Look up pre-requisite, co-requisite, semester offerings, course requirements and restrictions in the course catalog and Schedule of Classes.

**SAMPLE PLAN**

**Photonics Concentration**

**BSEE**

**2019-2020**

catalog term: 201908

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**Co-hort courses**

**Fall Year 1**

- MA1160/61 (4) Calculus I
- Ch1150/51 (4) &/or Ch1153 (1) Unv Chem I
- ENG1101 (3) Engr Analysis
- MA1160/61 Spatial Visualization Test
- MA1160/61 Calculus II

**Spring Year 1**

- EE1111 (1) ECE 1.0 Programming
- EE1110 (1) Essential Math (track A)
- EE1111 (1) ECE 1.0 Programming
- CS1111 (3) Intro C/C++ Programming
- PH1100 (1) Physics I Lab
- PH1200 (1) Physics II Lab
- PH2200 (3) Univ. Physics 2

**Year 2**

- **MA2321 (2) Accel. Linear Alg**
- **MA2352 (1) Accel. Diff. Eq.**
- **EE2111 (3) Electric Circuits I**
- **MA3521/20**
- **EE3131 (4) Calculus II & Lab**
- **EE3901 (2) Design Fund.**
- **MA2160**
- **EA 2190 (3) Intro to Photonics**
- **EE3190 (3) Photonics & Devices w/ Lab**
- **EE3910 (2) EE Design 1**

**Year 3**

- **EE3140 (3) Electromagnetics**
- **EE3160 (3) Signals & Systems**
- **EE3180 (3) Electronic and Lab**
- **EE3290 (4) Photonic Ml & Devices w/ Lab**

**Year 4**

- **EE4910 (2) EE Design 2**
- **EE4920 (5) Modern Comm. Systems**
- **EE4940 (5) EE Elective (3)**

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**Electives:** Must have pre-reqs complete. Look up pre-reqs and semester offerings. See note below.

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**UN1025 (3) Global Issues**

**Choose from SELECT course list in your degree audit. Sugg. PH2300 or PH2400**

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**Undergraduate advisor:**

EERC 131. Call 487-2550 to schedule appt.  eceadvice@mtu.edu

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* Schedule a minimum of 14 credits if taking accelerated Linear Alg/Diff Eq MA2321/3521

** A grade of C or higher in Calc I is required for PH2100 or if CD or D in Calc I, PH2110 is required with PH2100.

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**Photonics electives:**

- **fall:** EE4240, EE4252, PH4510, PH4640 odd
- **spring:** EE4253, EE4290, MSE4292, BE4250-Alt spg even, BE4410 spg odd

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1) 2) 3) 4) 5) See reverse side for planning info and General Education worksheet.

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Total 128

plus 3 units co-curricular Activities

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**Recommended HASS elective: EC3400**