# POLYMER SCIENCE AND ENGINEERING CERTIFICATE

The Polymer Science and Engineering (PSE) certificate provides a foundation in polymer synthesis, processing, and characterization, and how this relates to polymer structure and properties. This facilitates the proper selection of polymers for various applications such as plastics, composites, biomaterials, organic electronics, and rheology modifiers.

## **About this Program**

- · College: Herbert Wertheim College of Engineering (http://catalog.ufl.edu/UGRD/colleges-schools/UGENG/)
- · Credits: 10 | Completed with minimum grades of C
- Student Learning Outcomes (SLOs) (https://public.tableau.com/app/profile/uf.oipr4918/viz/UFStudentLearningOutcomesCertificatesOnly/ StudentLearningOutcomes/?publish=yes)

Certificates must contain at least nine credits of coursework that are unique to that program out of all other certificates and minors.

### **Department Information**

The Department of Materials Science and Engineering strives to serve the scientific and engineering community of the state and nation by providing quality education in the field, conducting basic and applied research to enhance science in the field, and supplying short courses, technology transfer, industrial consulting, and distance learning to promote engineering in the field.

Website (https://mse.ufl.edu/)

#### CONTACT

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Map (http://campusmap.ufl.edu/#/index/0184)

### Curriculum

- · Advanced Engineering Ceramics Certificate
- · Biomaterials Certificate
- Combination Degrees
- Materials Science and Engineering
- · Materials Science and Engineering Minor
- · Metallurgical Engineering Certificate
- · Nuclear and Radiological Engineering Minor
- Nuclear Engineering
- · Polymer Science and Engineering Certificate
- · Semiconductor Materials Certificate

## **Prerequisites**

Code	Title	Credits
CHM 2045	General Chemistry 1	3
or CHM 2095	Chemistry for Engineers 1	
EMA 3010	Materials	3
or BME 3101	Biomedical Materials	
EMA 3066	Introduction to Organic Materials	3

# **Required Courses**

Code	Title	Credits
EMA 4061	Biomaterials: Structure and Properties	3
or EMA 4062	Biopolymers: Manufacture, Stability and Biocompatibility	
EMA 4161	Physical Properties of Polymers	3
EMA 4666	Polymer Processing	3
EMA 4161L	Polymers Laboratory	1

Total Credits 10