

Degree Requirements

Master of Science in Robotics and Autonomous Systems

Systems Engineering Concentration



The MS in Robotics and Autonomous Systems requires a minimum of 30 credit hours. For the concentration in Systems Engineering, these credit hours must reflect one of the following options:

- 30 credit hours and a portfolio, or
- 30 credit hours including the required Applied Project course (EGR 593), or
- 30 credit hours including the required Thesis course (EGR 599) and a thesis

Coursework

Required Core Courses (6 credit hours)*

- MAE 501 Linear Algebra in Engineering
- MAE 547 Modeling and Control of Robots *MAE 501 is a prerequisite

Concentration Courses (6 credit hours)*

- EGR 550 Mechatronic Systems
- and one of the following:
 - EGR 557 Foldable Robotics
 - EGR 555 Mechatronics Device Innovation
 - EGR 598 System Control and Optimization
 - EGR 598 Applied AI and Machine Learning
 - EGR 598 Robotics Systems II
 - SES 598 Autonomous Exploration Systems

Elective Courses (12 - 18 credit hours)**

At least two courses (6 credit hours) must be chosen from outside the student's concentration area among the courses listed here: <https://ras.engineering.asu.edu/courses/>

The electives must be graduate courses in science, engineering, mathematics, or others approved by the Graduate Program Committee. For the full list of approved electives under this program, please visit: <https://docs.google.com/spreadsheets/d/1r30F-xdfxmLa8XPiVg5rgmJZBwWDufujlqFoMsKfA-0/edit#gid=0>

Culminating Experience (0 - 6 credits)

- Select one (1) culminating experience:
 - Portfolio (0 credits)
 - EGR 593 Applied Project (3 credits)
 - EGR 599 Thesis (6 credits)

**Courses are subject to change and are not typically offered every semester. See program website, graduate advising, or department with questions.*

***Electives offered through the other Fulton Schools of Engineering may require override requests; these requests are reviewed by the academic unit who owns the course. The Polytechnic School cannot guarantee that students would be granted overrides for these courses.*