

College of Engineering

Department of Mechanical and Materials Engineering

Proposal for Minor Program

Minor in Robotics and Mechatronics

Contact: _____
Dr. Sabri Tosunoglu Date

Chairperson: _____
Dr. George Dulikravich Date

Chairperson, Curriculum Committee: _____
Dr. Sabri Tosunoglu Date

Dean of the College of Engineering: _____
Dr. Vish Prasad Date

Approved by:

University Curriculum Committee: _____
Date

Faculty Senate Chairperson: _____
Date

Academic Affairs V.P.: _____
Date

Minor in Robotics and Mechatronics

Prescribed courses and other requirements:

For admission to the minor, students need:

- 1) To be fully admitted to their major
- 2) To have a GPA ≥ 2.0

Students are expected to meet all prerequisites for the required courses. Mechanical Engineering students are not eligible for the minor.

The minor requires 16 credit hours consisting of the following courses:

EGN 3311 Statics (3)

EGN 3321 Dynamics (3)

EML 3301L Instrumentation and Measurement Lab (1)

EMA 3702 Mechanics and Materials Science (3)

EML 4804 Introduction to Mechatronics (3)

EML 4806 Modeling and Control of Robots (3)

Show Evidence that Library and/or Laboratory Resources are Available to Accommodate the Proposed Minor:

This minor program will not require any additional library resources. Existing labs will be adequately support the one course that has laboratory components.

Type of Students Expected to be Attracted to this Program:

This program will attract students majoring in Materials, Physics, Computer Engineering, Industrial Engineering, and Civil Engineering who would like to pursue a career related to Robotics and Mechatronics.

Briefly Describe the Requirements of the Related Major Program:

The minor program is being proposed under the umbrella of the Bachelor of Science in Mechanical engineering. All the courses for the proposed minor are part of the required courses for the Mechanical Engineering major.

Justification:

This minor will enable FIU graduates with degrees, other than Mechanical Engineering, to gain a fundamental understanding in Robotics and Mechatronics. Robotics and Mechatronics are a high-tech and rapidly growing industry, and employ graduates from different majors. This minor will enhance the working skills of a graduate in a career related to Robotics and Mechatronics.