



# Become a CU BME capstone design sponsor!

CU BME's capstone design program offers unmatched value to our industry sponsors. With hundreds of hours in student effort, paired with extensive advising from medical and engineering experts and access to CU's state-of-the-art engineering facilities, projects are well-supported throughout the academic year.

## Unmatched value

At the sponsor cost of \$12,000\*, you will receive:

- *At least* 700 hours of student effort from a team of five BME undergraduates
- *At least* 50 hours of instruction to the student team in manufacturing, data analysis, troubleshooting, and design reviews throughout the academic year
- *At least* 30 hours of targeted advising to the student team from medical and engineering experts
- **Full ownership of any IP generated during or from the project**
- Altogether, an estimated **\$25,000 in value (over 2x ROI)!**
- Additional resources and equipment not included in the value estimate:
  - 12 skilled engineers available for consultation across CU's Idea Forge and Integrated Teaching and Learning Laboratory, with workshops for students held throughout the year at both facilities
  - Software available to students: AutoCAD, Ansys, EAGLE, Matlab, NI LabVIEW, Solidworks, and more
  - Equipment available to students: 3D printing, 3D scanning, CNC milling machines, laser cutters, oscilloscopes, PCB fabrication, soldering irons, universal test frames, vibration table, and more

\*Alternate pricing models available

## Instructional team

- Course Instructor: James Long, *PhD*
- Medical Officer: Dale Varner, *MD, MBA, FACS*
- Engineering Officer: Byron Rudisil

If you are interested in working with us, or have questions, please contact James Long (james.long-1@colorado.edu). We look forward to partnering with you!



# Supporting a Transformative Year

Capstone design is a transformative, year-long experience for seniors in CU's BME program. Going beyond the classroom and into design spaces and boardrooms, students engage in an open-ended engineering design problem supplied by industry sponsors like you. Through these projects, students apply skills they have learned in their previous engineering coursework to real-world problems, and learn critical skills in project management, budget management, technical communication, and team work. **By sponsoring a capstone design project, you are directly supporting the development of the next generation of engineers and problem solvers.**

## Keys to a Successful Project

Student teams are supported by a host of faculty and staff throughout the academic year. Beyond regular instruction, teams receive direct consultation with the program's medical and engineering officers, as well as engineering staff employed by CU's Idea Forge and Integrated Teaching and Learning Laboratory. As a sponsor, you will also play a role in guiding your team. Below are a few suggestions for a successful year:

- **Identify a baseline set of design specifications.** For example, “the device must move 100 gallons of fluid/per day,” “the software must process results in less than 2 seconds,” “the battery life must be at least 72 hours.” You will work with your team to refine these specifications over the year to ensure that such a device can be built to satisfy your requirements. If possible, identify equipment or a type of equipment that could be used to validate your specifications.
- **Designate a technical mentor for the project.** Ideally, this mentor would be able to dedicate one hour per week to the team. As students begin rapid prototyping and testing, it is helpful to have a representative from your organization help keep the team on track and focused on the most important features.
- **Choose a project outside your organization's critical path.** Capstone design is primarily an educational experience, and because students are not full-time employees, they are often balancing their engineering work with other coursework and obligations. The instructional team's goal is to make every project a success, but the University of Colorado cannot take responsibility for results deemed by the sponsor as “insufficient.”

Please reach out if you are unsure about your project idea, or would like consultation to determine more specific details. There are many ways to turn an idea into a valuable capstone design project!



# Capstone Sponsor Benefits

Beyond supporting our students and forming a close relationship with CU's BME program, sponsors also enjoy the following benefits:

**Products:** Sponsors receive a functional prototype, validated with quantitative tests derived from desired engineering specifications, along with supporting documentation at the end of the project. This prototype is the result of a rigorous process of brainstorming, refinement, and testing with ample support from engineering staff and faculty through the College of Engineering and Applied Sciences.

**Recruitment:** Sponsors closely interact with student teams and have the option to interact with the rest of the graduating class, as well as the greater BME program. This provides a unique opportunity for recruiting graduates or current students for entry-level positions or internships.

**Outreach:** Sponsored projects are showcased to the local community and other companies at a public design exposition in the spring semester, unless restricted by the sponsor for intellectual property reasons.

## Participation Timeline for 2026-2027

**January to May 2026:** Contact CU BME to discuss availability and feasibility of proposed projects.

**June to July 2026:** Finalize details of project proposal and payment.

**August 1<sup>st</sup>, 2026:** Submit Project Description form for students to view.

**Early September 2026:** Student teams are formed and paired with projects and sponsors.

**Fall 2026 semester:** Work with teams to establish a Scope of Work (early October), and review work in a Critical Design Review (mid December).

**Spring 2027 semester:** Continue to advise teams on prototyping and testing, and review work in an Internal Design Review (early March) and Final Design Review (mid April). If possible, attend the Engineering Design Expo in mid April and celebrate a successful year with your team!



# Payment and Terms

**Contract:** The fee to sponsor one project for one academic year is \$12,000. **As the sponsor, you will retain all project-related IP and receive any resulting prototypes, both hardware and software, at the end of the academic year.** Students will be made aware of the requirement to sign over their IP rights. The full contract details are created and shared through the University of Colorado's Office of Contracts and Grants (OCG).

**Options for Payment:** Please note, we cannot accept credit card payments.

- *Option 1:* Full payment is provided upon full execution of the contract, no later than September 1<sup>st</sup> or the beginning of the fall semester, whichever is first.
- *Option 2:* Payment is divided into two payments of \$6,000, with the first payment due on September 1<sup>st</sup> or the beginning of the fall semester, whichever is first. The remaining \$6,000 is due on January 1<sup>st</sup> or the beginning of the spring semester, whichever is first.

**Export Controlled Items:** These projects are conducted by CU students of varying backgrounds and futures. The University of Colorado cannot receive any EAR or ITAR controlled information as we do not control where these students go after they graduate at the end of the course.

**Alternate Pricing Models:** If you are interested in sponsoring more than one project, we offer discounts to reflect your increased support of our program. If you are interested in a more tailored pricing model to reflect the needs of your company, including multi-year agreements, please reach out.

	1 project	2 projects	3 projects
Cost	\$12,000	\$21,000 (12.5% disc.)	\$27,000 (25% disc.)

