Idea to Prototype (I2P) Syllabus

CREATE-X
Georgia Institute of Technology

Expectations for students, mentors, and faculty representatives

The Idea to Prototype (I2P) program, part of the CREATE-X initiative, offers undergraduate research course credit and financial support for student teams to advance their ideas for a potential value creating product by performing basic research, analysis, building, and testing--leading to a proof-of-concept prototype.   Analogous to undergraduate research: students dive deep into a problem for 1-2 semesters with a mentor, enrolled in the research course (2699/4699) for credit and grade.

Students
- Apply with team, idea, and budget for the program for a semester by the deadline. Acceptances determined by faculty committee.
- Register for undergraduate research in your major with the faculty representative (not required to participate, not allowed for graduate students)
- Find a mentor who is willing to meet with your team regularly, that can provide advice and accountability
- Meet with your mentor approximately weekly
  - Refine your idea, set goals, schedule, and who is doing what
  - Set up and attend regular meetings: present updates and receive feedback
- Effort commensurate with 3 hours of credit (5-10 hours/week)
- Weekly self-reporting of progress
- Work towards proof-of-concept prototype
- Attend and exhibit at Mid-Semester Mingle and End-of-Semester Showcase. Students who can not attend the Mingle may submit a video presentation. Students who do not attend and do not participate in the mingle or do not communicate about their participation will be encouraged to drop the course and/or will not receive reimbursement. Students who do not participate in the Mingle can receive grade reduction. Students who do not participate in the Showcase will receive grade reduction.
- Submit reimbursement form and receipts within budget by deadline, up to $500 or more with prior approval and justification

Mentors
- Mentors should care about the students and their idea
- Qualifications: professor, research engineer/scientist, or academic professional who has taught a class previously
- Meet with your team approximately 30 min per week to offer critical feedback, advice, accountability for goals/schedule, and encouragement
- Work with/provide grades to the students' faculty representative
- Participate in a Mid-Semester Mingle and Showcase

Faculty representatives: Faculty members who enroll I2P students in their undergraduate research course

- Enter the grade for each student at the end of each semester after correspondence and agreement with mentor

GRADING

As in undergraduate research, there is no requirement for documentation, unless agreed on with the mentor (e.g., reports, presentations). Did the team meet with the mentor regularly (e.g., weekly)? Did the student take a deep dive on the problem, and do research to figure out how to solve it? Was the effort sincere and strong?   Did the student contribute meaningfully to the team's progress?   Was the team represented at the mid- and end-of-semester events? This is "A" work. Students who do not participate can receive D's or F's.   Mentors may ask the students to each (confidentially) submit peer reviews about what grade they and their teammates deserve.

More info:

[FAQ](FAQ)