

## Mechanical Engineering

### 1<sup>st</sup> Semester

### NMC

### MTU

Number	Course Name	Cr	Number	Course Name	Cr
ENG 111	English Composition	4	UN 1015 HU 1XXX	Composition HASS Elective	3 1
EGR 101	Intro to Engineering	1	ENG 1XXE	ENG Elective	1
EGR 113	Engineering Graphics I	3	ENG 1102	Engrg Modeling & Design	3
MTH 141	Calculus I	5	MA 1160 MA 1XXX	Calculus I STEM Math Elective	4 1
* GEO 109	World Reg. Geography	3	UN 1025	Global Issues	3
16			16		

### 2<sup>nd</sup> Semester

### NMC

### MTU

Number	Course Name	Cr	Number	Course Name	Cr
CIT 110	Programming Design	3	ENG 1101	Engrg Analysis & Prob	3
CHM 150, 150R, 150L	General Chemistry I	5	CH 1150/51/53	University Chemistry I	5
MTH 142	Calculus II	5	MA 2160 MA 1XXX	Calculus II STEM Math Elective	4 1
EGR 221	Material Science	3	MSE 2100	Material Science	3
16			16		

### 3<sup>rd</sup> Semester

### NMC

### MTU

Number	Course Name	Cr	Number	Course Name	Cr
* PSY 101	Intro to Psychology	3	PSY 2000	Intro to Psychology	3
* PHL 101	Intro to Philosophy	3	HU 2700	Intro to Philosophy	3
* HST 101 /111/112	History	4	SS 2502 /00/01 SS1XXX	History HASS Elective	3 1
ENG 112	English Composition	4	HU 1XX5	HASS Comm. / Comp	4
14			14		

### 4<sup>th</sup> Semester

### NMC

### MTU

Number	Course Name	Cr	Number	Course Name	Cr
MTH 241	Calculus III	5	MA 3160 MA 1XXX	Calculus III STEM Math Elective	4 1
PHY 221, 221R, 221L	P&P Physics I	5	PH 2100/1100 TRU XXXX	University Physics I Unassigned Transfer	4 1
EGR 201	Statics	3	MEEM 2110	Statics	3
EGR 220	Engineering Practice I	2	MEEM 2901	Mech. Eng. Practice I	2
EGR 232	Introductory Thermo	3	MEEM 2201	Introductory Thermo	3
18			18		

Mechanical Engineering

**5<sup>th</sup> Semester**

**NMC**

**MTU**

Number	Course Name	Cr	Number	Course Name	Cr
MTH 251	Diff. Eq.	4	MA 2320/3520	Diff. Eq. / Linear Alg.	4
PHY 222, 222R, 222L	P&P Physics II	5	PH 2200/1200 TRU XXXX	University Physics II Unassigned Transfer	4 1
EGR 202	Mechanic of Materials	3	MEEM 2150	Mechanic of Materials	3
EGR 203	Dynamics	4	MEEM 2700 TRU XXXX	Dynamics Unassigned Transfer	3 1
16			16		

\* General Education required courses - some selected NMC courses may satisfy MTU Gen. Ed. requirements and Michigan Transfer Agreement. See an advisor for Gen. Ed. courses and applicable MTA requirements.

NMC 80 credits transfer to MTU 71 program + 9 credits electives.

3<sup>rd</sup> semester is a summer session.

Up to 3 additional credits of Physical Education may transfer.

**Courses at MTU**

**Junior year**

**6<sup>th</sup> Semester**

<b>MEEM 2911</b>	<b>Mechanical Eng. Practice II</b>	<b>3</b>
<b>EC 3400</b>	<b>Economic Decision Analysis</b>	<b>3</b>
<b>MA 3710</b>	<b>Statistics</b>	<b>3</b>
<b>EE 3010</b>	<b>Circuits &amp; Instrumentation</b>	<b>3</b>
<b>MEEM 3901</b>	<b>Mechanical Eng. Practice III</b>	<b>2</b>
		<b>14</b>

**7<sup>th</sup> Semester**

<b>MEEM 3750</b>	<b>Dynamic Systems</b>	<b>4</b>
<b>MEEM 3600</b>	<b>Intro. to Manuf.</b>	<b>3</b>
<b>MEEM 3400</b>	<b>Mech. Sys. Desg. &amp; Analy</b>	<b>3</b>
<b>MEEM 3911</b>	<b>Mech. Eng. Practice IV</b>	<b>3</b>
		<b>13</b>

**Senior Year**

**8<sup>th</sup> Semester**

<b>MEEM 3201</b>	<b>Intro. Fluid Mech. &amp; Heat Trans.</b>	<b>4</b>
<b>MEEM 4901</b>	<b>Senior Design I</b>	<b>2</b>
	<b>Technical Elective I</b>	<b>3</b>
	<b>Technical Elective II</b>	<b>3</b>
	<b>HASS Gen. Ed. (3000+)</b>	<b>3</b>
		<b>15</b>

**9<sup>th</sup> Semester**

<b>MEEM 4911</b>	<b>Senior Design II</b>	<b>2</b>
	<b>Technical Elective III</b>	<b>3</b>
	<b>Technical Elective IV</b>	<b>3</b>
	<b>Technical Elective V</b>	<b>3</b>
	<b>HAAS Gen. Ed. (3000+)</b>	<b>3</b>
		<b>14</b>

**NOTE: A minimum of six (6) credits of MTU Technical Electives must be MEEM courses.**

## Mechanical Engineering

MTU 56 credits.

**Program Total: 136 Credits**

**[ Does not include 3 Credits of Physical Education required for Graduation. ]**

**Once all MTA requirements are met, the student will receive an Associate Degree from Northwestern Michigan College. Any course not completed at NMC will require completion at MTU, including all prerequisite courses.**

**All program specific courses require a 2.0 (C) grade for transfer.**

**Students may require additional courses necessary to meet the minimum Mathematical and English Composition pre-requisites.**

**NMC and MTU course offerings and / or delivery methods are subject to change.**

**Students are required to meet with an academic advisor during each semester to maintain continuity with program requirements.**