Computer Engineering at
Michigan Tech
1885

Bachelor of Science - Computer Engineering 2022-2023
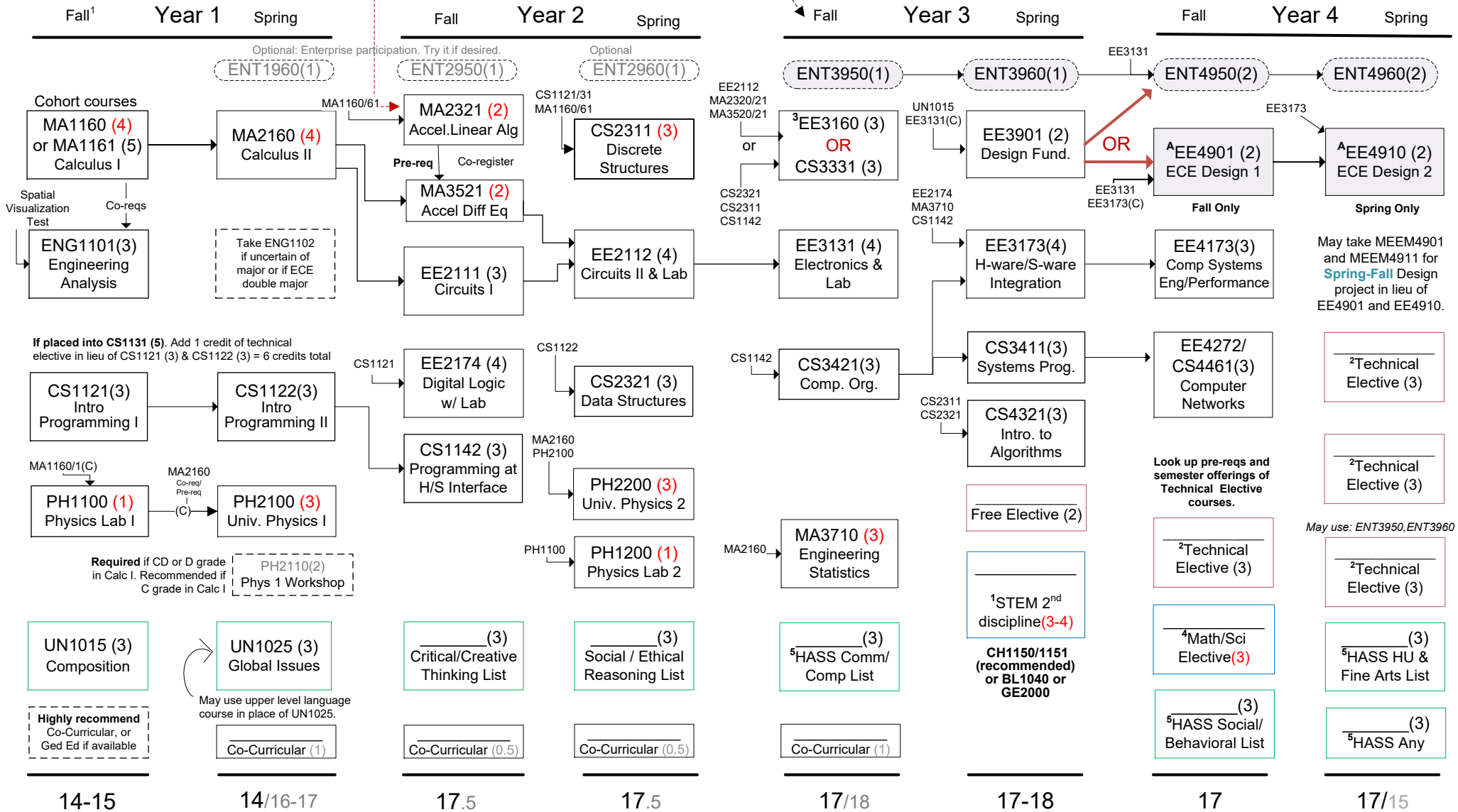
SAMPLE PLAN
Calculus-ready students

MA2320 & MA3520, full semester courses, may replace MA2321 & MA3521. Diff Eq is p-req to EE2112. Delays EE2112.

A good time to co-op

See footnote (**A**)

Fall[1]	Year 1	Spring	Fall	Year 2	Spring	Fall	Year 3	Spring	Fall	Year 4	Spring

Optional: Enterprise participation. Try it if desired.

Optional

ENT1960(1) — **ENT2950(1)** — **ENT2960(1)** — **ENT3950(1)** — **ENT3960(1)** — EE3131 — **ENT4950(2)** — **ENT4960(2)**

Cohort courses

MA1160/61

Cohort courses

MA1160 (4) or **MA1161 (5)** Calculus I → **MA2160 (4)** Calculus II

MA1160/61 → **MA2321 (2)** Accel. Linear Alg

CS1121/31 MA1160/61

CS2311 (3) Discrete Structures

EE2112 MA2320/21 MA3520/21

or

[3]**EE3160 (3)** OR **CS3331 (3)**

UN1015 EE3131(C)

EE3901 (2) Design Fund.

OR

[A]**EE4901 (2)** ECE Design 1 **Fall Only**

EE3173

[A]**EE4910 (2)** ECE Design 2 **Spring Only**

Spatial Visualization Test

Co-reqs

Pre-req **Co-register**

MA3521 (2) Accel Diff Eq

CS2321 CS2311 CS1142

EE2174 MA3710 CS1142

EE3131 EE3173(C)

May take MEEM4901 and MEEM4911 for **Spring-Fall** Design project in lieu of EE4901 and EE4910.

ENG1101(3) Engineering Analysis

Take ENG1102 if uncertain of major or if ECE double major

EE2111 (3) Circuits I → **EE2112 (4)** Circuits II & Lab → **EE3131 (4)** Electronics & Lab → **EE3173(4)** H-ware/S-ware Integration → **EE4173(3)** Comp Systems Eng/Performance

If placed into CS1131 (5). Add 1 credit of technical elective in lieu of CS1121 (3) & CS1122 (3) = 6 credits total

CS1121

CS1122

CS1142

CS2311 CS2321

CS1121(3) Intro Programming I → **CS1122(3)** Intro Programming II

EE2174 (4) Digital Logic w/ Lab

CS2321 (3) Data Structures

CS3421(3) Comp. Org.

CS3411(3) Systems Prog.

CS4321(3) Intro. to Algorithms

EE4272/ CS4461(3) Computer Networks

CS1142 (3) Programming at H/S Interface

MA1160/1(C)

MA2160 Co-req/ Pre-req

(C)

MA2160 PH2100

MA2160

PH1100 (1) Physics Lab I → **PH2100 (3)** Univ. Physics I

PH2200 (3) Univ. Physics 2

PH1100

PH1200 (1) Physics Lab 2

MA3710 (3) Engineering Statistics

Look up pre-reqs and semester offerings of Technical Elective courses.

[2]Technical Elective (3)

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Free Elective (2)

May use: ENT3950, ENT3960

Required if CD or D grade in Calc I. Recommended if C grade in Calc I

PH2110(2) Phys 1 Workshop

[1]STEM 2nd discipline(3-4)

CH1150/1151 (recommended) or BL1040 or GE2000

[4]Math/Sci Elective(3)

[2]Technical Elective (3)

UN1015 (3) Composition → **UN1025 (3)** Global Issues

May use upper level language course in place of UN1025.

_____(3) Critical/Creative Thinking List

_____(3) Social / Ethical Reasoning List

_____(3) [5]HASS Comm/ Comp List

_____(3) [5]HASS Social/ Behavioral List

_____(3) [5]HASS HU & Fine Arts List

Highly recommend Co-Curricular, or Ged Ed if available

Co-Curricular (1)

Co-Curricular (0.5)

Co-Curricular (0.5)

Co-Curricular (1)

_____(3) [5]HASS Any

| 14-15 | 14/16-17 | 17.5 | 17.5 | 17/18 | 17-18 | 17 | 17/15 |

1) **If considering BSEE or another Engineering major:** Choose CH1150/51 for your Math/Sci 2nd discipline.
2) **Technical Electives:** If doing Senior Design: choose 12 credits of Technical Electives from approved list of CpE Tech Electives. If doing Enterprise: choose 10 credits from approved list of CpE Tech Electives.
3) **Choose either CS3331 or EE3160:** The other may be used for technical elective credits, if desired.
4) **Eligible Math/Sci electives:** MA2600, MA2910, MA3000 or higher; **BL**1010 or higher; **CH**1150 or higher; **PH**2300 or higher (with some exclusions; see degree audit for complete list)
5) **HASS electives:** 6 credits must be upper division 3000-4000. UN1015 & UN1025 are prerequisites for upper division HASS courses.

Undergraduate advisor: EERC 131 | 487-2550 to schedule appt | eceadvise@mtu.edu

(A) Capstone Options. Choose at start of third year.

Senior Design: After EE 3901, take EE4901 and EE4910.
Enterprise for Design: May take 4 semesters of Enterprise in lieu of EE4901 and EE4910. ENT4950 & ENT4960 must be consecutive & same enterprise. ENT3950 & ENT3960 may apply toward Technical Electives.
EPS: European Project Semester; fulfills EE3901, 4901 & 4910.

Total 128
plus 3 units co-curricular activities