Georgia Institute of Technology
College of Computing & College of Engineering

CS/AE/ECE 8751: Multidisciplinary Research Foundation II
Proposed Syllabus

Catalog Description (25 words or less)

Continuation of CS/AE/ECE 8750.

Course Description and Learning Outcome

CS/AE/ECE 8750 and 8751 form a two semester sequence, designed to expose students to the discipline of robotics research in a structured way, as well as to encourage novel ideas in a multidisciplinary context. Each course requires the student to complete a semester-long research project under the guidance of two faculty members. The desired learning outcome is to foster a multidisciplinary research approach in the student by:

- critically assessing the prior art in an area outside her own,
- performing state-of-the-art experimental or simulation work in a multidisciplinary area,
- coherently reporting, at the level of a conference publication, on the research performed.

Instructors

The student selects two faculty advisors from distinct participating schools in the proposed Robotics Ph.D. program:

- Aerospace Engineering
- College of Computing
- Electrical and Computer Engineering
- Mechanical Engineering

Course Requirements and Grading

The evaluation component includes:

- Week 2: a one page proposal outlining the proposed work along with a well-argued motivation
- Week 5: a detailed written review paper of the state-of-the art in the area
- Week 10: a written report on the experimental or simulation component
- Week 14: a final report and presentation that includes all of the above along with a discussion of the work done and opportunities for future work

All deliverables will be graded by both faculty advisors as well as reviewed to comply with the evaluation criteria set by the Graduate Committee.