



TRANSFER GUIDE - ASSOCIATE DEGREE PROGRAMS

NTC Program: Welding Fabrication & Robotics

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
10-804-107	College Math	3		NA	0
10-801-196	Oral/Interpersonal Communication	3	COMM 100	Speech Communication	3
10-801-195	Written Communication <u>OR</u>	3		Goal Area 1B	3
10-801-136	English Composition 1		ENGL 101	English Composition I	
10-809-199	Psychology of Human Relations <u>OR</u>	3	PSY 220	Social Behavior	3
10-809-198	Intro to Psychology		PSY 113	General Psychology	
10-809-172	Intro to Diversity Studies	3		Goal Area 7	3
10-801-197	Technical Reporting	3		NA	0
10-890-165	College 101	1			
Total general education credits earned:		19			
Total transferable general education credits:		12	Total general education credits accepted:		12

Occupational Courses

Course No.	Course Title	Credits	Course No.	Course Title	Credits
10-442-101	Introduction to Welding	1			
10-442-163	Weld Inspections & Testing	1			
10-442-172	Welding Safety	1			
10-442-173	Thermal Cutting	1			
10-442-181	Weld Print Reading 1: Basic Views and Dimensions	1			
10-442-182	Weld print Reading 2: Other Views and Symbols	1			
10-442-183	Gas Metal ARC Welding 1: Short Circuit Transfer (Horizontal)	1			
10-442-184	Gas Metal ARC Welding 2: Short Circuit Transfer (Vertical)	1			
10-442-185	Gas Metal ARC Welding 3: Spray Transfer	1			
10-442-186	Gas Metal ARC Welding 4: Pulsed Spray Transfer	1			
10-442-194	Flux Cored ARC Welding 1: Theory, Maintenance and Set-up	1			
10-442-203	Welding Career Exploration	1			

10-442-187	Gas Metal ARC Welding 5: Stainless Steel	1		Technical credits accepted in transfer as a block. Additional credits will be accepted as unrestricted elective credits.	30+15
10-442-188	Gas Metal ARC Welding 6. Sheet Metal	1			
10-442-111	Intro to Welding CNC Applications	1			
10-442-165	Welding Metallurgy	1			
10-442-189	Welding Fabrication Techniques 1: International Weld Symbols	1			
10-442-190	Welding Fabrication Techniques 2: GD&T and Pipe Prints	1			
10-442-191	Welding Fabrication Techniques 3: Production Welding	1			
10-442-192	Shielded Metal ARC Welding 1: E7018	1			
10-442-193	Shielded Metal ARC Welding 2: E6010, E7018	1			
10-442-195	Flux Cored ARC Welding 2: 045 Diameter Wire	1			
10-442-196	Flux Cored ARC Welding 3: Submerged Arc Welding & 1/16" Diameter Wire	1			
10-442-197	Gas Tungsten ARC Welding 1: Carbon Steel, Flat and horizontal Positions	1			
10-442-198	Gas Tungsten ARC Welding 2: Carbon Steel, Vertical and Overhead Positions	1			
10-442-199	Gas Tungsten ARC Welding 3: Stainless Steel	1			
10-442-200	Gas Tungsten ARC Welding 4: Aluminum	1			
10-442-201	Gas Tungsten ARC Welding 5: Pipe and Tubing	1			
10-420-101	Introduction to Machine Shop	2			
10-442-141	Robotic Welding Applications 1	2			
10-442-142	Welding Laser Programming	1			
10-442-175	Welding Metal Forming 1	1			
10-442-176	Welding Metal Forming 2	1			
10-442-140	Layout & Welding Fabrication 1	2			
10-442-143	Layout & Welding Fabrication 2	2			
10-442-144	Robotic Welding Applications 2	3			
10-442-145	Welding Laser Operations	1			
10-606-133	SolidWorks 1	1			
10-442-179	SolidWorks for Welders	1			
	Total occupational course credits earned:	45			
	Total program credits:	64			
	Total transferable credits:	57		Total credits accepted at MSUM:	57

Courses needed to complete degree at MSUM:

Course No.	Course Title	Credits
	MnTC/ Gen Ed Goal Area (LASC) *	28
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
<i>MATH 127</i>	<i>College Algebra</i>	3
<i>MATH 234</i>	<i>Introduction to Probability & Statistics</i>	3
<i>ECON 202</i>	<i>Principles of Economics I: Micro</i>	3
	<i>*These courses are required, but may also count toward LASC</i>	
Total credits needed at MSUM to complete degree:		64

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