

# Internships in Nanosystems Science, Engineering and Technology (INSET)

Summer Undergraduate Research Experience for Community College Students

Summer Program Dates: June 23 to August 15, 2008

Application Deadline: February 29, 2008

*Hosted by the California NanoSystems Institute (CNSI) at the University of California Santa Barbara.*

*The INSET program is supported by the National Science Foundation (NSF)*

## California NanoSystems Institute (CNSI) and the Center for Nanotechnology in Society (CNS)

This internship program brings community college undergraduates to the UC Santa Barbara campus for a summer research experience. Interns will gain first-hand experience in scientific investigation in a dynamic, collaborative research environment. They are matched individually with UCSB faculty and graduate student mentors who will provide training and support. Interns attend weekly meetings, special seminars, and have the opportunity to develop their presentation skills throughout the summer.



The *California NanoSystems Institute (CNSI)* is a science and engineering research center at UC Santa Barbara. Researchers at CNSI belong to several different academic departments including chemistry and biochemistry, physics, biology, engineering, materials science, and computer science. CNSI research determines new ways of integrating nanometer-scale building blocks into new materials, devices and systems with capabilities far exceeding those found in nature.

CNSI collaborates with the *Center for Nanotechnology in Society (CNS)* to study the societal implications of nanotechnology, including risk perception, historical contexts, and technological innovations. At least two INSET projects will be within the scope of CNS research.

Students are welcome to apply for internships with both centers, please see the application form for more details.

## The Program:

- The INSET program will run from June 23 to August 15, 2008.
- Interns will receive a stipend of \$3,000 total for 8 weeks at 35 hrs/week. Interns are not allowed to hold other jobs or attend summer courses during the internship.
- We will provide \$900 for housing expenses, or arranged accommodations in University apartments for free. Students will arrange their own meals.
- Travel costs to and from the UCSB campus will be provided for students outside the local area.

## Student Eligibility:

This program is open to undergraduate students who meet all of the following requirements:

1. Currently enrolled at a community college in California
2. A US citizen or permanent resident
3. Majoring or intends to major in science, engineering, social science or mathematics
4. Has satisfied the following course/unit requirements: (1 semester unit = 1.5 quarter units)
  - Completed or currently enrolled in a minimum of 4 semester units of Calculus
  - Completed a minimum of 12 semester units in science and/or engineering courses for internships with California NanoSystems Institute
  - Completed a minimum of 12 semester units in science, engineering, and/or social sciences for internships with Center for Nanotechnology in Society

## Student Application:

- See information on following page about the necessary components for completing an application.
- Application postmark/e-mail deadline is Friday, February 29, 2008.
- Award notification will begin by mid-April 2008.

***To learn more about ... go to the following websites:***

CNSI Research and Faculty:  
<http://www.cnsi.ucsb.edu>

CNS Research:  
<http://www.cns.ucsb.edu>

Former INSET student projects:  
<http://education.cnsi.ucsb.edu/inset.html>

Find faculty under the "Directory" link

## INSET Application Information

### A COMPLETED INSET APPLICATION INCLUDES THE FOLLOWING:

1. **On-line registration of your application** - go to <http://education.cnsi.ucsb.edu/inset.html> and follow the links to "Application Process"
2. **A completed application form** - see next page
3. **A statement of interest** explaining why you are interested in a research internship experience, and what you feel you can contribute to it. BE SPECIFIC - for example, you might discuss how a particular experience or person inspired you to study science. You should also include a discussion of your future academic and career plans. Your essay should be typed, and at most one page long.
4. **A copy of your unofficial college transcript.**
5. **A letter of recommendation** from a course instructor, TA, or employer who is familiar with your scientific skills. A letter of recommendation form is included in this packet.

### Comments:

- Item #1 MUST be completed on-line, on the web. All other items (#2, 3, 4 and 5) may be sent by e-mail or post-mail. (Electronic mail is preferred.)
- Acceptable file formats for e-mail attachments are Microsoft Word (doc) and Adobe Acrobat (pdf). Transcripts should be scanned in and converted to pdf file format. If you don't know how to do this, send the paper copy by regular post-mail.

**Application E-mail/Postmark Deadline is February 29, 2008**

**Incomplete applications will not be considered**

<p><b>Please e-mail application materials to:</b></p> <p><a href="mailto:inset@cnsi.ucsb.edu">inset@cnsi.ucsb.edu</a></p> <p>(e-mail is preferred)</p>	<p><b>....or post-mail application materials to:</b></p> <p>INSET Program CNSI University of California Santa Barbara, CA 93106-6105</p>
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**Questions or Concerns about INSET? Contact....**

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\*\*\*REMEMBER TO REGISTER YOUR APPLICATION ON-LINE AT <http://education.cnsi.ucsb.edu/inset.html> \*\*\*

## INSET Summer 2008 Student Application Form

First Name \_\_\_\_\_ Last Name \_\_\_\_\_

e-mail Address (print CLEARLY) \_\_\_\_\_ Phone \_\_\_\_\_

Please list Science, Engineering, Social Science and Math courses that you have completed or are currently taking:

SCIENCE, ENGINEERING, AND SOCIAL SCIENCE: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

MATHEMATICS: \_\_\_\_\_

\_\_\_\_\_

Please circle your level of experience with the following types of software/programming:

Word processing: none/ some/ a lot	Databases: none/ some/ a lot	Please list here any <i>programming languages</i> you know:
Spreadsheets: none/ some/ a lot	Graphics/Media: none/ some/ a lot	
Presentation: none/ some/ a lot	Web authoring: none/ some/ a lot	

Please give a brief description of your work experience. We are interested in ALL kinds of jobs, including non-scientific and unpaid (volunteer) work:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Do you have experience in working with technical equipment or tools? (Shop tools; electrical, mechanical, construction, or medical equipment, etc) Please explain:

\_\_\_\_\_

\_\_\_\_\_

Please indicate if you are interested in pursuing an internship with CNSI or with CNS. If you would be interested in doing research with either center please check both boxes:

CNSI - Science/Engineering Internship  \_\_\_\_\_

CNS - Social Science Internship  \_\_\_\_\_

Please go to the CNSI (<http://www.cnsi.ucsb.edu>) or CNS website (<http://www.cns.ucsb.edu>) and identify 3 or 4 faculty or research areas who/which interest you:

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

APPLICATIONS must be e-mailed or postmarked by FEBRUARY 29, 2008.

Only complete applications will be considered.

Send applications to [inset@cnsi.ucsb.edu](mailto:inset@cnsi.ucsb.edu)

Or via post to: INSET Program, CNSI

University of California

Santa Barbara CA 93106-6105

**Student Name:** \_\_\_\_\_

### Letter of Recommendation for INSET Program

*To the Recommender:*

*The student who has asked for your recommendation is applying to a summer undergraduate research internship program in science and engineering at UC Santa Barbara. Our programs comply with the Rehabilitation Act of 1973 which prohibits discrimination on the bases of handicap. Please do not refer to any handicap the applicant may have.*

**Recommender's name:** \_\_\_\_\_

**Title and Institution:** \_\_\_\_\_

**E-mail address:** \_\_\_\_\_ **phone :** \_\_\_\_\_

*Please place check marks to rank this student in the following qualities (leave unchecked if you haven't had opportunity to evaluate student in a particular area)*

	Exceptional Top 1%	Excellent Top 5%	Very Good Top 20%	Good Top 40%	Fair - Poor Bottom 60%
Maturity and self-confidence					
Work ethic, responsibility					
Initiative, motivation					
Interest in science / engineering					
Intellectual ability					
Problem solving skills					
Laboratory skills					
Communication skills - written					
Communication skills - oral					
Ability to work well with others					

*Please answer the following questions in the space below, or attach a separate letter to address them.*

- How long have you known this student, and in what capacity?
  
- What do you know of this student's future educational and/or career plans?
  
- Please use the space below to give us your impressions related to this student's abilities, character, and potential to succeed in a scientific research internship.

**E-MAIL (OR POSTMARK) DEADLINE FOR LETTERS IS FEBRUARY 29, 2008**

Please e-mail your completed letter to [inset@cnsi.ucsb.edu](mailto:inset@cnsi.ucsb.edu).

Alternatively you may mail a hard copy to:

INSET Program, CNSI, University of California, Santa Barbara, CA 93106-6105