



**TRANSFER GUIDE - ASSOCIATE DEGREE PROGRAMS**

**NTC Program: MECHANICAL DESIGN**

**Michigan Tech Program: Mechanical 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	College Physics 1 + PH 111	4
10-801-195	Written Communication <u>OR</u>	3	UN 1015	Composition	3
10-801-136	English Composition 1				
10-801-197	Technical Reporting	3	HU 1XX5	HASS Communication/Composition	3
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	
10-809-199	Psychology of Human Relations <u>OR</u>	3	PSY 2000	Intro to Psychology <u>OR</u>	3
10-809-198	Intro to Psychology			PSY 2000	
<b>Total general education credits earned:</b>		<b>19-20</b>			
Total transferable general education credits:		19	<b>Total general education credits accepted:</b>		<b>19</b>

**Occupational Courses**

Course No.	Course Title	Credits	Course No.	Course Title	Credits
10-606-105	Technical Drafting/CAD	2	ENG 1003	Intro to Computer Aided Draft	1
			ENG 1XXE	ENG Elective	1
10-606-128	Technical Detailing	2	TRU XXXX	Unassigned Transfer	2
10-606-132	Materials of Industry	2	MET 1540	Materials Science	2
10-606-160	Manufacturing Processes - Machining	2			
10-606-103	Mechanical Design Workforce Preparedness	1			
10-606-106	2D AutoCad Applications	2	MET 1020	Technology Computer Applications	3
10-606-133	SolidWorks 1	1			
10-606-134	SolidWorks 2	1			
10-606-111	Applied Mechanics for Technicians	3			
10-606-115	Machine Design 1	2	MET 3242	Machine Design 1	2
10-606-162	Manufacturing Processes - Fabrications	2	MET 2153	Machine Tool Funds & Apps	2
10-606-163	Strength of Materials	3	MET 2120	Statics and Strength of Materials	3

10-606-107	Designing for Manufacturability	4	MET 3500	Manufacturing Processes	4
10-606-114	Mechanisms	4	MET 1XXE	MET Elective	4
10-606-117	Machine Design 2	3	MET 3451	Machine Design II	3
10-612-120	Fluid Power Systems 1: Fundamentals	1			
10-606-108	Geometric Dimensioning & Tolerancing Fund.	1	MET 2400	Practical Applications with Parametric Modeling	3
10-606-130	Autodesk Inventor 3D CAD Software	2			
10-606-109	Computer Apps & Analysis for Engineers	1			
10-606-116	Tooling & Production	2			
10-606-125	Design Problems	3	TRU XXXX	Unassigned Transfer	3
	<b>Total occupational course credits earned:</b>	<b>44</b>		<b>Total occupational course credits accepted:</b>	<b>33</b>
	<b>Total credits required for graduation:</b>	<b>63-64</b>			
	<b>Total transferable credits:</b>	<b>52</b>		<b>Total credits accepted at MTU:</b>	<b>52</b>

**Additional NTC courses to take to transfer to MTU:**

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

Course No.	Course Title	Credits	Course No.	Course Title	Credits
10-804-196	Trigonometry W/Apps*	3	MA 1031	College Algebra II with Trigonometry	3
10-809-103	Thinking Critically & Creatively*	3	Gen ED Core	TA9004I-LG4 Core Elective	3
10-804-198	Calculus	4	MA 1160	Calculus with Technology 1	4
10-806-134	General Chemistry	4	CH 1150	University Chemistry & Lab	4
			CH 1151		
			MA 2160	Calculus with Technology 2	4
			EET 1411	Basic Electronics	4
			MET 3400	Applied Fluid Mechanics	3
			PE		1
			MET 2130	Dynamics	3
			MET 3700	Applied Thermodynamics	3
			EC 3400	Economic Decision Analysis	3
10-804-189	Introductory Statistics (transfers as MA 2710)	3	MA 2720	Statistical Methods	4
			PE		1
			MET 4460	Product Design and Development	2
10-806-144	College Physics 2	3	PH 1200	College Physics II & Lab	1
			PH 1240		3
			EET 2233	Electrical Machinery	4
			MET 4300	Applied Heat Transfer	3
			MET 4575	Senior Project 1	2
			MET 4360	Thermal-Fluids Lab	1

**If the additional credits are completed at NTC, there is 55 credits left to complete at Michigan Tech**

				HU 3120	Technical and Professional Communication	3
				HUFA HASS (3000+)		3
				EET 3131^	Instrumentation	3
				MET 4675	Senior Project 2	2
				MET 4999	Professional Practice Seminar	1
				OSM 3000	Operations & Supply Chain Management	3
				Tech Elective		3
				PE		1
10-809-159	Abnormal Psychology		3	HASS (3000+)		3
10-809-172	Introduction to Diversity Studies		3	Gen Ed Core	<a href="#">UN 1025 - Global Issues</a>	3
				<b>Total credits needed at MTU to complete degree:</b>		<b>81</b>

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

**Update on: 11/20/18**

**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.