ABOUT THE PROGRAM

The undergraduate Bachelor of Science in Aeronautical & Astronautical Engineering (BSAAE) includes an intensive senior capstone project in which students complete a rigorous design and build project focusing specifically on the skills and knowledge unique to the field of aerospace engineering.

Interdisciplinary project options include a suite of small-team, industry-sponsored flight and space projects that provide students with focused industry mentoring, interdisciplinary teamwork, written and oral communication skills, engagement with regulatory requirements, fiscal and procurement management, social and ethical considerations, and market awareness.

If your company would like to sponsor a project, please submit your idea by August 31, 2016 to be considered.

THE NUMBERS:

$10K industry sponsorship
4-6 students per team
6 month project window
1 prototype deliverable

PAST PROJECTS:

- A-10 Retrofitting for Firefighting
  SPONSOR: The Boeing Company
- Aerospace Structure Fastener Inspection System
  SPONSOR: MTorres
- In-Space Additive Manufacturing and Recycling
  SPONSOR: Tethers Unlimited, Inc
- Satellite Propellant Tank Design
  SPONSOR: Spaceflight Industries
- UAV for Precision Agriculture
  SPONSOR: The Loads Group, Inc
- Design, Launch and Recovery of a Rocket and Payload
  SPONSORS: Aerojet Rocketdyne Foundation, Blue Origin, Systima, Planetary Resources

TIMELINE

- CALL FOR PROJECT PROPOSALS: Jun. 20, 2016
- INDUSTRY PAPERWORK DUE: Aug. 31, 2016
- PROJECT LIST POSTED FOR STUDENTS: Sept. 16, 2016
- INDUSTRY PITCH DAY: Oct. 28, 2016
- TEAM ASSIGNMENTS ANNOUNCED: Nov. 14, 2016
- SYSTEM REQUIREMENT REVIEW & POSTER SESSION: Feb. 3, 2017
- PRELIMINARY DESIGN REVIEW: Mar. 10, 2017
- CRITICAL DESIGN REVIEW: Apr. 28, 2017
- CAPSTONE SHOWCASE & RECEPTION: TBA (week of June 5)

MORE INFO: www.aa.washington.edu/seniorcapstone
INFORMATION FOR SPONSORS:

We are now accepting industry project proposals for the 2016-2017 Sponsored Capstone Program. These projects should provide a small team of seniors (4-6 students) with design and performance challenges that require deep analytical study on a topic directly relevant to aerospace engineering. Of particular interest are projects that are primarily self-contained but also integrate with a larger system.

The best projects will incorporate a range of complementary skills from aerospace disciplines including: aerodynamics; propulsion and power; control, sensing, and avionics; communication; structures; manufacturing; and materials. We encourage topics that require interdisciplinary team membership from non-aerospace disciplines such as electrical engineering, mechanical engineering, industrial engineering, or computer science.

The duration of work on the project will last roughly six months, starting in early January and finishing in early June, 2017.

IP & ITAR:

• A standardized agreement for IP rights has been developed by the College of Engineering and the Washington State Attorney General's Office. Currently, we have a single structure for IP. Students and the UW will grant the sponsor a non-exclusive royalty free (NERF) right to project intellectual property for any purpose.

• At this time, no ITAR restricted projects will be allowed.

PROPOSAL REVIEW:

Projects will be ranked and selected based on academic relevance, appropriate scope, student interest, and mentor involvement. Ensuring a successful experience for both the students and the industry partner is a top priority for this program. If we do not have sufficient numbers of students to match teams to all projects this year, we are happy to hold the project for the next year and/or to work with you to find alternate collaborative opportunities with the department.

MENTOR EXPECTATION:

All industry sponsors must commit to providing a technical mentor who will meet with the team for one to two hours each week during the duration of the project. The sponsor must provide at least one site visit for the student team, and students are encouraged to hold their weekly technical mentor meeting at the industry location, if at all possible. A faculty advisor will also be provided. Teleconferencing for the weekly meetings is possible, but attendance at the following events is mandatory for both the faculty advisor and an industry mentor on each team:

Mentor/Advisor Orientation & Team Kick-Off: Dec. 2, 2016
Preliminary Design Review: Mar. 10, 2017
Critical Design Review: Apr. 28, 2017
Capstone Showcase & Reception: TBA (week of June 5)

SPONSORSHIP DETAIL:

The cost for sponsoring a project is $10,000. These funds will be utilized to offset costs of campus capstone lab facilities, shared equipment, and administrative support of the program. Of those funds, $3,000 will be designated for student materials costs. If additional project costs are expected, sponsors are requested to supply an appropriate amount of funding for materials and supplies for the project that will not be provided either directly by the sponsor or by the UW.