**“Double Major”: BS CpE and EE**  
**Sample 5 year plan**  
**catalog year: 2017-2018**

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**Year 1**

- **Fall**: MA1160
  - ENGR Analysis

- **Spring**: MA2160 (4) CALC II
  - EE2111 (3) Electrical Circuits I

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**Year 2**

- **Fall**: MA2321 (2) Linear Alg
  - CS1121

- **Spring**: MA3521 (2) Differential Eq
  - CS2311 (3) Discrete Structures

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**Year 3**

- **Fall**: EE2112 (2) Circuits II & Lab
  - CS3421 (3) Computer Org.

- **Spring**: CS3411 (3) Systems Programming
  - CS4321 (3) Comm. Theory

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**Year 4**

- **Fall**: PH2100 (3)
  - **HC**

- **Spring**: CS4160 (3) Multi-var. Calc
  - EE3261 (3) Control

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**Year 5**

- **Fall**: PH2200 (3)
  - **HC**

- **Spring**: CS421 (3) Intro. to Algorithms
  - EE4272 (3) Comp. Networks

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**Total credits: 147**

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**Notes:**
- Time conflicts may occur with this plan & adjustments may be necessary. Plan ahead as much as possible to avoid this.
- Delays EE2112.
- Recommended: use ECP as primary major, EEE as double major.
- Do not take: EE3171.
- See page 2 for double-major details.
- BSEE-15 credits of EE Electives include EE4173 & CS4461/EE4272, and may use EE in CpE technical electives.
- UN1025 Sub: May use upper level language course in place of UN1025
- HASS electives: 6 credits must be upper division 3000-4000 level - UN1015 and UN1025 are prerequisites for all upper division HASS courses.

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**Look up pre-reqs and semester offerings for required classes and electives. Plan ahead.**

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**Undergraduate advisor:**  
ecadvis@mtu.edu  
EERC 131  
Call 487-2550 for appt.
CpE / EE Double-major notes for planning the minimum number of credits needed:

1. Recommend: Use ECP as primary major and EEE as double-major. Primary major shows first on diploma, may switch before graduation.

2. Do not take EE3171 (for EE majors only). EE3173 will substitute for EE3171 on BSEE, but NOT vice-versa.

3. Take EE3160 for the requirement of: EE3160 or CS3331. (EE3160 double-counts)

4. BSEE Courses shown in blue italicized lettering on the flowchart have been added to CpE flowchart.
   a. CH1150/1151, math/sci elective, 2nd discipline STEM
   b. ENG1102
   c. SELECT approved elective, choose one course: EE/EET3373, ENG2120, ENG3200, ENG4510, MEEM2110, MEEM2150, MEEM2200, MEEM2700, MY2100, MY3292, PH2300, PH2400, PH3300
   d. MA3160, math/sci elective
   e. EE3120, EE3140, EE3160, EE3180, EE3250, EE3261
   f. 9 cr. of “EE Electives”. Helps fulfill CpE technical electives.

5. EE3180 may be used in place of MA3710 on the CpE degree. NOT vice-versa. If you cannot get EE3180 complete on time before taking EE3173, then take MA3710 before taking EE3173. Must take EE3180 for BSEE, even if MA3710 was taken.

6. 15 credits of “EE Elective” type courses are required for the BSEE (w/o a concentration). EE Elective courses may double-count in CpE technical Electives. EE4173 and EE4272/CS4461 double-count in EE electives.

7. Additional CS courses may be taken as CpE Technical Electives, however CS courses cannot count in for ‘EE electives’ on the BSEE.