

Network Science IGERT

Frequently Asked Questions

- **What makes a competitive applicant?**

Students must meet the minimum requirements for admission to their home department. Beyond the minimum requirements, competitive applicants should have strong GRE scores and GPAs.

We weigh research statements in the applications very heavily. Potential IGERT Trainees should indicate an interest in interdisciplinary research, especially at the crossroads of math, biology, and the social sciences.

We also look for strong letters of recommendation from faculty who know the applicant's research and potential as a future scientist.

We do not require publications for admittance to the program.

UC Santa Barbara's Network Science IGERT program is committed to promoting diversity within STEM fields. Women, underrepresented minorities, and individuals from economically and socially disadvantaged backgrounds are especially encouraged to apply.

Please check the box in the online form when applying to one of the home departments. Doing so will ensure your application is considered for the IGERT Traineeship.

- **How many students do you accept to the IGERT program?**

The Network Science IGERT will accept 25 students over its 5-year term. This comes to approximately six new students per year, starting in October 2014.

- **How do I apply?**

We advise students to familiarize themselves with the research of IGERT faculty before applying to the program.

Apply directly to a home department and indicate an interest in the Network Science IGERT on their applications.

Complete the IGERT Traineeship Application found at <http://networkscience.igert.ucsb.edu/content/apply>.

Doing so requires the submission of a CV, a Statement of Interest, and a Summary of Relevant Experience in the areas of Network Science and/or Big Data.

Application information is due by December 15. Home departments may have different application deadlines, but students with interest in this program should send in the IGERT Traineeship application by December 15. We aim to send award letter by the following February.

- **Can non-U.S. citizens apply?**

The NSF IGERT financial support is only available to US citizens and permanent residents.

Non-U.S. Citizens may still participate in programmatic activities as IGERT Associates. Contact the IGERT coordinator directly for information about becoming an associate.

- **How long does it take to complete the traineeship?**

We estimate five years to complete a Ph.D. Program.

- **How is the Network Science IGERT program structured?**

The Network Science IGERT is a training program funded by the National Science Foundation. It is not a separate department. Rather, it is an initiative to integrate seven distinct areas of research at the University of California, Santa Barbara through the broad study of networks. Students have a home department, and their eventual degree will be conferred through that department. The IGERT, however, provides additional resources and focus to the students to help them engage in interdisciplinary research.

IGERT students receive access to the new Network Science Laboratory (NSL), as well as to new courses, weekly seminars, summer internships, summer boot camp, and an innovation program. In the NSL, trainees will obtain hands-on experience with software, empirical datasets, and interdisciplinary science through a set of newly designed training modules. The team-based modules will span the first year of the program and solve problems of empirical networks using an interdisciplinary mix of hypotheses and strategies. A sequence of newly introduced courses will train students in the basic concepts from the emphasis areas. Weekly seminars, summer internships, and a workshop will provide the trainees with the necessary professional skills. Finally, an innovation program will stimulate problem-solving and creative thinking.

In September, new IGERT trainees will jump into a 2-week boot camp to prepare for the interdisciplinary study of Network Science. IGERT trainees will then complete one team-based, four-credit training module per quarter in the first year. The training modules supplement the two required courses. A trainee is encouraged to partner with students from a different background each quarter, and to rotate through modules from different areas of Network Science. For example, a trainee could complete a module on

dynamics and control in the first quarter, on social networks in the second quarter, and the final one on Cyberinfrastructure.

The bulk of the IGERT work occurs in the first two years of graduate study, and helps trainees select and refine a topic for their dissertations. The final three years are spent conducting unique research, and working on professional development for a career beyond graduate school. IGERT trainees have access to the NSL during the entirety of their participation in the program.

Please visit <http://networkscience.igert.ucsb.edu/education> for more information.

- **Who are the Program faculty and what are their research interests?**

A list of IGERT program faculty and their research interests can be found on the website. Faculty members are drawn from seven departments nationally recognized for their cutting-edge research: Communication; Computer Science; Ecology, Evolution, and Marine Biology; Electrical and Computer Engineering; Geography; Mechanical Engineering; Sociology

- **What is the financial support package for IGERT trainees?**

In the first two years of study, IGERT trainees receive stipends in the amount of \$30k/year in addition to health insurance and full remission of graduate student fees and tuition.

In remaining three years, IGERT trainees will receive departmental support in the form of Research Assistantships or Teaching Assistantships. They will continue to receive health insurance and full remission of fees.

- **Do you offer summer internships for undergraduate students?**

Yes, we do. <http://networkscience.igert.ucsb.edu/content/undergraduate>

- **My background is in a discipline other than the 7 main departments (i.e. Physics). May I still apply to the IGERT program?**

Yes, you may still apply, but you must be admitted to one of the seven home departments to be eligible for the IGERT Fellowship. An undergraduate background in Physics might do well in Computer Science, Electrical Engineering, or Mechanical Engineering. There might even be overlap in Ecology, Evolution and Marine Biology. Please look at the individual faculty advisors to find synergy in your research goals.