

Distinction in Research and Creative Works in CAAM

The Department of Computational and Applied Mathematics (CAAM) will recognize graduating seniors for outstanding creative contributions with the award of “Distinction in Research and Creative Works in CAAM.”

By establishing this Distinction, the department hopes to kindle in students an ambition to make a significant contribution beyond routine classroom assignments.

The CAAM Department regards this Distinction to be a great honor; it shall be awarded for significant contributions in research, design, and creative projects. The basis for the award may be one outstanding work, or a consistent series of meaningful contributions made over the duration of an undergraduate career.

According to George R. Brown School of Engineering policy, no more than 30% of CAAM majors in a graduating class can receive this Distinction.

Application Procedure

CAAM majors are eligible Distinction in Research and Creative Works in CAAM; other students who may be engaged in CAAM-related research are encouraged to seek out this Distinction in their major departments.

Students will be considered for this Distinction in the Spring semester before they graduate. (December graduates should submit their portfolios in the Spring following their graduation.) To be considered, a student must:

- declare his/her intention to apply for this distinction by sending a brief email to the CAAM department office (caam_dept@rice.edu; subject: Distinction in Research and Creative Works in CAAM) by the end of the 2nd week of the Spring semester;
- Electronically submit a portfolio to the CAAM department office (caam_dept@rice.edu; subject: *Distinction in Research and Creative Works in CAAM*) by the end of the 10th week of the Spring semester;
- and submit a hard-copy of the portfolio to the CAAM department office,

Department of Computational & Applied Mathematics (CAAM)
c/o Distinction in Research and Creative Works
Rice University
6100 Main St. - MS 134
Houston, TX 77005-1892,

by the end of the 10th week of the Spring semester.

Only those students that explicitly apply according to these guidelines will be eligible for this Distinction. Successful applicants must graduate with a cumulative GPA of at least 3.30.

Upon review of the portfolios, the CAAM Department Undergraduate Committee will recommend awards to the Department Chair, who will issue final approval.

The portfolio should comprise the following.

- One page abstract.
This well-written introduction should concisely summarize the longer works that make up the main substance of the portfolio. *This abstract must contain a clear statement of the role that fellow student collaborators, faculty advisors, and other mentors played in the works included in the portfolio.*
- Copies of papers/final reports/etc. from research and design projects. These must have been completed during the student's undergraduate years at Rice, though the projects may have been conducted off campus, e.g., with collaborators in the Texas Medical Center, through an REU (Research Experience for Undergraduates), or through an industrial internship. Cogent written reports are strongly favored over collections of slides from project presentations or posters. Candidates may include links to videos or computer codes.
- One or more letters of recommendation from faculty or other advisors (at Rice or elsewhere) addressing the student's contribution to the project. The advocate should send this letter directly to the CAAM Department (caam_dept@rice.edu).

Applicants should carefully consider the composition of their portfolio. It is quite possible, for example, that two members of a design team will both apply, but only one will be awarded Distinction: while the design project might be the main element in the portfolio, supporting material from other projects can make a difference. On the other hand, students should be judicious in the material they include: quality trumps quantity.

Material included in this portfolio may not be submitted for Distinction in any other major.

Standards

Many CAAM students conduct undergraduate research during the academic year and over the summers, and all CAAM majors must complete a meaningful year-long design project. Successful candidates for Distinction must explain how their contributions rise "above and beyond the norm" accomplished by many of our majors.

The following activities are hallmarks of research that goes beyond conventional expectations. The Undergraduate Committee will look for such achievements when assessing portfolios.

- Publish an article in the research literature.
Students may publish in conventional research journals, or a student-oriented publication like SIAM Undergraduate Research Online, (<http://www.siam.org/students/siuro>). Due to the lengthy review times in the discipline, strong consideration will be given to submitted manuscripts.
- Present work at a regional or national conference.
- Publish an article in a Rice research journal, such as *Catalyst*, or as a CAAM Department technical report.
Technical reports must be sponsored by a faculty advisor, who should be named in the report.
- Win an award at the Rice Undergraduate Research Symposium (RURS).
- Make a significant contribution to the needs of design team's client. In this case, the client should write a letter of endorsement.
- Demonstrate a high degree of dedication, leadership, and creative contribution to a research team or mathematically-oriented outreach project, e.g., the Worthing Rice Apprentice Program (WRAP), over the course of several years.

While not exhaustive, this list intentionally emphasizes that students must go well beyond the norm to be awarded with Distinction.