# COGNITIVE SCIENCES University of California, Irvine

# THE DEGREE

The bachelor of science degree in cognitive sciences prepares students for a research career in cognitive science, focusing on the current dominant approaches of the field. The study of cognition can be approached though cognitive neuroscience, behavioral experiments, language science, computational and mathematical modeling, or any combination of those. The major combines strong technical skills with deep knowledge of at least one of these approaches. Students in the department may become involved in research by working with faculty members in areas such as cognitive neuroscience, vision, hearing, attention, memory, language, development, and decision-making.

# **CAREERS**

The major prepares students for graduate study by providing a challenging introduction to the field that is strongly grounded in theory and empirical approaches emphasizing experimental/computational methods. Cognitive science grads are sought by high-tech startups, research consultancy companies and government science and laboratories.

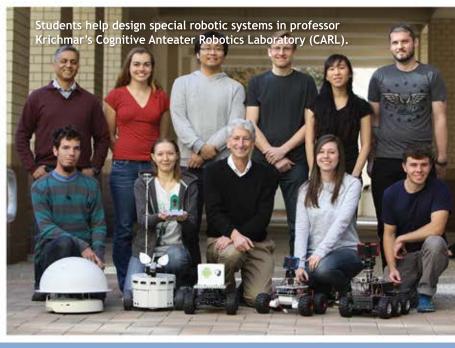






# **COGNITIVE SCIENTISTS ASK QUESTIONS LIKE ...**

- How do people perceive, learn and solve problems?
- How does the human brain organize and store information?
- How do we create and use language?
- How and why do people work the way they do?



**UCI** School of Social Sciences

# CURRICULUM HIGHLIGHTS

Below are just some of the required courses for students majoring in cognitive sciences. Students are required to choose a concentration (from those at right) and each concentration comes with different recommended courses.

- Psychology Fundamentals (Psychology 9A-B-C)
- Math 2A-2B and Stats 7
- School of Social Sciences Computer technology requirement:
   Psychology 114M or ICS 31
- Psych 109: Cognitive Science Research Seminar
- Psych 110: Quantitative Methods or Stats 110: Statistical Methods
- Concentration Core Course
- Research Methods:
  Psych H111A-H111BW-H111C
- Seminar and Thesis: Psych H101A-H101B-H101C

\*Honors in cognitive sciences possible when overall GPA in major is 3.2 or higher and thesis is approved by cog aci advisor.





# **CONCENTRATIONS**

#### COGNITIVE NEUROSCIENCE

An interdisciplinary field that investigates the relationship between mind and brain. Cognitive neuroscience intersects closely with research in psychology, neuroscience, biology, computer science, mathematics and engineering.

#### COMPUTATIONAL AND MATHEMATICAL MODELING

Researchers construct mathematical or computer models of human cognition and behavior. They then test how well these models predict real human or group behavior, and use the models to gain insight in any aspect of human psychology, development, pathology and so on.

#### EXPERIMENTAL PSYCHOLOGY

Researchers experimentally investigate mental operations by measuring changes in human behavior as a function of changes in the environment. The resulting changes are interpreted by comparing them with the predictions of mathematical, computational and neural models.

#### LANGUAGE SCIENCE

Researchers investigate the psychological and neurological bases of the complex system of human language knowledge, from sounds to words to sentences and beyond.

# UNDERGRAD STUDENT AFFAIRS

The Social Sciences Undergraduate Student Affairs Office provides numerous services and special programs for undergraduate students including:

- Course planning
- Information concerning honors
- Change of major requests
- Course substitutions
- Financial aid appeals
- Career and internship guidance
- Graduate and professional school information

To set up an appointment, call 949.824.6803, or visit their website at www.undergrad.socsci.uci.edu/offices/studentaffairs.

# **ACADEMIC RESOURCE CENTER**

The School of Social Sciences Academic Resource Center (SSARC) is a great starting point for information regarding internships, graduate school, and prospective careers.

Visit SSARC online at www.ssarc.socsci.uci.edu or call 949.824.8322 today to set up an appointment.

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