



TRANSFER GUIDE - ASSOCIATE DEGREE PROGRAMS

NTC Program: ELECTROMECHANICAL

MN State Moorhead Program: Operations Management

Minimum GPA for admission: 2.0

Initial effective date:

General Education Courses

NTC			MSU Moorhead		
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 <u>OR</u>	3
10-804-118	Intermediate Algebra with Apps (4 cr.)			NA	0
10-806-154	General Physics 1	4		PHYS 160/ 160L College Physics I & Lab	4
10-806-144	College Physics 2	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	
10-809-172	Intro to Diversity <u>OR</u>	3		Goal Area 7	3
10-809-196	Intro to Sociology			SOC 110 Intro to Sociology	
10-809-198	Intro to Psychology <u>OR</u>	3		PSY 113 General Psychology	3
10-809-199	Psychology of Human Relations			PSY 220 Social Behavior	
Total general education credits earned:		22-23			
Total transferable general education credits:		16-19		Total general education credits accepted:	16-19

Occupational Courses

Course No.	Course Title	Credits	Course No.	Course Title	Credits
10-620-172	Industry Workplace Safety	1			
10-660-118	Electrical Fabrication	1			
10-612-120	Fluid Power Systems 1: Fundamentals	1			
10-612-121	Fluid Power Systems 2: Fundamentals of Pneumatics	1			
10-612-122	Fluid Power Systems 3: Design & Maintenance	1			
10-623-200	Interpreting Engineering Drawings	1			
10-660-123	Industrial Ele Tech 1- Direct Current Ele Characteristics	1			
10-660-124	Industrial Ele Tech 2- Alternating Current Ele Characteristi	1			
10-620-171	AutoCAD for Technicians	1			
10-606-133	Solidworks 1	1			
10-660-121	Intro to Microcontrollers	1			
10-620-151	Machine Control 1: Ladder Logic Fund	1			

10-620-152	Machine Control 2: Motor & Actuator Control	1		Technical credits accepted in transfer as a block. Additional credits will be accepted as unrestricted elective credits.	30 + 8
10-620-153	Machine Control 3: Sensors & Machine Safety	1			
10-620-157	Mechanical Systems 1: Basic Machine Comp	1			
10-620-158	Mechanical Systems 2: Power Trans Systems	1			
10-620-159	Industrial Motors 1: Electric Motors	1			
10-660-125	Industrial Ele Tech 3- Electronic Circuits and Devices	1			
10-660-126	Industrial Ele Tech 4- Electrical Systems	1			
10-660-127	Industrial Ele Tech 5- Advanced Electrical Characteristics	1			
10-660-128	Industrial Ele Tech 6- Advanced Digital Concepts	1			
10-420-101	Intro to Machine Shop	2			
10-620-154	Robot App 1: Fundamentals of Robotic Control	1			
10-620-155	Robot App 2: Robotic System Comp & Software	1			
10-620-156	Robot App 3: Automated Robot Cont Sys Interfacing	1			
10-620-160	Industrial Motors 2: DC/AC Var Speed Motor Dr	1			
10-620-161	Servo Sys 1: Fund of Position Control	1			
10-620-162	Servo Sys 2: Components & Systems	1			
10-620-163	Servo Sys 3: Auto Pos Control Sys Interfacing	1			
10-620-164	PLC 1: PLC Fudamentals And Bit Basd Instruction	1			
10-620-165	PLC 2: Timers, Counters, And Program Control	1			
10-620-166	PLC 3: Data, Math, Sequencer And Shift Instructions	1			
10-620-167	PLC 4: Advanced Instructions	1			
10-442-101	Intro to Welding	2			
10-620-145	Electromechanical Projects	3			
10-620-168	PLC 5: Industrial Networking	1			
10-620-169	PLC6: PLC, PAC And PC Automation Integration	1			
	Total occupational course credits earned:	41		Total occupational course credits accepted:	38
	Total credits required for graduation:	63-64			
	Total transferable credits:	54-47		Total credits accepted at MSU Moorhead:	54-57

Courses needed to complete degree at MSU Moorhead:

Course No.	Course Title	Credits
	Remaining MnTC/ LASC Goal Requirements*	23 - 26
	ACCT 230 Principles of Accounting I	3
	MGMT 260 Principles of Management	3
	OM 380 Methods Improvement	3
	OM 393 Occupational Safety & Health	3
	OM 395 Computer Applications for Technologists	3

	OM 470 Purchasing & Sourcing Mgmt	3
	OM 482 Quality Planning & Implementation	3
	OM 483 Cost Analysis	3
	OM 485 Production & Inventory Management	3
	OM 469 Internship	3
	PMGT 300 Project Management & Scheduling	3
	PMGT 385 Process Leadership	3
	Electives (Consult MSUM Advisor)	4
*MATH 127	<i>College Algebra</i>	0 - 3
*MATH 234	<i>Intro to Probability & Statistics</i>	3
*ECON 202	<i>Principles of Economics I: Micro</i>	3
	<i>*These courses are required, but may also count toward LASC</i>	
Total credits needed at MSU Moorhead to complete degree:		63 - 66

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

Updated on:7/22/19