



**TRANSFER GUIDE - ASSOCIATE DEGREE PROGRAMS**

**NTC Program: Mechanical Design Engineering Technology**

**MSUM Program: Operations Management: Technical Management BS**

**Minimum GPA for admission: 2.0**

**Initial effective date:**

**General Education Courses**

NTC			MSUM		
Course No.	Course Title	Credits	Course No.	Course Title/Field	Credits
10-804-195	College Algebra with Apps (3 cr.) <u>OR</u>	3 or 4	MATH 127	College Algebra	0-3
10-804-118	Intermediate Algebra with Apps (4 cr.)			NA	
10-806-154	General Physics 1 <u>OR</u>	3 or 4	PHYS 160/160L	College Physics I	0-4
10-806-139	Survey of Physics			NA	
10-801-195	Written Communication <u>OR</u>	3		Goal Area 1B	3
10-801-136	English Composition 1		ENGL 101	English Composition I	
10-801-197	Technical Reporting	3		NA	0
10-809-172	Intro to Diversity <u>OR</u>	3		Goal Area 7	3
10-809-196	Intro to Sociology		SOC 110	Introduction to Sociology	
10-809-199	Psychology of Human Relations <u>OR</u>	3	PSY 220	Social Behavior	3
10-809-198	Intro to Psychology		PSY 113	General Psychology	
10-890-165	College 101	1			
<b>Total general education credits earned:</b>		<b>19-21</b>			
Total transferable general education credits:		9-16	<b>Total general education credits accepted:</b>		<b>9-16</b>

**Occupational Courses**

Course No.	Course Title	Credits	Course No.	Course Title	Credits
10-606-105	Technical Drafting/CAD	2			
10-606-106	AutoCAD Applications	2			
10-606-128	Technical Detailing	2			
10-606-160	Manufacturing Processes - Machining	2			
10-606-162	Manufacturing Processes - Fabrications	2			
10-606-180	Mechanisms	3			
10-606-115	Machine Design 1	2			
10-606-116	Tooling & Production	2			
10-606-117	Machine Design 2	3			
10-606-132	Materials of Industry	2			
10-606-163	Strength of Materials	3			
Technical credits accepted in transfer as a block. Additional credits will be accepted as unrestricted elective					30+15

10-612-120	Fluid Power Systems 1: Fundamentals	1		Additional credits will be accepted as unrestricted elective credits.	001-10
10-606-107	Designing for Manufacturability	4			
10-606-108	Geometric Dimensioning & Tolerancing Fund.	1			
10-606-109	Computer Apps & Analysis for Engineers	1			
10-606-111	Applied Mechanics for Technicians	3			
10-606-125	Design Problems	3			
10-606-130	Autodesk Inventor 3D CAD Software	2			
10-606-133	SolidWorks 1	1			
10-606-134	SolidWorks 2	1			
10-623-119	Quality Assurance	1			
10-623-118	Quality Systems	2			
	<b>Total occupational course credits earned:</b>	<b>45</b>		<b>Total occupational course credits accepted:</b>	<b>45</b>
	<b>Total credits required for graduation:</b>	<b>63-65</b>			
	<b>Total transferable credits:</b>	<b>54-61</b>		<b>Total credits accepted at MSUM:</b>	<b>54-61</b>

**Courses needed to complete degree at MSUM:**

Course No.	Course Title	Credits
	MnTC/ Gen Ed Goal Area (LASC) *	24-31
ACCT 230	Principles of Accounting I	3
OM 470	Purchasing & Sourcing Management	3
MGMT 260	Principles of Management	3
OM 380	Methods Improvement	3
OM 393	Occupational Safety & Health	3
OM 483	Cost Analysis	3
OM 395	Computer Applications for Technologists	3
OM 469	Internship	3
OM 482	Quality Management	3
OM 485	Production Inventory Management	3
PMGT 385	Process Leadership	3
PMGT 300	Project Management and Scheduling	3
MATH 127	College Algebra	0-3
MATH 234	Introduction to Probability & Statistics	3
ECON 202	Principles of Economics I: Micro	3
	*These courses are required, but may also count toward LASC	
	<b>Total credits needed at MSUM to complete degree:</b>	<b>60-67</b>

Disclaimer: Students planning to transfer should contact NTC's Transfer Specialist and transfer personnel at MSUM for the most current transfer information.

**Update on: 8/3/23**