

## Electrical 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
13			13		

### 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
	MTU online course		EE 1110	Ess. Math for EE	1
10			11		

**NOTE: Students required to complete MTU EE 1110 (1 credit) before enrolling in EGR 211.**

### 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 211	Elect. Circuits I	3	EE 2111	Electric Circuits I	3
13			13		

### 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 221	Material Science	3	MSE 2100	Material Science	3
12			12		

## Electrical Engineering

# MTU ECE Department approval granted to substitute EGR101/ENG1XXE for EE1111 (7/24/2019).

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

NMC 64 credits transfer to MTU 57 program + 7 credits electives.

MTU 1 credit (EE 1110) prior to transfer.

3<sup>rd</sup> and 6<sup>th</sup> semesters are summer sessions. Up to 3 additional credits of Physical Education may transfer.

### Courses at MTU

#### 6<sup>th</sup> Semester (Summer Track A)

<b>EE 3120</b>	<b>Electric Energy Systems</b>	<b>3</b>
<b>EE 2112</b>	<b>Electric Circuits II</b>	<b>4</b>
		<b>7</b>

#### Junior year

##### 7<sup>th</sup> Semester (Fall)

<b>CS 1111</b>	<b>Intro. C / C++</b>	<b>3</b>
<b>EE 3131</b>	<b>Electronics and Lab</b>	<b>4</b>
<b>EE 3160</b>	<b>Signals &amp; Systems</b>	<b>3</b>
<b>EE 3140</b>	<b>Electromagnetics</b>	<b>3</b>
	<b>HASS Elective</b>	<b>1</b>
		<b>14</b>

##### 8<sup>th</sup> Semester (Spring)

<b>EE 2174</b>	<b>Digital Logic &amp; Lab</b>	<b>4</b>
<b>EE 3901</b>	<b>Design Fundamentals</b>	<b>2</b>
<b>EE 3180</b>	<b>Intro. Prob. &amp; Ran. Sig.</b>	<b>3</b>
<b>EE 3261</b>	<b>Control Systems</b>	<b>3</b>
	<b>EE Elective</b>	<b>3</b>
		<b>15</b>

#### Senior Year

##### 9<sup>th</sup> Semester (Fall)

<b>EE 4901</b>	<b>EE Design 1</b>	<b>2</b>
<b>EE 4250</b>	<b>Modern. Comm. Systems</b>	<b>3</b>
<b>EE 3171</b>	<b>Microcontroller Appl.</b>	<b>4</b>
	<b>EE Elective</b>	<b>3</b>
	<b>HASS Gen. Ed. (3000+)</b>	<b>3</b>
		<b>15</b>

##### 10<sup>th</sup> Semester (Spring)

<b>EE 4910</b>	<b>EE Design 2</b>	<b>2</b>
	<b>EE Elective</b>	<b>3</b>
	<b>EE Elective</b>	<b>3</b>
	<b>EE Elective</b>	<b>3</b>
	<b>HAAS Gen. Ed. (3000+)</b>	<b>3</b>
		<b>14</b>

## Electrical Engineering

MTU 66 credits.

**Program Total: 130 Credits**

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

**One additional Composition Course required for MTA completion. 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.**