

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

**CENTURY COLLEGE
AND
DUNWOODY COLLEGE OF TECHNOLOGY**

*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 **CENTURY COLLEGE** at 3300 Century Avenue North, St. Paul, MN 55110 (hereinafter sending institution), and **DUNWOODY COLLEGE OF TECHNOLOGY** at 818 Dunwoody Boulevard, Minneapolis, MN 55403 (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 **ENGINEERING ASSOCIATE IN SCIENCE DEGREE**, and the receiving institution has established a **MECHANICAL ENGINEERING BACHELOR'S DEGREE**, 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 44 credits from the sending program. A total of 80-81 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 "*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 Articulation Agreement is effective on January 1, 2017 and shall remain in effect until the end date of December 31, 2022 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 June 30, 2022 (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

Check if the sending program ___ or receiving program ___ is new.

	College (sending)	University (receiving)
Institution	Century College	Dunwoody College of Technology
Program name	Engineering Associate in Science with Mechanical Engineering specialty	Bachelor of Science in Mechanical Engineering
Award Type (e.g., AS)	AS	BS
Credit Length	60	124
CIP code (6-digit)	14.0102	14.1901
Describe program admission requirements (if any)		Minimum of 24 credits 3.0-4.0 GPA Math through Calculus II

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						
MATH 1081 Single Variable Calculus I	4	5	MATH 1810 Calculus I		3	Equiv
MATH 1082 Single Variable Calculus II	4	5	MATH 1820 Calculus II		3	Equiv
MATH 2081 Multivariable Calculus	4	5	MATH 2810 Multivariable Calculus		3	Equiv
MATH 2082 Linear Algebra & Differential Equations	4	5	MATH 2820 Linear Algebra & Differential Equations		3	Equiv
PHYS 1081 Introduction Physics I	3	5	PHYS 1800 Physics I with Lab		3	Equiv
PHYS 1082 Introduction Physics II	3	5	PHYS 1820 Physics II with Lab		3	Equiv
ENGL 1021 Composition I	1	4	ENGL 1010 English		3	Equiv
*Social & Behavioral Sciences Course	5	3	Lower Division Social Sciences Elective		3	Equiv
*Humanities and Fine Arts	6	3	Not Applicable		0	
MnTC/General Education Total		40				24

¹ MnTC goal areas transfer to the receiving MnSCU college/university according to the goal areas designated by the sending college/university

Special Notes, if any:

ENGR 2085 Deformable Body Mechanics-3 credits will NOT apply.

*Three credits in TWO of the following goal areas are required (7, 8, 9 or 10).

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				
*Mechanical Engineering Specialty: Choose 20 credits CHEM 1041 Principles of Chemistry I (Goal 3) (5) CSCI 1081 Programming Fundamentals (4) ENGR 1020 Introduction to Engineering (4) ENGR 1080 Statics (3) ENGR 2070 Thermodynamics (3) ENGR 2080 Dynamics (3) ENGR 2091 Circuits I (4)	20	CHEM 2110 Chemistry with Lab (3) MENG 1220 Introduction to Programming (4) MENG 1120 Introduction to Engineering (3) MENG 2130 Statics (3) MENG 3130 Introduction to Thermodynamics (4) MENG 2230 Dynamics (4) MENG 3110 Electrical & Controls Engineering Lab (2)	20	Equiv Equiv Equiv Equiv Equiv Equiv
Restricted elective credits - list courses (if none enter 0)	0			
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	20	Total College Credits Applied (sum of sections A and B)	44	

Special Notes, if any:

* The equivalent course(s) not taken at Century will need to be taken at Dunwoody.

SECTION C - Remaining University (receiving) Requirements

	course prefix, number and name	Credits
	Course(s) not taken from the Mechanical Engineering Specialty	3-4
	MDES 1110 Engineering Drawings with SolidWorks	4
	MENG 2110 Manufacturing Materials & Processes Lab	2
	MENG 2120 Manufacturing Materials & Processes	5
	MENG 2210 Geometric Dimensions & Tolerances Lab	2
	MENG 2220 Geometric Dimensions & Tolerances	5
	MENG 2240 Design for Manufacturability	2
	*MENG 3120 Electrical & Controls Engineering	5
	MENG 3140 Lean Manufacturing Principles	2
	MENG 3210 Heat Transfer & HVACR Lab	2
	MENG 3220 Heat Transfer & HVACR	5
	MENG 3230 Statistical Process Control	4
	MENG 3240 CAD/CAM Systems	2
	MENG 4110 Transmission of Power Lab	2
	MENG 4120 Transmission of Power	5
	MENG 4130 Finite Element Analysis	4
	MENG 4140 Mechanical Design & Systems	2
	MENG 4210 Engineering Co-op or Senior Project	2
	MENG 4220 Leadership & Project Management	5
	MENG 4230 Engineering Economics	4
	MENG 4240 Design of Experiments	2
	WRIT 2010 Technical Writing	3
	Upper Division Humanities Elective	2
	Lower Division Diversity Elective	2
	Upper Division Communications Elective	2
	HUMN 4000 Ethical Decision Making	2
	Total Remaining University Credits	80-81

Special Notes, if any:

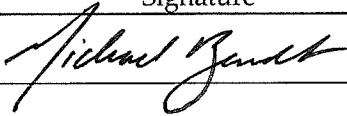
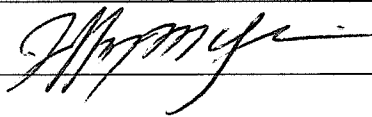
* ENGR 2092 Circuits II & ENGR 2095 Introduction to Digital Design (each course 4 credits) can be taken at Century College to apply as MENG 3120 Electrical & Controls Engineering

SECTION D - Summary of Total Program Credits

College (sending) Credits		University (receiving) Requirements	
MnTC/General Education	40		
Major, Emphasis, Unrestricted Electives or Other	20		
Total College Credits	60	Total College Credits Applied	44
		Remaining credit to be taken at the university (receiving institution)	80-81
		Total Program Credits	124-125

Special Notes, if any:

² At least 40 of the required credits for the baccalaureate degree shall be at the upper-division 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.

College	Name	Signature	Date
Chief Academic Officer	Michael Berndt		7/8/16
Title			
University	Name	Signature	Date
Chief Academic Officer	JEFF YLINEN		7-15-16
PROVOST	Dunwoody College OF TECHNOLOGY		
Title			
DARS Encoder			

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