



Summer Undergraduate Research Fellowship Program (SURF)

PROGRAM OVERVIEW

The Undergraduate Research Fellowship program, established in the spring of 2005, is dedicated to enhancing the academic lives of UAH engineering students by providing rising juniors and seniors with opportunities for participating in the research of scholars of UAH College of Engineering during the summer session.

SURF welcomes all students who have the potential and motivation to benefit from working with faculty and research staff as research assistants. The program has been designed to include partnerships between **students and mentors**.

The Research Fellow

The SURF program is intended to be a summer experience. Rising juniors and seniors in the College of Engineering are eligible to be SURF Fellows. Award of the Fellowship is based on the student's overall motivation and potential to benefit from the program.

Students in the SURF Program are involved in all aspects of research: writing a Research Proposal, conducting lab procedures, and presenting results. They gain valuable experience in lab procedures, software applications and other facets of research, while working with faculty and research staff. In addition, SURFers earn up to \$2,000 over the summer based on the number of work hours.

Finding a Faculty Mentor and a Research Project

Each Department has compiled a list of SURF Research Opportunities based on the submissions by Research Mentors which is available at the Department's office. Students can search through this list and select a research project that is interesting to them. It will then be up to the student to contact the research mentor and set up an appointment to discuss the potential for a SURF project.

Both students and research mentors have a choice about working together. It should be a mutual decision. In their meeting, students and mentors will learn about each other, and students will learn more about what the mentor's project entails and about the mentor's expectations.

Here are some tips that might help students in the process of finding a research position:

- **Don't delay!** Students should contact prospective mentors and set up an appointment as soon as possible.
- Students should think carefully about what they want to gain from and contribute to the research project. Carefully assess whether a research project offers the opportunity to acquire the skills or knowledge desired.
- Don't be intimidated by the kinds of student tasks that the research mentor has listed for the project. As long as students are willing to learn new skills, they are probably eligible for the project.
- Use the meeting with the prospective faculty mentor as an opportunity to get to know him/her and vice versa. Ask about things such as who supervises the work, how many hours are expected, what the work entails, etc.

The Application Process

Once the student and the Research Mentor have agreed on a Research Project, the student completes an application (including the Faculty Mentor's signature) and turns it in to the College of Engineering Dean's Office.

The College of Engineering SURF Selection Committee, headed by the Dean, will meet shortly after the application deadline to determine which applicant will be awarded the Fellowship. Acceptance letters will be mailed shortly thereafter.

Research Journal

Each SURF scholar is required to keep a journal. The purpose of this journal is to reflect upon their research experience – from the interview, the objective of the project, the highs and lows of the work, and how the student is feeling about the entire experience. We expect each student to write at least 1-2 pages per week. We want this to be both creative and analytical – but what's key is the writing process. We want this to be an exercise that helps students in the meaningful interpretation and analysis of the research.

Research Abstract

Each scholar is required to write an abstract at the end of the semester that includes a clear succinct statement about what the research is about, any relevant background information about the project, a brief description of the methodology, preliminary results, anticipated relevance and applications and plans for future research. We strongly encourage research mentors to review their student's abstract, to see that they have a clear understanding of the project.

Research Presentations

At the end of the summer, scholars give short oral presentations about their research work. The presentations offer the students an opportunity to share findings with their fellow scholars, get feedback on ideas, and share enthusiasm for the hard work they've completed. The presentations are a step toward developing personal presentation styles and empowering a self-image of being knowledgeable about the research work.

See more about the three assignments under Important Information.