

**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** (hereinafter sending institution), at 3300 Century Avenue North, St. Paul, MN 55110 and **DUNWOODY COLLEGE OF TECHNOLOGY** (hereinafter receiving institution) at 818 Dunwoody Boulevard, Minneapolis, MN 55403. 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** (hereinafter sending program), and the receiving institution has established a **MECHANICAL ENGINEERING BACHELOR'S DEGREE** (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 43-51 credits from the sending program. A total of 75-83 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, 2021 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, 2021 (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.

April 7, 2015

PROGRAM ARTICULATION TABLE

Check if the sending program ___ or receiving program __x__ 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	126
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		4	Equiv
MATH 1082 Single Variable Calculus II	4	5	MATH 1821 Calculus II		4	Equiv
MATH 2081 Multivariable Calculus	4	5	MATH 2810 Multivariable Calculus		4	Equiv
MATH 2082 Linear Algebra & Differential Equations	4	5	MATH 2820 Linear Algebra & Differential Equations		4	Equiv
PHYS 1081 Introduction Physics I	3	5	PHYS 1800 Physics I with Lab		4	Equiv
PHYS 1082 Introduction Physics II	3	5	PHYS 1820 Physics II with Lab		4	Equiv
ENGL 1021 Composition I	1	4	ENGL 1010 English		3	Equiv
Social & Behavioral Sciences Course	5	3	Lower Division Social Sciences Elective		3	Sub
Humanities and Fine Arts	6	3	Lower Division Humanities Elective		2	Sub
MnTC/General Education Total		40				32

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: 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 from this Specialty Area				
CHEM 1041 Principles of Chemistry I (Goal 3) (5)	20	CHEM 2110 Chemistry with Lab (4)	11-19	Equiv
CSCI 1081 Programming Fundamentals (4)		MENG 2110 Introduction to Logic & Programming (3)		Equiv
ENGR 1020 Introduction to Engineering (4)		MENG 1120 Introduction to Engineering (3)		Equiv
ENGR 1080 Statics (3)		MENG 1230 Statics (3)		Equiv
ENGR 2070 Thermodynamics (3)		MENG 2230 Introduction to Thermodynamics (3)		Equiv
ENGR 2080 Dynamics (3)		MENG 2120 Dynamics (3)		Equiv
ENGR 2085 Deformable Body Mechanics (3)		Not Applicable (0)		---
ENGR 2091 Circuits I (4)		Not Applicable (0)		---
ENGR 2094 Digital Fundamentals (2)		Not Applicable (0)		---
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)	43-51	

SECTION C - Remaining University (receiving) Requirements

	course prefix, number and name	Credits (0-4)
	Course(s) not taken from the Mechanical Engineering Specialty Area "TBD"	
	MENG 1110 Print Reading with SolidWorks	4
	MENG 1210 Machining for Engineers Lab	2
	MENG 1220 Machining for Engineers	2
	MENG 2130 Materials Science	3
	MENG 2210 Geometric Dimensions & Tolerances Lab	2
	MENG 2220 Geometric Dimensions & Tolerances	3
	MENG 3110 Electrical & Controls Engineering Lab	1
	MENG 3120 Electrical & Controls Engineering	3
	MENG 3130 Introduction to Heat Transfer	3
	MENG 3140 Design for Manufacturability	2
	MENG 3210 Heat Transfer Applications & HVACR Lab	2
	MENG 3220 Heat Transfer Applications & HVACR	3
	MENG 3230 Fluid Mechanics	3
	MENG 3240 Principles of Quality & Lean Manufacturing	3
	MENG 3250 Mechanical Design & CAD/CAM Systems	3
	MENG 4110 Transmission of Power Lab	2
	MENG 4120 Transmission of Power	3
	MENG 4130 Finite Element Analysis	3
	MENG 4140 Senior Design I	3
	MENG 4210 Senior Design II	3
	MENG 4220 Leadership & Project Management	3
	MENG 4230 Engineering Economics	2
	MENG 4240 Design of Experiments	2
	MENG 4250 Engineering Ethics	2
	WRIT 2010 Technical Writing	3
	MATH 2260 Probability & Statistics	4
	Lower Division Diversity Elective	2
	Upper Division Humanities Elective	2

	Upper Division Communications Elective	2
	University unrestricted elective credits not counted elsewhere (if none enter 0)	4
	Total Remaining University Credits²	75-83

Special Notes: "Total Remaining University Credits" may total 77-78 credits due to courses not taken from the Mechanical Engineering Specialty area at Century College.

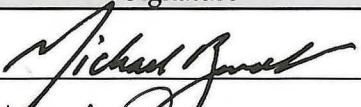


Century's ENGR 2092 Circuits II & ENGR 2095 Introduction to Digital Design (each course 4 credits) can be taken at Century to apply as MENG 3120 Electrical & Controls Engineering (3 credits) at Dunwoody.

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	43-51
		Remaining credit to be taken at the university (receiving institution)	75-83
		Total Program Credits	126

Special Notes: Students need a total of 126 credits to receive a Bachelor's Degree in Mechanical Engineering at Dunwoody College.

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		12-21-16
<i>Academic Dean</i> Title	<i>Iddw Aden</i>		1/3/17
University	Name	Signature	Date
Chief Academic Officer			
<i>Provost</i> Title	<i>JEFF YLINEK</i>		1-26-2017
DARS Encoder			
Date when equivalencies were verified/encoded in DARS by the receiving MnSCU institution.			