Bachelor of Science - Electrical Engineering Technology

Academic Year 2018-19 – Recommended Course Sequence

Total Credits: 127-129

Semester 1
FALL
16 Cr

UN 1015
Composition
(3) [f,s,su]

MET 1020
Technology
Computer Applications
(3) [f]

EET 1120
Circuits I
(4) [f]

MA 1160
Calculus with Technology I
(4) [f]

HASS Elective
(Course from Any List)
(3) *

CO-CURR
½ UNIT *

Semester 2
SPRING
15/16 Cr

UN 1025
Global Issues
(3) [f,s,au]

EET 2120
Circuits II
(4) [f]

EET 2214
Data Communications
(3) [f,su]

CO-CURR
½ UNIT *

Semester 3
FALL
18 Cr

Critical and Creative Thinking
(3) *

MA 2720
Statistical Methods
(4) [f,s,su]

EET 2412
Digital Design & Modeling Using VHDL
(4) [f]

CO-CURR
½ UNIT *

Semester 4
SPRING
16/17 Cr

Social Responsibility & Ethical Reasoning
(3) *

MA 3710
Engineering Statistics
(3) [f,s,su]

EET 2233
Electrical Machinery
(4) [f,su]

CO-CURR
½ UNIT *

Semester 5
FALL
18 Cr

HU 3120
Technical and Professional Communication
(3) [f,s,su]

EET 3281
Electrical Project Development and Troubleshooting
(3) [s]

CO-CURR
½ UNIT *

Semester 6
SPRING
16 Cr

OEM 4300
Project Management
(3) [f,s,su]

EET 3243
Electrical Project Development and Troubleshooting
(3) [s]

CO-CURR
½ UNIT *

Semester 7
FALL
14 Cr

EET 4460
Senior Project I
(3) [f,s,su]

EET 3390
Microcontroller Interfacing
(4) [f]

CO-CURR
½ UNIT *

Semester 8
Spring
14 Cr

EET 4480
Senior Project II
(3) [f,s,su]

EET 3400
Microcontroller Interfacing
(4) [f]

CO-CURR
½ UNIT *

Technical Electives
(Prerequisite/s)
(3 credits minimum to be EET)

EET 3131 - 3 (EET 2220) [s]
Instrumentation

EET 3143 - 3 (EET 3141) [f,s]
Programmable Logic Devices

EET 3390 - 3 (EET2223) [f]
Power Systems

EET 4412 - 3 (EET3367 & EET4141) [s]
Digital Signal Processing Applications

EET 4414 - 4 (EET2220) **
Real-Time Robotics Systems

EET 4417 - 4 (EET4144) [s]
Industrial Robotic Vision Systems and Advanced Teach Pendant Programming

EET 3367 - 3 (EET3367 & MA2160) [s]
Wireless Communications

EET 3437 - 4 (EET3373) [s]
Advanced Programmable Controllers

EET 3830 - 3 (EET2233) **
Alternative Energy Applications

EET 4996 - 1-3 **
Special Topics in Elec Eng Tech

EET 4997 - 1-3 **
Independent Study in Elec Eng Tech

EET 4998 - 1-6 **
Undergraduate Research in Elec Eng Tech

MET 2120 - 4 ([MA 1160 (C) or MA 1161 (C) & PH 1140] [f]
Statics and Strength of Materials

MET 2139 - 3 (MET 2120) [s]
Dynamics

UN 3002 - 1-4 [f,s,su]
Undergraduate Cooperative Education I

** On Demand

CpET Electives
(Prerequisite/s)

EET 3131 - 3 (EET 2220) [s]
Instrumentation

EET 4412 - 3 (EET3367 & EET4141) [s]
Digital Signal Processing Applications

EET 4414 - 4 (EET2220) **
Real-Time Robotics Systems

EET 4417 - 4 (EET4144) [s]
Industrial Robotic Vision Systems and Advanced Teach Pendant Programming

ENT XXX - variable 1-2
Enterprise Project Work
(except 3964, 4950, 4960)

** On Demand

* See Notes on Back

May 2018
1. **General Education Requirements**: 24 total credits. Required courses: UN 1015-Composition (3 credits); UN1025-Global Issues (3 credits); Critical and Creative Thinking (3 credits); Social Responsibility & Ethical Reasoning (3 credits); and 12 HASS credits. Approved lists are available in EERC 423 and linked on the School of Technology's “Advising” web page. [http://www.mtu.edu/registrar/pdfs/core-and-hass-list-18-19-v2.pdf](http://www.mtu.edu/registrar/pdfs/core-and-hass-list-18-19-v2.pdf)

2. **UN 1025 Global Issues Language Option**: 3 credits of 3000-level or higher modern language may be substituted directly for UN 1025. Any students with previous language experience in Spanish, French, German, or Mandarin must take the Modern Language Online Placement Test.

3. **HASS (Humanities, Arts, & Social Sciences)**: 12 total credits that include a minimum of 3 credits each in: Communication/Composition, Humanities/Fine Arts, and Social & Behavioral Sciences. Approved lists are available in EERC 423 and are linked on the School of Technology's "Advising" web page. [http://www.mtu.edu/registrar/pdfs/core-and-hass-list-18-19-v2.pdf](http://www.mtu.edu/registrar/pdfs/core-and-hass-list-18-19-v2.pdf) Six (6) credits must be 3000 level or higher (does not include HU 3120). HU 3120 is not a HASS course for School of Technology students, but still is a degree requirement. No more than 3 credits may be used from the HASS Restricted List. All 3000-level or higher HASS courses require UN 1015 and UN 1025 as prerequisites.


5. **Math**: Students are placed into an initial math course based on required assessment using the ALEKS software program, or a math placement exam score (AP, IB, CLEP). MA 1160 (4 credits) or MA 1161 (5 credits) satisfy the Calculus I requirement. MA 2320, MA 2321, or MA 2330 are equivalent Linear Algebra courses. MA 2710, MA 2720, and MA 3710 are all approved Statistics courses.

6. **Free Electives**: Any Michigan Tech course(s) or approved transfer course(s) that are 1000-level or above, and are not duplicated or equivalent courses.

7. **Co-curricular Activities**: Mainly physical education courses with some additions. Three units (or six half units) are required for graduation. These units will be included as earned hours and may be used to determine full-time enrollment status. These are in addition to the total credits required for the degree. A co-curricular list is available in EERC 423 and is linked on the School of Technology’s “Advising” web page. These units are graded pass/fail and are not included in credit hours used for calculation of any grade point averages (cumulative or departmental).

8. **Pre-requisite** courses are noted by a plain arrow. The pre-requisite course must be successfully completed prior to taking the subsequent course.

9. **Concurrent Pre-requisites** are noted by a ‘C’ by the arrow and may be taken at the same time, although it is not necessary to take these courses together if the pre-requisite course is completed first.

10. **Co-requisite** courses are courses that must be taken together in the same semester.

11. **Transfer, Advanced Placement, or Study Abroad Courses** are not included in credit hours used for GPA calculations. Transfer credit is awarded for Michigan Tech equivalent course work only if a grade of ‘C’ or better (2.00/4.00) or equivalent is earned at a transfer institution. Study abroad credit will be awarded by International Programs and Services based on passing a course according to equivalent international standards. Advanced Placement credit is awarded according to published AP Exam score standards.

This flow chart is not an official list of degree requirements. Adjustments may be required due to curriculum changes.

Advising web page: [http://www.mtu.edu/technology/resources/undergraduate/advising/](http://www.mtu.edu/technology/resources/undergraduate/advising/)

*May 2018*