

ELECTRO-OPTICS

Minors:

- Electro-Optics (p. 1) and Photonics (p. 1)
- Semiconductor Manufacturing (p. 1)

Faculty

Andrew Sarangan, Department Chairperson

Minor in Electro-Optics and Photonics (EOP)

This minor is open to students with an interest in photonics technology, which includes a wide range of subjects such as optical design, imaging systems, holography, lasers, fiber optics, optoelectronics, etc.. This minor prepares students with the necessary fundamentals to pursue advanced studies or seek a career in this field. A background in electromagnetics and wave propagation is expected in order to take this minor.

Taking any four courses from the following list will satisfy the Minor in Electro-Optics and Photonics (EOP)

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| EOP 401 | Introduction to Fiber Optics |
| EOP/ECE 404 | Semiconductor Characterization and Metrology |
| EOP 501 | Fundamentals of Optical Design |
| EOP 502 | Light and Matter Interaction |
| EOP 503 | Optical Information Processing |
| EOP 504 | Guided-Wave Optics |
| EOP 505 | Introduction to Lasers |
| EOP 506 | Photonic Devices & Systems |

Only one course may double count for both the student's major and minor.

Minor in Semiconductor Manufacturing (SMC)

This minor is open to all engineering students with an interest in semiconductor technology. It provides the essential background in semiconductor processes, including design, fabrication and metrology. The goal is to help prepare students to pursue a career in the semiconductor manufacturing industry. Students interested in this minor are encouraged to discuss the most appropriate classes to take for this minor with their department chair or the EOP department chair. Only one course may double count for both the student's major and minor.

Required:

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| ECE 205 | Introduction to Semiconductor Engineering |
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Select any three additional courses from the following list:

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| PHY 321 | General Physics IV - Modern Physics |
| EOP/ECE 404 | Semiconductor Characterization and Metrology |
| EOP/ECE 405 | Semiconductor Device Fabrication Lab |
| PHY 420 | Introduction to Solid State |
| ECE/EOP 406 | Advanced Semiconductor Manufacturing |

Only one course may double count for both the student's major and minor.