



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: Fall 2015

General Education Courses

NTC			Michigan Tech		
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	MA 1030	College Algebra I	3
10-804-118	Intermediate Algebra with Apps (4 cr.)				
10-806-154	General Physics 1	4	PH 1110/11	College Physics 1 and lab (sub for PH1140/1141)	4
10-806-144	College Physics 2	3	PH 1240/12	Applied College Physics II and lab (1 TW for PH12	3
10-801-196	Oral/Interpersonal Communication	3	HU 2830	Public Speaking & Multimedia	3
10-801-195	Written Communication <u>OR</u>	3	HU 1XX5 <u>OR</u>	HASS Communication/Composition	3
10-801-136	English Composition 1		UN 1015	Composition - Gen Ed Core	
10-809-172	Intro to Diversity <u>OR</u>	3	UN 1025	Global Issues <u>OR</u>	3
10-809-196	Intro to Sociology		SS 2700	Intro to Sociology	
10-809-198	Intro to Psychology	3	PSY 2000	Intro to Psychology	3
Total General Education credits earned		22-23			
Total transferable general education credits:		22		Total general education credits accepted:	22

Occupational Courses

Course No.	Course Title	Credits	Course No.	Course Title	Credits
10-660-118	Electrical Fabrication	1	TRU XXXX	Unassigned Transfer	1
10-612-120	Fluid Power Systems 1: Fundamentals	1	MET3400	Applied Fluid Mechanics	3
10-612-121	Fluid Power Systems 2: Fundamentals of Pneumatics	1			
10-612-122	Fluid Power Systems 3: Design & Maintenance	1			
10-620-172	Industry Workplace Safety	1	TRU XXXX	Unassigned Transfer	1
10-623-200	Interpreting Engineering Drawings	1	MET 1020	Technology Computer Applications (with 10-620-171 and 10-606-133)	3
10-620-171	AutoCAD for Technicians	1			
10-606-133	Solidworks 1	1			
10-660-123	Industrial Ele Tech 1- Direct Current Ele Characteristics	1	EET 1120	Circuits I (with 660-124/125/127)	4
10-660-124	Industrial Ele Tech 2- Alternating Current Ele Characteristics	1			
10-660-125	Industrial Ele Tech 3- Electronic Circuits and Devices	1			
10-660-127	Industrial Ele Tech 5- Advanced Electrical Characteristics	1			
10-660-121	Intro to Microcontrollers	1	TRU XXXX	Unassigned Transfer	1

10-620-151	Machine Control 1: Ladder Logic Fund	1	EET 1XXE	Technical elective	1
10-620-152	Machine Control 2: Motor & Actuator Control	1	EET 1XXE	Technical elective	1
10-620-153	Machine Control 3: Sensors & Machine Safety	1	EET 1XXE	Technical elective	1
10-620-157	Mechanical Systems 1: Basic Machine Comp	1	EET 1XXE	Technical elective	1
10-620-158	Mechanical Systems 2: Power Trans Systems	1	EET 1XXE	Technical elective	1
10-620-159	Industrial Motors 1: Electric Motors	1	EET 2233	Electric Machinery (with 620-161/162/163)	4
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			
10-660-126	Industrial Ele Tech 4- Electrical Systems	1	EET 1XXE	Technical elective	1
10-660-128	Industrial Ele Tech 6- Advanced Digital Concepts	1	EET 1XXE	Technical elective	1
10-420-101	Intro to Machine Shop	2	TRU XXXX	Unassigned Transfer	2
10-620-154	Robot App 1: Fundamentals of Robotic Control	1	EET 2XXE	Technical elective	1
10-620-155	Robot App 2: Robotic System Comp & Software	1	EET 2XXE	Technical elective	1
10-620-156	Robot App 3: Automated Robot Cont Sys Interfacing	1	EET 2XXE	Technical elective	1
10-806-154	Industrial Motors 2: DC/AC Var Speed Motor Dr	1	TRU XXXX	Unassigned Transfer	1
10-620-164	PLC 1: PLC Fundamentals And Bit Based Instruction	1	EET 3373	Intro to Programmable Controllers (w/620/165/166)	3
10-620-165	PLC 2: Timers, Counters, And Program Control	1			
10-620-166	PLC 3: Data, Math, Sequencer And Shift Instructions	1			
10-620-167	PLC 4: Advanced Instructions	1	EET 4373	Advanced Programmable Controllers (w/10-620-168/169) Technical elective	3
10-620-168	PLC 5: Industrial Networking	1			
10-620-169	PLC 6: PLC, PAC And PC Automation Integration	1			
10-442-101	Intro to Welding	2	TRU XXXX	Unassigned Transfer	2
10-620-145	Electromechanical Projects	3	EET 2XXE	Technical elective	3
	Total occupational course credits earned:	41		Total occupational course credits accepted	41
	Total credits required for graduation:	63-64			
	Total transferable credits:	63		Total credits accepted at Michigan Tech	63

Additional NTC courses to take to transfer to MTU:

Courses needed to complete degree at Michigan Tech:

Course No.	Course Title	Credits	Course No.	Course Title	Credits
			EET 2120	Circuits II	4
			EET 2142	Digital Design & Modeling Using VHDL	3
			EET 2141	Digital Electronics & Microprocessor Fundamentals	4
			EET 2220	Electronic Devices and Circuits	4
			EET 2241	C++ & Matlab	3
			EET 2413	Data Communications	3
			EET 3141	Computer Architecture	4

			EET 3225	Special Electronic Devices	4
			EET 3281	Electrical Project Development & Troubleshooting	3
			EET 3367	Communications Systems	4
			EET 4141	Microcontroller Interfacing	4
			EET 4253	LabVIEW Programming for Data Acquisition	3
			EET 4460	Senior Project 1	3
			EET 4480	Senior Project 2	3
			EET 4999	Professional Practice Seminar	1
10-809-103	Thinking Critically & Creatively*	3	TA 2XX4	Critical and Creative Thinking - Core elective	3
10-801-197	Tech Reporting	3	HASS*	Any list - elective	3
10-809-159	Abnormal Psychology	3	HASS *	Social & Behavioral Sciences elective	3
			HASS *	Humanities and Fine Arts elective	3
			HU 3120	Technical and Professional Communications	3
10-804-196	Trigonometry w/ Apps	3	MA 1031	College Algebra II with Trigonometry	3
10-804-198	Calculus	4	MA 1160	Calculus with Technology 1	4
			MA 2160	Calculus with Technology 2	4
10-804-189	Intro to Statistics (transfers as MA 2710)	3	MA 3710	Engineering Statistics (sub with MA2710)	3
			OSM 4300	Project Management	3
			Science Elec		3
			PE	Co-curricular activities (units)	3
			Total credits needed at MTU to complete degree		88

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

* Six credits of HASS must be at the 3000-level or higher.

Thirty (30) semester credit hours of advanced level courses (3000 or higher) must be completed at Michigan Tech (including Michigan Tech Online).

**The scholarship is equal to the difference between nonresident and resident tuition for a maximum of 10 semesters of undergraduate study

Michigan Tech General Education Requirements per the following lists:

<https://www.mtu.edu/registrar/faculty-staff/advisors/gen-ed/>

NTC students who meet the following criteria below are eligible for a scholarship that makes up the difference between non-resident and resident tuition. The award is available for a maximum of ten semesters of undergraduate study.

* The student must be a U.S. citizen and resident of any territory or state except Michigan.

* The student must have completed two or more semesters of college as a full-time student (with the most recent completed semester being at NTC) prior to enrolling at Michigan Tech and have a cumulative grade point average of 3.0 or higher (4.0 scale) to be eligible for the award.

- * The student must be accepted into a degree seeking program at Michigan Tech.
- * The student must maintain a minimum cumulative grade point average of 2.50 at Michigan Tech at the end of each spring semester to be eligible for scholarship renewal.
- * The student must maintain continuous full-time undergraduate enrollment and acceptable social behavior according to Michigan Tech's academic policies and procedures.

- * Recipients are eligible for need-based aid and/or private scholarship funds; however, they are not eligible for the National Scholars Program, Alumni Legacy Award or the Military Family Education Award.

Updated on: 09/25/19

