

SUMMER SPRINGBOARD
Look Inward. Go Upward.

Advanced Neuroscience Infosheet

New student admissions for Summer 2027 are open

2-Week Course

This is a two-week program where you'll focus on one course for the entire duration.

Program Highlights

- Record live nerve signals using specialized electrophysiology equipment and sensor kits
- Track eye movements with surface electrodes during visual challenges and optical illusions
- Measure real-time brainwaves using EEG headsets to see how the brain focuses and relaxes
- Present an original research project or brain-computer interface prototype at a capstone symposium

2027 Dates

UC San Diego:

- Session 1: June 21 - July 03

Academic Program Overview

Neuroscience sits at the intersection of biology, computation and engineering, where mapping neural circuits drives breakthroughs in everything from brain-computer interfaces to targeted psychiatric treatments. Modern researchers decode complex electrical signals to treat neurodegenerative conditions, restore mobility through prosthetics and understand how neural networks shape human behavior. In this program, students step into the role of a neuroscientist, working with electrophysiology equipment, electroencephalography (EEG) sensors and neural modeling tools to investigate how the nervous system receives, processes and acts on information.

Designed for high school students seeking an advanced, hands-on deep dive into the brain, this course goes beyond introductory concepts to explore the cellular and computational mechanisms of neural function. Through hands-on laboratory work, brain dissections and an original capstone research project presented at a final campus symposium, participants learn how to formulate testable hypotheses and analyze real-time neural data.

Prerequisites: Students must have successfully completed AP Psychology, Honors Biology or an equivalent introductory course in psychology or life sciences prior to enrolling.

Academics in Action

To complement classroom learning, students explore world-class research facilities across the UC San Diego campus. Throughout these visits, students engage with university researchers, bioengineers and graduate trainees to learn how cutting-edge technology translates into discoveries in brain health and neural engineering.

Instructors

UC San Diego - Dr. Seraphina Solders

Dr. Seraphina Solders is a Postdoctoral Fellow in the Neurosciences Department at UC San Diego. She received her Bachelor of Arts in Psychology and Biology with the Honors Minor in Interdisciplinary Studies from San Diego State University (SDSU), and her Ph.D. in Neurosciences from UCSD. Her current research focuses on the role of the blood-brain barrier in aging and its contributions to Alzheimer's disease risk.

Tuition Information:

***Apply by November 30 to lock in the lowest prices of the year. Tuition increases on December 1**

Residential Students:

- **Includes:** all meals, lodging, excursions, academic course and weekend excursions
- **Excludes**: optional airport pickup and drop off service (available for an additional fee)
- **Price**: $5,998*

Commuter Students:

- **Includes:** lunch, academic course, excursions, and programming from 9am to 5pm, Monday-Friday
- **Excludes:** lodging, breakfast, dinner, and weekend excursions
  - Weekend excursions can be added on for $125 per day
- **Price**: $3,298*

Supplements:

- **Application Fee**: Starting at $99 (mandatory, non-refundable)
- **Tuition Protection Plan**: Allows for cancellation for any reason up until the day of the program. Click here for more info.

More info on Airport Transfer

More info on Unaccompanied Minor Service

Apply Now!

Course Structure

There are nine 3-hour class sessions over the two-week course. During week one, students have class from 9am-12pm Monday - Friday. During week two, students have class from 9am-12pm Monday through Thursday. Afternoons in both weeks are dedicated to students' preferred College Readiness Workshops (CRW), True You, and Academics in Action, with Academics in Action including academic excursions, guest speakers, and course-related activities, such as an instructor-led project or student-led, independent study.

Typical Schedule

8AM	Breakfast
9AM	Academic Course / Commuter Student Arrival
12PM	Lunch
1:30PM	Academics in Action or Recreational Activity
3:30PM	CRWs, True You, or Academics in Action
5-5:15PM	Commuter Student Departure
6PM	Dinner
7PM	Clubs
10:30PM	Night Checks

Schedule above is a sampler; real schedules may vary based on program and academic track.

Summer Springboard programs are not run by our campus partners (with the exception of Cal Poly, University of Washington Foster School of Business, and NYSID which are run in partnership with SSB). Universities and their affiliated departments and partners do not control and are not responsible or liable in any manner for any part of the Summer Springboard program.