

Tips for Mentors

As a tangible introduction to the application of an engineering education, an undergraduate research position can provide the most powerful learning experience of a student's undergraduate education. The role of the faculty mentor in shaping this experience is paramount. Although often requiring a significant amount of time and energy, serving as a faculty research mentor has the potential to be an extraordinarily rewarding experience for both student and faculty.

The following guidelines promote the importance of preparation and effective communication in establishing a positive working relationship between mentor and student. Attention to these will help facilitate a successful mentoring experience.

- Assess your student's interests, knowledge, and abilities. Do not make assumptions about knowledge. Regularly encourage your student to speak up if there is something that is not understood.
- Explain the project at the outset, making sure the student understands the overall goals of the project and the contribution of his/her part of the research.
- Clearly define your expectations for the student. Develop a tentative schedule for completion of various aspects of the project and discuss the hours your student is expected to maintain.
- Exchange contact information with the student, so both student and faculty are accessible if needed. Discuss appropriate guidelines for when and how to contact each other.
- Develop a schedule of regular meetings with the student. It is suggested that meetings occur at least weekly. If you are off-campus for a period of time, continue to keep in touch by e-mail or phone.
- Keep and share notebooks and other lab records.
- Outline your student's daily tasks and responsibilities in the lab. Also explain the student's role in lab meetings and other communications with project team members.
- Whenever possible, provide specific instructions in writing.
- Explain the roles of other team members. Make sure the student understands the supervision and reporting structure and the roles of graduate students and post-doctorates.
- Communicate about overall project progress.
- Provide encouragement as well as honest feedback about the student's work.
- Review the student's research products (final report, posters, etc.) and provide constructive feedback.
- Make an effort to get to know your student on an informal basis. This can facilitate a comfortable working relationship as well as opportunities for discussing future aspirations and options.

Includes material from *Mentoring Undergraduates in Summer Research Programs*, The Leadership Alliance: Providence, RI.