

ECS Senior Design, Research & Collegiate Design Projects Competition: 2018

The ECS College Leadership Council (CLC) is pleased to sponsor the ECS Student Projects Showcase & Awards for undergraduate engineering and computer science students at Cal State Fullerton. This showcase and competition assembles outstanding projects from across each of ECS's departments of Civil Engineering, Computer Engineering, Computer Science, Electrical Engineering and Mechanical Engineering.

Prior to the ECS Student Projects Showcase & Awards, each of these teams is invited to submit an abstract to a panel of reviewers who collectively represent a diverse set of industry disciplines. **Only projects who submit an abstract to the reviewers by the deadline are eligible for award recognition.** The deadline for the project abstract is **5:00 pm on April 13, 2018**, three weeks prior to the scheduled ECS Student Projects Showcase & Awards on May 7, 2018.

Reviewers are recruited from the College Leadership Council, Industry Advisory Boards, and volunteers. Project Teams must face the challenge of succinctly describing their design project's objective, strategy and results to a diverse audience. As such, of chief importance in this competition is the ability to clearly communicate complex subject matter to those who may not be experts in that subject matter. **The top 15 projects will be selected for presentations. Presentations will be scheduled for the morning of May 7, the ECS Student Projects Showcase and Awards day.**

2018 Project Award Categories:

- **Legacy Award:** Legacy projects are those that compete nationally or statewide with three years of design history. Cash prize will be awarded.
- **Best Software:** Software projects are those in the disciplines of Computer Science and Computer Engineering. Cash prize will be awarded.
- **Most Innovative:** Most innovative projects demonstrate unique and forward thinking designs and come from across all engineering and computer science disciplines. Cash prize will be awarded.
- **Capstone Award:** Capstone projects are those specifically completed for Senior Design requirements. Cash prize will be awarded.

2018 Overall Showcase Award Categories:

- **Best in Showcase Overall** – Cash prize will be awarded.
- **Best in Showcase Runner-Up** - Cash prize will be awarded.
- **Honorable Mention** - Cash prize will be awarded.

Eligible projects:

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- Only those projects that have submitted an abstract **by 5:00 pm on April 13** are eligible to be considered for cash awards.
- Eligible projects include those undertaken by an individual undergraduate student or a team of undergraduate students. Projects may have graduate student, alumni, and/or industry mentors but must demonstrate execution by undergraduate students.
- Projects for which students received compensation are not eligible for entry into the competition but may participate in the Showcase event.
- Any project completed under faculty supervision during the current academic year is eligible to participate in the ECS Student Project Showcase whether or not they are being reviewed for awards.
- Each team that enters the competition is only eligible for one award and must be able to provide evidence that a *prototype is functional by the competition date*.

All projects are eligible for participation in the Student Projects Showcase. Only those projects that have submitted abstracts are eligible to be considered for cash awards.

Project Abstract Format

Project abstracts should be submitted via the [competition entry form](#) by **5:00 PM, Friday, April 13, 2018**. Each abstract should be written in the third person. It should include the objective, approach, and intended conclusion. The abstract is limited to 2-pages.

Competition Judging Criteria

Members of the ECS Committee at Large, the College Leadership Council, and industry experts will review the competition submissions and select 15 project teams who will compete on May 7th in 15 minute time slots from 8:00 am – 1:00 pm. **Award recipients will be announced at the ECS Student Projects Showcase & Awards event, Monday, May 7, 2018, 3:00-5:00 PM in the TSU.**

Project abstracts that make it to competition day will be judged using the following **four** criteria:

1. Project Abstract (20%): Each project team (student or students) is required to submit by a word document containing an abstract using the Project Final Report format described above. Project overviews will be used to inform the reviewers of the important aspects of the project by providing a brief background, a statement of the problem, methods used with results, and conclusions.

2. Design Concept (25%): Scoring in this category is based on a team's design concept. Specifically, how well did a team achieve its stated design objectives through implementation of a sound technical strategy.

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3. Results and Support (30%): Scoring in this category is based on several criteria. First, how well do the technical data and, if provided, cost analyses support the outcome. Second, how successfully does the design outcome achieve the original design goals and objectives of the project. A team's ability to succinctly and clearly articulate what was accomplished is crucial. Evidence of a functioning prototype is absolutely necessary.

4. Presentation (25%): The Project Team's ability to effectively convey to the reviewers via a 10-slide power point the project's objective, approach and conclusions is weighted the highest in this competition.