

Robotics and Autonomous Systems (RAS) MS Degree Check Sheet

MAE Concentration

Non-Thesis: Portfolio

Name _____
ID _____

Date _____
Admit Term _____

Core Courses (6 credit hours)

Term Taken

- | | | | |
|---|---|---|-------|
| 1 | MAE 501 Linear Algebra in Engineering | 3 | _____ |
| 2 | MAE 547 Modeling and Control of Robots | 3 | _____ |

Required MAE Concentration Courses (6 credit hours)

MAE 506 is a required course. Select ONE additional concentration course from the following:

- | | | |
|--|--|--|
| <p><i>MAE 508: Digital Control: Design and Implementation</i></p> <p><i>MAE 542: Design Geometry and Kinematics</i></p> <p><i>MAE 527: Finite Element for Engineers</i></p> <p><i>MAE 566: Rotary Wing Aerodynamics</i></p> <p><i>MAE 598: LMI Methods in Optimal and Robust Control</i></p> <p><i>MAE 507: Fundamentals of Control and Optimization</i></p> | | <p><i>MAE 502: Partial Differential Equations</i></p> <p><i>MAE 514: Vibration Analysis</i></p> <p><i>MAE 521: Structural Optimization</i></p> <p><i>MAE 598: Multi-Robot Systems</i></p> <p><i>MAE 598: Bio-Inspired Robots</i></p> |
|--|--|--|

- | | | | |
|---|--|---|-------|
| 1 | MAE 506 Advanced System Modeling, Dynamics, and Control | 3 | _____ |
| 2 | _____ | 3 | _____ |

Electives (18 credit hours)

At least two courses (6 credit hours) must be non-MAE concentration RAS electives.

All concentration courses can be found at the following link: [RAS Electives](#)

- | | | | |
|---|-------|---|-------|
| 1 | _____ | 3 | _____ |
| 2 | _____ | 3 | _____ |
| 3 | _____ | 3 | _____ |
| 4 | _____ | 3 | _____ |
| 5 | _____ | 3 | _____ |
| 6 | _____ | 3 | _____ |

TOTAL **30**

Culminating Event: Portfolio

The portfolio consists of two projects completed by the student in an MAE concentration course, chosen by the student, from the student's iPOS. A paper summarizing the projects and synthesizing the knowledge obtained, plus a cover page is attached to the portfolio in one pdf format.

**More detailed information about the portfolio, including deadlines and a formatting guide can be found at [SEMTE Resource Guide- Portfolio](#)*

Notes: