be met with a minimum of 40 MnTC credits.

² Students are encouraged to select courses that meet additional Goal areas.

(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 COMP 1150 Computer Science Concepts CS 101 Exploring Creative Computing 3 Ε COMP 2243 Programming & Problem Solving 4 CS 234 Algorithms and Problem Solving I 4 Ε COMP 2247 Algorithms and Data Structures CS 250 Algorithms and Problem Solving II Ε Students transferring to WSU - Rochester are encouraged to begin taking WSU Computer Science courses concurrently after completing the above core requirements. MATH 2218 Discrete Mathematics 4 CS 275 Mathematical Foundations of Algorithms 4 S STAT 210 Statistics Е MATH 2350 Introduction to Mathematical Statistics 4 4 Unrestricted elective credits College's unrestricted elective credits accepted in 1 1 (**Physical development/wellness course recommended) transfer (if none enter 0) (Physical dev/wellness) Major, Emphasis, Unrestricted Electives Total 20 **Total College Credits Applied** 60 (sum of sections A and B)

SECTION C - Remaining Univ	versity (receiving) Requirements	
	course prefix, number and name	Credits
	CHEM 213 Principles of Chemistry II ³	4
	BIOL 242 Organismal Diversity ⁴	4
	CS 313 Networking and Telecommunications	4
	CS 341 Data Structures	4
	CS 344 Web Programming OR CS 345 Mobile Application Development	3
	CS 368 Introduction to Bioinformatics	4
	CS 375 Computer Systems	4
	CS 385 Applied Database Management Systems	4
	CS 410 Software Engineering	4
	CS 444 Human Computer Interaction	3
	CS 485 Advanced Database Systems	3
	Restricted Computer Science Electives (see catalog)	3
	Remaining MnTC Requirements or University unrestricted elective credits ⁶	15
	Physical Development/Wellness courses (**This assumes that students completed 1 credit in this category at RCTC-See starred note above.)	1
	Total Remaining University Credits ²	60

 $^{^3}$ Students may opt to take CHEM 1128 Chemical Principles II at RCTC which will transfer to WSU as CHEM 213 Principles of Chemistry II.

⁴ Students may opt to take BIOL 1230 Survey of Life Forms at RCTC (Fulfills MnTC Goal 3) which will transfer to WSU as BIOL 242 Organismal Diversity.

⁶ Select courses that meet additional goal areas (5-9).

SECTION D - Summary of Total Program Credits			
College (sending) Credits		University (receiving) Requirements	
MnTC/General Education	40		
Major, Emphasis, Unrestricted Electives or	20		
Other	20		
Total College Credits	60	Total College Credits Applied	60
		Remaining credit to be taken at the university	60
		(receiving institution)	00
		Total Program Credits	120

Special Notes, if any:

Winona State University requires:

- A minimum of 40 required semester hours (credits) for the baccalaureate degree at the upper-division (300-400) level. If a lower division course is shown as equivalent to an upper division course, check with the university to determine if it will count toward the 40 required credits of upper division.
- A minimum of 30 credits out of the last 60 credits to be completed at Winona State University.
- All **major emphasis** courses taken for grade.
- A minimum grade of "C".
- A cumulative grade point average of at least 2.5 GPA for the courses taken while enrolled at RCTC.
- A minimum WSU GPA of 2.50 and an overall cumulative GPA of 2.50 required.
- A minimum GPA of 2.50 required in the major.
- Students may attempt CS course at most 3 times.
- Students must complete at least 18 credits of 300-400 level CS courses with at least 12 credits beyond the Computer Science core requirements at WSU.

The following limitations also apply:

- Developmental courses shall not be counted toward graduation.

Rochester Community & Technical College	Name	Signature	Date
Chief Academic Officer VPAA and CAO Executive VP Academic Affairs	Michelle Pyfferoen	Alekelle Pofferson	10/14/2022
Title			
Winona State University	Name	Signature	Date
College of Science & Engineering Dean	Charla Miertschin, Ph.D.	Charles Mintellini	10/17/2022
· ·	Charla Miertschin, Ph.D. Darrell Newton, Ph.D.	Charles Mintelleri Drunten	10/17/2022
Engineering Dean Chief Academic Officer		Charles Mintelleri Muntan	