

**MINNESOTA STATE COLLEGES AND
UNIVERSITIES*
TRANSFER AGREEMENT
BETWEEN**

**Minnesota State College Southeast
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 Minnesota College Southeast [1250 Homer Rd, Winona, MN 55987] (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 **Electrical Engineering Technology A.A.S.** (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 **68** credits from the sending program. A total of **71 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 **07/01/2023** and shall remain in effect until the end date of **07/01/2028** 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 **02/01/2028** (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	Minnesota State College Southeast	Winona State University
Program name	Electrical Engineering Technology	General Engineering
Award Type (e.g., AS)	AAS	BS
Credit Length	68	139
CIP code (6-digit)	50.0132	14.0101
Describe program admission requirements (if any)		Admission requirements are listed on page 5.
<p style="text-align: center;">Instructions</p> <ul style="list-style-type: none"> • 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 ¹						
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 1215 College Writing I ²	1	3	ENG 111 College Reading and Writing ²	1	3	Partial E ²
ENGL 1410 Technical Writing	1	3	ENGL 211 Writing in Communities	1	3	E
COMM 1218 College Speech	1	3	CMST 191 Intro to Public Speaking	1	3	E
PHYS 1215 College Physics I ³	3	4	PHYS 221 University Physics I ³	3	4	S
MATH 1225 Pre-Calculus	4	3	MATH 120 Pre-Calculus	3	3	E
MATH 2440 Calculus I ⁴	4	4	MATH 212 Calculus I	4	4	E
PSYC 1110 Introduction to Psychology	5 & 7	3	PSYC 210 Introduction to Psychological Science	5 & 7	3	E
ECON 1210 Survey of Economics	5 & 8	3	Goal 5 & 8 Elective	5 & 8	3	E
MnTC Goal 6 Choose a course simultaneously fulfilling multiple goals 6, 9,10** (e.g., HUMA 1125 Moral Problems or PHIL 1410 Technology Ethics satisfies goals 6 & 9.)	6, 9, 10	3	Choose a course simultaneously fulfilling multiple goals 6, 9, 10**	6, 9, 10	3	E
MnTC/General Education Total		29				
Special Notes, if any: **The Engineering programs at Winona State University have 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						
MATH 2445 Calculus II ⁴		4	MATH 213 Calculus II		4	E
ELEC 1202 Introduction to DC Electricity		2	Technical Credits		2	E
ELEC 1204 Introduction to AC Electricity		2	Technical Credits		2	E
ELECT 1209 DC Theory & Circuits		2	Technical Credits		2	E
ELEC 2505 Advanced DC/AC Circuit Analysis		3	PHYS 328 Electrical Circuits (4 SH) and Measurement & PHYS 330 Electronics (4 SH) Upper Division Engineering Elective (3 SH) Technical Credits (3 SH)	14	S	
ELEC 2260 Linear Integrated Circuits		4				
ELEC 2510 Advanced Electronic Circuit Analysis		3				
ELEC 1251 Solid State Devices		4	PHYS 332 Digital Circuits ⁵	7 ⁵	S	
ELEC 1212 Digital Electronics I		3				
ELEC 2211 Digital Electronics II		4	PHYS 333 Microprocessor Electronics	5 ⁶	S	
ELEC 2230 Microcontroller Applications		5				
ELEC 2221 Programmable Controllers		3	Upper Division Engineering Elective	3	E	
Major, Emphasis Total		39	Total College Credits Applied (sum of sections A & B)		68	

¹ 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.

² ENGL 1215 will transfer as an equivalent to ENG 111 Winona State University when ENGL 112 is completed at Winona State University. (This course is offered online during summer sessions.)

³ Students will receive credit with the successful completion of PHYS 222 (grade of B or better) at Winona State University.

⁴ Students may opt to complete Calculus equivalent at Winona State University.

⁵ 7 credits transfer to Winona State University and apply toward the Bachelor of Science degree. 3 credits apply toward the Engineering upper division credits for the degree; 4 credits will transfer as technical credits.

⁶ 5 credits transfer to Winona State University and apply toward the Bachelor of Science degree. 3 credits apply toward the Engineering upper division credits for the degree; 2 credits will transfer as technical credits.

SECTION C - Remaining University (receiving) Requirements – Winona State University

Course prefix, number and name	Credits
ENG 112 Research Writing (Goal 1)	1
CHEM 212 Principles of Chemistry I (Goal 3)	4
CHEM 213 Principles of Chemistry II (Goal 3)	4
PHYS 222 University Physics II (Goal 3)	4
MATH 312 Multivariable Calculus	4
MATH 313 Differential Equations	3
MATH 314 Linear Algebra for Differential Equations	1
STAT 303 Introduction to Engineering Statistics	3
CME 102 Introduction to Engineering	2
CME 182 Engineering Graphics and Design	2
CME 250 Statics	3
CME 260 Mechanics of Materials	3
CME 280 Properties of Materials	3
CME 281 Properties of Materials Lab	1
CME 491A Engineering Seminar	0
CME 491B Engineering Seminar	1
PHYS 231 University Physics 1B	1
PHYS 232 University Physics IIB	1
PHYS 320 Computational Physics	2
PHYS 321 Computerized Data Acquisition and Analysis	2
PHYS 340 Modern Physics	3
PHYS 345 Thermodynamics (4) or CME 300 Thermodynamics (3)	3
PHYS 350 Mechanics (4) or CME 270 Dynamics (3)	3
PHYS 420 Control Theory	3
PHYS 430 Electromagnetic Theory	3
PHYS 455 Engineering Design	4
CS 234 Algorithms and Problem Solving	4
Remaining MnTC Goal Area Requirements	3
Total Remaining University Credits	71

SECTION D - Summary of Total Program Credits			
College (sending) Credits		University (receiving) Requirements	
MnTC/General Education	29		
Major, Emphasis, Unrestricted Electives or Other	39		
Total College Credits	68	Total College Credits Applied	68
		Remaining credit to be taken at the university (receiving institution)	71
		Total Program Credits	139

Special Notes:
 Acceptance of PHYS 1215 as a substitution for PHYS 222 at Winona State University is conditionally based upon successful completion of PHYS 222 (grade of B or better) at Winona State University.



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:




<p>Minnesota State College Southeast</p> <ul style="list-style-type: none"> ○ ENGL 1215 College Writing ○ COMM 1218 College Speech ○ MATH 2440 Calculus I ○ MATH 2445 Calculus II ○ PHYS 1215 College Physics I 	<p>Winona State University</p> <p>CHEM 212 Principles of Chemistry I CHEM 213 Principles of Chemistry II CME 102 Introduction to Engineering CME 182 Engineering Graphics and Design CME 250 Statics CS 234 Algorithms and Problem Solving MATH 312 Multivariable Calculus PHYS 222 University Physics II</p>
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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.

Minnesota State College Southeast	Name	Signature	Date
Vice President of Student Success	Ginny Boyum	 Ginny Boyum (Jun 14, 2023 12:51 CDT)	Jun 14, 2023
Dean of Academic Innovation	Alex Howell	 Alex N Howell (Jun 14, 2023 12:22 CDT)	Jun 14, 2023

Winona State University	Name	Signature	Date
College of Science & Engineering Dean	Charla Miertschin	 Charla Miertschin (Jun 14, 2023 12:23 CDT)	Jun 14, 2023
Chief Academic Officer Provost	Darrell Newton, PhD Winona State University		Jun 14, 2023
DARS Encoder	Gabriel Lindo-Ardilla		Jun 15, 2023
Date when equivalencies were encoded in DARS by the receiving Minnesota State institution:			<u>6/15/2023</u>












SE & WSU Articulation Agreement Engineering


Final Audit Report

2023-06-15


Created:	2023-06-14
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 Agreement completed.

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