Capstone Design
ME/MSE/ID/BME/ECE

Pre-Semester Overview: Spring 2026

Dr. Amit Jariwala

Georgia Tech

WELCOME!

You are part of an experiment to create the most high-profile, rewarding, expensive, hard-working course at Georgia Tech and a model for design education at engineering schools worldwide

https://mecapstone.gatech.edu/students

What is Capstone Design all about?
Goals for the course:

1. Identify an unmet need
   WHAT'S THE PROBLEM?
2. Invent/design something useful
   CREATIVITY, INNOVATION
3. Apply your analytical knowledge to design it
   ANALYTICAL SKILLS
4. Prove it will work (Simulate it, build it, test it, virtually, physically)
   MODELING AND HANDS-ON
5. Document your process (reports, presentations)
6. Demonstrate it at the Expo
7. Give to sponsor for use or patent it and start company

Project Types

1. External company sponsored
2. Faculty sponsored
3. Your idea!

- For types #1 and #2, check out currently available projects (more are being added) here: https://projects.gatech.edu/
- For guidance on how to use the online portal, see this: http://mecapstone.gatech.edu/howto
- Examples of past projects are here: https://capstone.gatech.edu/past_projects

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Elements of a Good Student Project

- What's the problem?
  - NOT "We're going to design a better mousetrap"
- Creative/Innovative - not just an assembly of off-the-shelf parts (room for novelty)
- Lends itself to analysis
- Sufficient scope for senior design
- Team should have or acquire the skills to complete the project.
- Produce a proof-of-concept and learn from it
  - Design revisions
  - Validate design decisions

How to form a team?

- Team sizes are 4-6 students per team
- Total **350** students as of Jan 02
  - 133 MEs and 26 ECEs in monodisciplinary Capstone Design
  - 106 MEs, 14 IDs, 19 MSE, 42 ECE, 10 BME in Interdisciplinary Capstone Design

- Do NOT worry about swapping your registration from monodisciplinary capstone to interdisciplinary (or vice versa) during week #1. Your registration will be swapped automatically (if needed) after your teams are assigned projects during week #2

- Find team members
  - Based on project interest or skills and experience on https://projects.gatech.edu/
  - Via class-wide chat on MS Teams https://mecapstone.gatech.edu/support
  - Self-identified/assembled during lab meeting on January 14 in **TBD location**

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How are teams matched to projects?

- Review the Flowchart here: http://mecapstone.gatech.edu/flowchart
- Teams are matched to projects and then to faculty advisors
- Even if you plan on bidding for sponsored projects, you should have a “Plan B (C, and D)” project idea of your own
- See additional FAQ here: https://mecapstone.gatech.edu/faq

REMINDERS

1. Form your team ASAP!
   - Past students suggest forming teams based on **complementary skills**
   - Visit https://projects.gatech.edu/ to see the roster and find team members.
   - You may also use MS Teams to chat with other students in the class: https://mecapstone.gatech.edu/support

2. Attend 1st Studio on Monday, January 12 at 12:30 pm in Exhibition Hall – Midtown Ballroom

3. Attend the 1st Lab session on Wednesday, January 14, at 12:30 pm in Exhibition Hall – HomePark (2nd Floor) with **your project ideas** *(if any)*. This session will be the only interactive opportunity to present your project ideas to the class.