TRANSFER GUIDE - ASSOCIATE DEGREE PROGRAMS
NTC Program: ELECTROMECHANICAL
Michigan Tech Program: Electrical Engineering Technology
Minimum GPA for admission:3.0 to qualify for in-state tuition
Initial effective date:

General Education Courses

NTC			Michigan Tech		
Course No.	**Course Title**	**Credits**	**Course No.**	**Course Title/Field**	**Credits**
10-804-195 10-804-118	College Algebra with Apps (3 cr.) OR Intermediate Algebra with Apps (4 cr.)	3 or 4	MA 1030	College Algebra I	3
10-806-154	General Physics 1	4	PH 1110/111	College Physics 1 & Lab	4
10-806-144	College Physics 2	3		Credits will not apply to degree requirements	
10-801-196	Oral/Interpersonal Communication	3	HU 2830	Public Speaking & Multimedia	3
10-801-195 10-801-136	Written Communication OR English Composition 1	3	UN 1015	Composition - Core	3
10-809-172 10-809-196	Intro to Diversity OR Intro to Sociology	3	UN 1025 SS 2700	Global Issues OR Intro to Sociology	3
10-809-198	Intro to Psychology	3	PSY 2000	Intro to Psychology - Soc.Resp & Ethical Reasoning	3
	Total General Education credits earned	**22-23**			
	Total transferable general education credits:	19		**Total general education credits accepted:**	**19**

Occupational Courses

Course No.	Course Title	Credits	Course No.	Course Title	Credits
10-612-120	Fluid Power Systems 1: Fundamentals	1	EET 3390	Power Systems	3
10-612-121	Fluid Power Systems 2: Fundamentals of Pneumatics	1			
10-620-172	Industry Workplace Safety	1			
10-660-123	Industrial Ele Tech 1- Direct Current Ele Characteristics	1	EET 1121	Circuits 1	3
10-660-124	Industrial Ele Tech 2- Alternating Current Ele Characteristics	1			
10-660-125	Industrial Ele Tech 3- Electronic Circuits and Devices	1			
10-620-157	Mechanical Systems 1: Basic Machine Comp	1	EET 2233	Electrical Machinery	4
10-620-158	Mechanical Systems 2: Power Trans Systems	1			
10-620-159	Industrial Motors 1: Electric Motors	1			
10-620-160	Industrial Motors 2: DC/AC Var Speed Motor Dr	1			
10-620-164	PLC 1: PLC Fundamentals And Bit Based Instruction	1	EET 3373	Introduction to Programmable Controllers	3
10-620-165	PLC 2: Timers, Counters, And Program Control	1			

10-620-166	PLC 3: Data, Math, Sequencer And Shift Instructions	1			
10-620-145	Electromechanical Projects	3	EET 3281	Electrical Project Development & Troubleshooting	3
10-660-118	Electrical Fabrication	1	EET 2XXE	EET Technical Electives (6 technical credits & 4 free credits)	10
10-620-171 10-664-101	AutoCAD for Technicians OR AutoCAD Electrical	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			
10-620-153	Machine Control 3: Sensors & Machine Safety	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			
10-620-161	Servo Sys 1: Fundamentals of Industrial Control Systems	1			
10-620-162	Servo Sys 2: Motion Control Systems	1			
10-620-173	Electromechanical Troubleshooting	1			
10-620-167	PLC 4: Advanced Instructions & Programming	1			
10-442-101	Intro to Welding	1			
10-620-163	Servo Systems 3: Advanced Position Control & Integration	1			
10-620-168	PLC 5: Industrial Networking	1			
10-620-169	PLC 6: PLC, PAC And PC Automation Integration	1			
	Total occupational course credits earned:	**38**		**Total occupational course credits accepted:**	**26**
	Total credits required for graduation:	**61-62**			
	Total transferable credits:	**45**		**Total credits accepted at MTU:**	**45**

Courses needed to complete degree at MTU:

Course No.	Course Title	Credits
	Cocurricular	3
	GE - Core/HASS	12
	GE - Math and Science (includes EET 2150)	20
	Capstone	6
EET 1122	Circuits 1 Lab	1
EET 2121	Circuits 2	3
EET 2122	Circuits 2 Lab	1

EET 2411	Digital Electronics	3
MIS 2100 SAT 1610	Intro to Business Programming OR Computer and Operating Systems Architecture	3
EET 2142	Digital Design & Modeling Using VHDL	3
EET 2413	Data Communications	3
EET 3131	Sensors and Instrumentation	3
EET 3225	Analog Electronic Circuits	4
CS 1111	Intro to Programming in C/C++	3
EET 4144	Real Time Robotics Systems	4
EET 4253	Data Acquisition and Signal Processing	3
OSM 4300	Project Management	3
EET 4373	Advanced Programmable Controllers	4
EET 4999	Professional Practice Seminar	1
Total credits needed at MTU to complete degree:		**80**
Total credits at MTU for complete degree:		**125**

Additional credits to take at NTC to transfer:

Course No.	Course Title	Credits	Course No.	Course Title	Credits
10-804-189	Statistics	3	MA 3710	Engineering Statistics	3
10-804-196	Trigonometry with Apps	3	MA 1031	College Algebra 2 with Trig (3cr)	3
10-804-198	Calculus 1	4	MA 1160	Calculus with Technology 1	4
10-804-199	Calculus 2	4	MA 2160	Calculus with Technology 2	4
10-154-100	Troubleshooting	3	SAT 1610	Computer and Operating Systems Architecture	3
10-152-501	Programming Concepts A	1	CS 1111	Intro to Programming in C/C++	3
10-152-502	Programming Concepts B	1			
10-152-503	Programming Concepts C	1			
10-196-188	Project Management	3	OSM 4300	Project Management	3
	Total additional transferable credits:	**23**		**Total additional credits accepted at MTU:**	**23**

Remaining courses needed to complete degree at MTU:

Course No.	Course Title	Credits
	Cocurricular (3 units required for graduation)	3
	Technical Electives	0
	Free Elective	0
	GE - HASS	12
EET 2150	GE - Math and Science	6

	Capstone	6
EET 1122	Circuits 1 Lab	1
EET 2121	Circuits 2	3
EET 2122	Circuits 2 Lab	1
EET 2411	Digital Electronics	3
EET 2142	Digital Design & Modeling Using VHDL	3
EET 2413	Data Communications	3
EET 3131	Sensors and Instrumentation	3
EET 3225	Analog Electronic Circuits	4
EET 4144	Real Time Robotics Systems	4
EET 4253	Data Acquisition and Signal Processing	3
EET 4373	Advanced Programmable Controllers	4
EET 4999	Professional Practice Seminar	1
Total credits needed at MTU to complete degree:		**57**
Total credits at MTU for complete degree:		**125**

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

Updated on: 1/16/23