

MINNESOTA STATE COLLEGES AND
UNIVERSITIES*
ARTICULATION AGREEMENT
BETWEEN

HENNEPIN TECHNICAL COLLEGE
AND
MINNESOTA STATE UNIVERSITY MOORHEAD

*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 HENNEPIN TECHNICAL COLLEGE (hereinafter sending institution), and MINNESOTA STATE UNIVERSITY MOORHEAD (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 the following programs (hereinafter sending program):

Animation and Motion Graphic Artist AAS, 10.0201
Architectural Technology AAS, 15.1303
Auto Body Technician AAS, 47.0603
Automation Robotics Engineering Technology AAS, 15.0406
Automotive Technician AAS, 47.0604
Cabinetmaking AAS, 48.0703
Computer Numerical Control Technician AAS, 48.0510
Dental Assistant AAS, 51.0601
Desktop Support AAS, 11.1006
Electronics Technology AAS, 15.0303
Engineering CAD Technology AAS, 15.1302
Fluid Power Engineering Technician AAS, 15.1103
Graphic Design: Creative AAS 50.0102
Graphic Design: Web Design AAS 50.0409
Heating, Ventilation, Air Conditioning, and Refrigeration AAS, 47.0201
Hydraulic Engineering Technician AAS, 15.1103
Interactive Designer AAS, 09.0702
Landscape Design & Construction AAS, 01.0605
Landscape/ Horticulture AAS, 01.0605
Manufacturing Engineering Technology AAS, 15.0613
Marine, Motorsport and Outdoor Power Equipment Technician AAS, 47.0616
Medium/ Heavy Truck Technology AAS, 47.0613
.NET Programmer AAS, 11.0202
Networking Administrator/ Analyst AAS, 11.1001
Pneumatic Engineering Technician AAS, 15.1103
Tool and Die/ Moldmaking AAS, 48.0507

Urban Forestry Technician AAS, 03.0508

Video Production Specialist AAS, 10.0201

and the receiving institution has established an **Operations Management, BS** (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 56 - 66 credits from the sending program. A total of 60 - 64 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 06/01/2016 and shall remain in effect until the end date of 06/01/2021 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 12/01/2020 (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	Hennepin Technical College	Minnesota State University Moorhead
Program name	Animation and Motion Graphic Artist AAS, 10.0201 60 cr Architectural Technology AAS, 15.1303 72 cr Auto Body Technician AAS, 47.0603 72 cr Automation Robotics Engineering Technology	Operations Management

	<p>AAS, 15.0406 60 cr Automotive Technician AAS, 47.0604 72 cr Cabinetmaking AAS, 48.0703 72 cr Computer Numerical Control Technician AAS, 48.0510 72 cr Dental Assistant AAS, 51.0601 60 cr Desktop Support AAS, 15.1006 60 cr Electronics Technology AAS, 15.0303 72 cr Engineering CAD Technology AAS, 15.1302 72 cr Fluid Power Engineering Technology AAS, 15.1103 72 cr Graphic Design: Creative AAS 50.0102 69 cr Graphic Design: Web Design AAS 50.0409 69 cr Heating, Ventilation, Air Conditioning, and Refrigeration AAS, 47.0201 72 cr Hydraulic Engineering Technician AAS, 15.1103 60 cr Interactive Designer AAS, 09.0702 64 cr Landscape Design & Construction AAS, 01.0605 72 cr Landscape/ Horticulture AAS, 01.0605 72 cr Manufacturing Engineering Technology AAS, 15.0613 60 cr Marine, Motorsport and Outdoor Power Equipment Technician AAS, 47.0616 72 cr Medium/ Heavy Truck Technology AAS, 47.0613 94 cr .NET Programmer AAS, 60 cr 11.0202 Networking Administrator/ Analyst AAS, 11.1001 60 cr Pneumatic Engineering Technician AAS, 15.1103 60 cr Tool and Die/ Moldmaking AAS, 48.0507 70 cr Urban Forestry Technician AAS, 03.0508 60 cr Video Production Specialist AAS, 10.0201 72 cr</p>	
Award Type (e.g., AS)	AAS	BS
Credit Length	(See above)	120
CIP code (6-digit)	(See above)	52.020500
Describe program admission requirements (if any)		AAS with 30+ prescribed technical credits, as prescribed by program's accrediting board, The Association of Technology, Management, and Applied Engineering (ATMAE)

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						
General Education Requirements Students must select from at least three (3) of the (10) goal areas of the MNTC Animation and Motion Graphic Artist AAS, 15 cr Architectural Technology AAS, 15 cr Auto Body Technician AAS, 15 cr Automation Robotics Engineering Technology AAS, 15 cr Automotive Technician AAS, 15 cr Cabinetmaking AAS, 15 cr Computer Numerical Control Technician AAS, 15 cr Dental Assistant AAS, 18 cr Desktop Support AAS, 15 cr Electronics Technology AAS, 15 cr Engineering CAD Technology AAS, 15 cr Fluid Power Engineering Technology AAS, 15 cr Graphic Design: Creative AAS 15 cr Graphic Design: Web Design AAS 15 cr Heating, Ventilation, Air Conditioning, and Refrigeration AAS, 15 cr Hydraulic Engineering Technician AAS, 15 cr Interactive Designer AAS, 15 cr Landscape Design & Construction AAS, 15 cr Landscape/ Horticulture AAS, 15 cr Manufacturing Engineering Technology				MnTC General Education Courses	1 - 10	15 - 18

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

AAS, 15 cr Marine, Motorsport and Outdoor Power Equipment Technician AAS, 15 cr Medium/ Heavy Truck Technology AAS, 15 cr .NET Programmer AAS, 15 cr Networking Administrator/ Analyst AAS, 15 cr Pneumatic Engineering Technician AAS, 15 cr Tool and Die/ Moldmaking AAS, 15 cr Urban Forestry Technician AAS, 15 cr Video Production Specialist AAS, 15 cr						
MnTC/General Education Total		15 - 18				
<p>Special Notes: MSUM will accept other MnTC credits and will transfer the same number of credits and goal areas as HTC awards. Students should work with their advisor at HTC and MSUM to choose the best general education courses to take at HTC.</p> <p>ENGL 2121 Writing and Research (4 cr) is equivalent to MSUM ENGL 101 English Composition I, Goal Area 1B. COMM 2130 Public Speaking (3 cr) is equivalent to MSUM COMM 100 Speech Communications, Goal Area 1A. CHEM 2000 Intro to Chemistry is equivalent to MSUM CHEM 110/110L, Goal Area 3. CHEM 2200 Essentials of General, Organic & Biochemistry is equivalent to MSUM CHEM 180/ 185, Goal Area 3. ECON 2200 Principles of Microeconomics (3 cr) is equivalent to MSUM ECON 202 Principles of Economics: Micro, Goal Area 5. ECON 2300 Principles of Macroeconomics (3cr) is equivalent to MSUM ECON 204 Principles of Economics: Macro, Goal Area 5 & 8. MATH 2200 College Algebra (4 cr) is equivalent to MSUM MATH 127 College Algebra, Goal Area 4. MATH 2150 Intro to Statistics (3 cr) is equivalent to MSU MATH 234 Intro to Probability & Statistics, Goal Area 4. PHYS 2005 College Physics I (4 cr) is equivalent to MSUM PHYS 160 College Physics I & Lab Goal Area 3. SOC 2100 Intro to Sociology (3 cr) is equivalent to MSUM SOC 110 Intro to Sociology Goal Area 2, 5 PHIL 2100 Critical Thinking (3 cr) is equivalent to MSUM PHIL 110 Practical Reasoning Goal Area 2 PSYC 2300 General Psychology (3 cr) is equivalent to MSUM PSY 113 General Psychology, Goal Area 5.</p>						
<p align="center">SECTION B - Major, Emphasis, Restricted and Unrestricted Electives or Other</p> <p>(pre-requisite courses, required core courses, required courses in an emphasis, or electives (restricted or general) within the major). <u>Restricted electives (in Major)</u> 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).</p>						
<p align="center">Major, Emphasis, Restricted, Unrestricted Electives or Other Courses</p>						
Technical credits as prescribed in program Animation and Motion Graphic Artist AAS, 45 cr Architectural Technology AAS, 57 cr Auto Body Technician AAS, 57 cr* Automation Robotics Engineering Technology AAS, 45 cr Automotive Technician AAS, 57 cr* Cabinetmaking AAS, 57 cr Computer Numerical Control Technician AAS, 57 cr Dental Assistant AAS, 45 cr* Desktop Support AAS, 42 cr* Electronics Technology AAS, 57 cr Engineering CAD Technology AAS, 54 cr Fluid Power Engineering Technology AAS, 57 cr Graphic Design: Creative AAS 54 cr* Graphic Design: Web Design AAS 54 cr*						Technical Credits as prescribed in the program 30

Heating, Ventilation, Air Conditioning, and Refrigeration AAS, 55 cr Hydraulic Engineering Technician AAS, 45 cr Interactive Designer AAS, 49 cr Landscape Design & Construction AAS, 54 cr Landscape/ Horticulture AAS, 54 cr* Manufacturing Engineering Tech AAS, 45 cr Marine, Motorsport and Outdoor Power Equipment Technician AAS, 57 cr Medium/ Heavy Truck Technology AAS, 79 cr* .NET Programmer AAS, 45 cr Networking Administrator/ Analyst AAS, 45 cr Pneumatic Engineering Technician AAS, 45 cr Tool and Die/ Moldmaking AAS, 57 cr Urban Forestry Technician AAS, 44 cr Video Production Specialist AAS, 57 cr*		Additional credits up to 18 will be applied as unrestricted elective credits**	Up to 18	
ACCT 1125 Excel (3), MATH 1007 Math for the Trades (2), LNDC 1110 Intro to Landscape/Horticulture Careers (1) *No more than 4 credits for an internship or on-the-job experience will be counted as technical.		Not Applicable	0	
Major, Emphasis, Unrestricted Electives Total	42 - 79	Total College Credits Applied (sum of sections A and B)	56 - 66	
Special Notes: ** No more than 48 technical credits will be applied as elective credit. If the program doesn't have that many technical credits, that lower number of credits will be applied.				

SECTION C - Remaining University (receiving) Requirements

	course prefix, number and name	Credits
	Remaining MnTC/ LASC Goal Requirements	24 - 27
	ACCT 230 Principles of Accounting I	3
	MGMT 360 Principles of Management	3
	OM 380 Methods Improvement	3
	OM 393 Occupational Safety & Health	3
	OM 482 Quality Planning & Implementation	3
	OM 394 Computer Applications in Business	3
	OM 483 Cost Analysis	3
	OM 485 Production & Inventory Management	3
	PMGT 300 Project Management & Scheduling	3
	PMGT 385 Process Leadership	3
	ENGL 387 Technical Report Writing	3
	OM 469 Internship	3
	Electives if needed*	Up to 4
	Total Remaining University Credits²	60 - 64

Special Notes: The General Education courses listed below are required for the Operations Management BS degree. Equivalent courses can be taken at HTC (see Section A Notes). Students only need to select two science courses (one course must include a lab and the other must include a lab like experience), one course must be from Chemistry and the other from Physics.

Choose one Chemistry course from the following:
 CHEM 102 Environmental Chemistry (3) OR
 CHEM 105 Crime Scene Science (3) OR
 CHEM 110 Fundamentals of Chemistry (3) **and**
 CHEM 110L Fundamentals of Chemistry Lab (1) OR
 CHEM 150 General Chemistry I (3) **and**
 CHEM 150L General Chemistry Laboratory I (1) OR
 CHEM 304 The Environment and You (3)


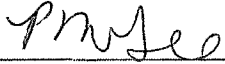
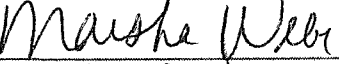

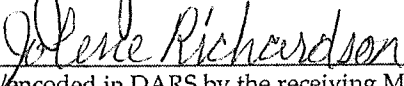
PHYS 160 College Physics I (3) **and**
 PHYS 160L College Physics I Lab (1)
 ECON 202 Principles of Economics I: Micro (3)
 MATH 127 College Algebra (3)
 MATH 234 Introduction to Probability and Statistics (3)
 *Number of elective credits required is the amount necessary to bring the total of credits earned to 120 varies.

SECTION D - Summary of Total Program Credits

College (sending) Credits		University (receiving) Requirements	
MnTC/General Education	15 - 18		
Major, Emphasis, Unrestricted Electives or Other	38 - 79		
Total College Credits	60 - 94	Total College Credits Applied	56 - 66
		Remaining credit to be taken at the university (receiving institution)	60 - 64
		Total Program Credits	120 - 126

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
Interim Chief Academic Officer	Dara Hagen		5/19/14
University	Name	Signature	Date
Department Chairperson	Pam McGee		5/31/16
Academic Dean	Dr. Marsha Weber		6-7-16
Chief Academic Officer	Dr. Joseph Bessie		6/8/16
DARS Encoder	Jolene Richardson		2/13/17

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