# MINNESOTA STATE COLLEGES AND UNIVERSITIES\* TRANSFER AGREEMENT BETWEEN

Western 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 between Western Technical College [400 7<sup>th</sup> Street North, La Crosse, WI 54601] (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 an **Associate of Applied Science**—Electronic & Computer Engineering (hereinafter sending program), and the receiving institution has established a General Engineering—Electronics 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 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 64 credits from the sending program. A total of 83-85 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 04/01/2025 and shall remain in effect until the end date of 04/01/2030 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 10/01/2029 (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 TRANSFER TABLE					
	College (sending)	University (receiving)			
Institution	Western Technical College	Winona State University			
Program name	Associate of Applied Science— Electronic & Computer Engineering	General Engineering—Electronics			
Award Type (e.g., AS)	ASLA	BS			
Credit Length	64	83-85			
CIP code (6-digit)	15.1201	14.0101			
Describe program admission requirements (if any)		Admission requirements are listed on page 5.			

#### 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 <sup>1</sup>						
College (sending)			University (receiving)			
course prefix, number and name	Goal(s) <sup>1</sup>	Credits	course prefix, number and name	Goal(s) <sup>1</sup>	Credits Applied	E, S, Wav
Minnesota Transfer Curriculum-General Education						
English Composition 1: 801136	1	3	ENG 111 College Reading and Writing	1	3	Е
General Physics I 806154 <sup>2</sup>	3	4	PHYS 221 University Physics I (Calculus based) <sup>2</sup>	3	4	S
College Technical Math 1A 804113	4	3	MATH 115 College Algebra <sup>3</sup>	4	5	E
College Technical Math 1B 804114	4	2				
Intro to Sociology 809196	5&7	3	SOC 150 Intro to Sociology	5&7	3	Е
Intro to Psychology 809198	5	3	PSY 210 Intro to Psychological Science	5	3	Е
MnTC/General Education Total		18				

#### Special Notes, if any:

\*\*The Engineering programs at Winona State University has different requirements for MnTC Goals. Goals 1-4 are fulfilled by the required courses. Beyond that, Goals 5 through 10 can be met by completing 3 semester hours for each of goals 5 – 10. Physical Development/Wellness requirements are waved.

SECTION B - Major, Emphasis, Restricted and Unrestricted Electives or Other					
Major, Emphasis, Restricted, Unrestricted Electives or					
Other Courses					
Strengths Seminar 890-106		OR 100 Intro. to Higher Education	1	E	
Technical Reporting 801197	3	ENG 439 Technical Writing (Writing Intensive)	3	E	
Intro to LabVIEW 662153	2	PHYS 321 Computerized Data Acquisition & Analysis		E	
SOLIDWORKS 606184	2	CME 182 Engineering Graphics and Design		E	
Electronic Devices 660125	4				
Integrated Circuit Applications 662157	3	PHYS 330 Electronics <sup>4</sup>	8 <sup>3</sup>	E	
Electronics Projects Design 663172	1				
Data Communications & Networking 662140		CC 224 Algorithms and Broblem Solving 15	<b>-</b> 4	۰ ۲	
Engineering Software 663100	2	CS 234 Algorithms and Problem Solving P	2.	5	
Digital Electronics Concepts 662137		PHYS 332 Digital Circuits	4	E	
Embedded Systems 662134		PHYS 333 Microprocessor Electronics		E	
Industrial Controls Programming 620131		General Engineering Electronics Concentration		E	
Industrial Controls Applications 620127		Elective		L	
DC/AC 1 660115		Technical Credits	3	E	
DC/AC 2 660116		Technical Credits		E	
Electronic Skills 660108		Technical Credit		1	
<ul> <li>Electronic Projects Integration course: Advanced Circuits 662105: (5<sup>th</sup> term elective)</li> <li>Power Conversion Analysis 663171</li> </ul>	3 3	Phys 328 Electric Circuits and Measurements	6 <sup>6</sup>	S	
Major, Emphasis Total	46	Total College Credits Applied (sum of sections A & B)			

<sup>&</sup>lt;sup>1</sup> MnTC goal areas transfer to the receiving MnSCU 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.

<sup>&</sup>lt;sup>2</sup> Acceptance of General Physics I 806154 as substitution for the PHYS 221 (which is a calculus-based physics course at Winona State University) is conditionally based upon successful completion PHYS 222 (grade of B or better) at Winona State University.

<sup>&</sup>lt;sup>3</sup> Students should also plan to complete the equivalent of precalculus (College Technical Math 2 804116 at Western Technical College or MATH 120 Precalculus at Winona State University) to prepare for the calculus requirement at Winona State University.

<sup>&</sup>lt;sup>4</sup> 8 credits transfer to Winona State University and apply toward the Bachelor of Science degree. 4 credits apply toward the Engineering upper division credits for the degree; 4 credits will transfer as technical credits.

<sup>&</sup>lt;sup>5</sup> 5 credits transfer to Winona State University and apply toward the Bachelor of Science degree. 4 credits apply toward the Engineering credits for the degree; 1 credit will transfer as technical credits.

<sup>6 6</sup> credits transfer to Winona State University and apply toward the Bachelor of Science degree. 4 credits apply toward the Engineering credits for the degree; 2 credits will transfer as technical credits.

SECTION C - Remaining University (receiving) Requirements – Winona State University <sup>1</sup>					
	MATH 212 Calculus I	4			
	MATH 213 Calculus II	4			
	MATH 312 Multivariable Calculus	4			
	MATH 313 Differential Equations	4			
	STAT 303 Intro to Engineering Statistics	3			
	CHEM 212 Principles of Chemistry I	4			
	CHEM 213 Principles of Chemistry II	4			
	PHYS 222 University Physics II	4			
	PHYS 231 University Physics IB	1			
	PHYS 232 University Physics 2B	1			
	PHYS 320 Computational Physics	2			
	PHYS 340 Modern Physics (Writing intensive)	4			
	PHYS 455 Engineering Design Project (Oral Intensive)	4			
	PHYS 420 Control Systems	3			
	PHYS 430 Electromagnetic Theory I (Critical Analysis Intensive)	3			
	CME 250 Statics	3			
	CME 260 Mechanics of Materials	3			
	CME 280 Properties of Materials	3			
	CME 281 Properties of Materials Laboratory (Writing Intensive)	1			
	CME 491A Engineering Seminar (Oral Intensive)	0			
	CME 491 B Engineering Seminar (Oral Intensive)	1			
	PHYS 150 Engineering in Modern World (Goal 9)	3			
	PHYS 345 Thermodynamics & Statistical Physisc (4 credits) ** OR ** CME 300 Thermodynamics (3 credits)	3-4			
	PHYS 350 Mechanics (4 credits) ** OR ** CME 270 Dynamics (3 credits)	3-4			
	General Engineering elective—See catalog	2			
	CMST 191 Intro to Public Speaking	3			
	Goal Area 6 Humanities	3			
	Goal Area 8 Global Perspectives	3			
	Goal Area 10 People and the Environment	3			
	Total Remaining University Credits	83-85			

<sup>1</sup> Students may opt to complete equivalent courses at Western Technical College prior to transferring to Winona State University. See Transferology for an equivalent course list or consult with an advisor.

SECTION D - Summary of Total Program Credits				
College (sending) Credits		University (receiving) Requirements		
18				
46				
64	Total College Credits Applied	64		
	Remaining credit to be taken at the university (receiving institution)	83-85		
	Total Program Credits	147-149		
	Summ 18 46 64	Summary of Total Program Credits         University (receiving) Requirements         18         46         64         Total College Credits Applied         Remaining credit to be taken at the university (receiving institution)         Total Program Credits		

## **Special Notes:**

Students must earn a cumulative grade point average of at least 2.5 GPA and obtain a grade of C or higher in the following courses to qualify for formal admission into the General Engineering program at Winona State University:

## Western Technical College

- English Composition 1: 801136
- General Physics I 806154
- SOLIDWORKS 606184

## Winona State University

- CMST 191 (Intro to Public Speaking)
- MATH 212 Calculus I
- MATH 213 Calculus II
- MATH 312 Multivariable Calculus
- PHYS 222 University Physics II
- CHEM 212 Principles of Chemistry I
- CHEM 213 Principles of Chemistry II
- PHYS 150 Engineering in Modern World
- CME 250 Statics

# Winona State University also requires:

- All upper division general engineering course work to be completed at Winona State University.
- All courses taken for a letter grade.
- Completion of the *Fundamentals of Engineering* exam prior to graduation.

## The following limitation also applies:

Admission is selective and subject to approval of the Engineering Admission Committee.

Western Technical College	Name	Signature	Date	
Dean Integrated Technology Division	Mike Poellinger	Signed by: Michael J. Poellinger 52EA43B2E96D420	3/24/2025   1:52	PM CDT
Chief Academic Officer VP of Learning and CAO	Rebecca Hopkins	Signed by: DWWCA/Hop AAFB25F4CD1946E	4/1/2025   2:39 PM	1 PDT

Winona State University	Name	Signature	Date		
College of Science & Engineering Dean	Nicole Williams	Signed by: Mcole Williams D4C2DE9CDE3F435	3/12/2025		
Chief Academic Officer Provost and VPAA	Julie Furst-Bowe	Signed by: Julie Furst-Bowe 823E9078A24B4A9	3/19/2025   6:54 /	M PDT	
DARS Encoder	Jen Meyer	Signed by: Jon Meyr C3A7690DC30F452	4/9/2025   7:30 AM	1 PDT	
Date when equivalencies were encoded in DARS by the receiving Minnesota State institution:					
	4/9/2025   7:30 AM PDT				