## Cal Teach Program Summary

**UC Riverside**

<table>
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<tr>
<th>Key feature(s) that distinguishes Cal Teach from (your) other teacher preparation programs</th>
<th>At UCR, CaTEACH-SMI has seamlessly woven itself into a collegial campus fabric with an already strong history of preparing well-trained STEM teachers. By developing strong partnerships with: the Graduate School of Education, the ALPHA Center, numerous academic departments in the College of Natural and Agricultural Sciences and the College of Engineering, and the University Education Extension Program, we have developed multiple pathways enabling students to:</th>
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<td>• Achieve admissions eligibility a teaching credential program of choice</td>
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<td>• Establish professional networks</td>
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<td>• Deepen their subject knowledge through field experiences, including partnering SMI with the California Mathematics and Science Teacher Initiative (CMST) to create a four-year continuum.</td>
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<td>• Gain public school classroom experiences very early in their undergraduate careers</td>
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<td>• Access the Aurora Project for community college transfer students.</td>
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Through campus collaborations, programs such as the ones listed below, have recently been created and implemented:

- Teacher Mentor Certification Program (University Extension)
- Professional development programs that improve teacher instruction, increase student achievement, and improve teacher retention. These programs are research-based workshops and conferences developed through the Inland Area Science Project and the Riverside-San Bernardino County Teacher Association, which include longitudinal evaluation components to determine effectiveness of pedagogical changes.
- STEM degree emphases in teacher education
- Professional development training opportunities that provide network building between pre-service and credential teachers, such as through the Mathematics Academy for Teaching Excellence (MATE), Science Quest, Copernicus Project, and *Scientific Teaching* Summer Institute.

*Scientific Teaching* Summer Institute Program: This intensive, interactive program is based on a new teaching philosophy modeled in *Scientific Teaching* (Handelsman, 2007). Participants examine principles and practices of "scientific teaching" that provided them with a new set of pedagogical tools to help engage students.

Well-established connections with local K-12 communities have also enabled UCR to craft professional development opportunities that replenish and expand the pool of successful STEM teachers. With the recent conferral of a NSF Noyce award, UCR will build on its unique internal partnership with a nearby low-performing school district, Moreno Valley Unified, to create a continuum of teacher preparation and development that will result in 43 new secondary mathematics and science teachers. The Noyce program will impact 56 classrooms in six (6) middle and five (5) high schools supporting 14 district mentor teacher per year and secondary level 2,000 students.
### Structure of the undergraduate portion of your Cal Teach program

A sequence of pre-teaching service courses:
- EDUC 3 (CaT1): Imagining Teaching
- EDUC 4 (CaT2): Looking in Classrooms
- (CaT3): *Scientific Teaching* Summer Institute
- NASC 192 (CaT4): Careers in Science and Mathematics Education

A separate sequence of pre-credential courses to develop pedagogical training. These courses topics include:
- EDUC 110: Learning and Instruction
- EDUC 109: Education in a Diverse Society
- EDUC 116: The Exceptional Child
- EDUC 174: Reading and Writing in Content Area
- EDUC 177A: Language Development in Content Area
- MATH 104/EDUC 104 Mathematics Education

A continuum of field experiences, transitioning from SMI to:
- California Mathematics and Science Teachers Initiative (CMST)
- Avid Tutoring at local middle and high schools
- Supplemental Instruction at the college level
- College School University Partnership (CSUP; San Bernardino schools, an underserved, underperforming region)
- School University Partnership (SUP) with Perris Union High School District, also an underserved, underperforming school district

Students are encouraged as early as their freshman year to explore, via SMI catalysis, secondary teaching as a career through multiple types of exposure, including education related courses. The design of a personalized program plan is achieved through one-on-one advising at the SMI Resource Center in partnership with academic advising within each STEM degree programs. This dual advising strategy develops allegiance to meaningful career objectives founded on individual skills and knowledge.

### Alternative pathways to the credential at your campus

**Degree Programs with Education Emphases:**

In collaboration with faculty members in STEM departments, Bachelor degree options with emphases in science and mathematics education were developed. These featured degree options include:
- geoscience education (B.A.).
- mathematics for secondary school teachers (B.S.)
- physics education (B.S.)
- biology (B.S. or B.A., pending)
- chemistry (B.S. or B.A. pending)

Each of these degree options provides a framework for guiding students interested in secondary education by preparing participants for entrance into a teaching credential program, with a possibility of intern teaching. Because these degree options include core lower- and upper-division major courses, participation students gain comprehensive subject content knowledge, which facilitates effective pedagogy.
Integrated Teaching Track:
The Integrated Teaching Track program merges K-12 subject matter and pedagogy within the undergraduate degree. Participants plan for this option throughout their undergraduate studies with the goal of beginning student teaching in spring quarter of senior year. They next complete two additional post-baccalaureate quarters the following year to earn a preliminary teaching credential.

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<th>Type/format of your credential program(s)</th>
<th>Credential Program Offered</th>
<th>Student Teacher Format</th>
<th>Intern Teacher Format</th>
<th>M.Ed. Degree &amp; Credential</th>
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<tr>
<td>Multiple Subject</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
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<tr>
<td>Single Subject</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<tr>
<td>Education Specialist</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
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<tr>
<td>Dual: Education Specialist/Multiple Subject</td>
<td>X</td>
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<td>X</td>
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- **Student Teacher Format:** Under the guidance of a school site cooperating teacher, student gradually assume full-time teaching responsibility in the classroom
- **Intern Teacher Format:** For qualified candidates who meet the State and UCR pre-service requirements for an intern credential. Candidates obtain a paid teaching position with a nearby UCR school district that has entered into formal “cooperating” status with UCR. Supervision is provided by both UCR and the district while the candidate completes remaining requirements for a preliminary teaching credential.
- **Master’s in Education (M.Ed.) – General Education:** An accelerated program leading to both a teaching credential and a M.Ed. in four quarters.
- **Master’s in Education (M.Ed.) – Special Education Emphasis:** This M.Ed. requires admission to the Special Education credential in Mild/Moderate or Moderate/Severe disabilities.

Student numbers and demographics
Since Spring 2006, over 300 students have completed CaT 1, CaT 2, CaT 3, and CaT 4 courses.

SMI student profile based on Fall 2008
By Ethnicity: campus comparison in brackets
- Asian = 35% [36.4%]
- Chicano/Latino/Spanish = 32% [25.3%]
- Black/African American = 5% [7.1%]
- White/Caucasian = 25% [19.3%]
- Other/Declined = 3% [8.3%]

Others Statistics:
- objective in mathematics teaching = 55%
- objective in science teaching = 45%
- originated as transfer students = 23% (15% are minorities)

Other
We provide financial support to promote pre-service teacher participation in
important elements of your program.

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<th>Website</th>
<th><a href="http://smi.ucr.edu">http://smi.ucr.edu</a></th>
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professional development opportunities (e.g. *California Mathematics Council Annual Conference, Paper Folding With Standards* offered by the Riverside-San Bernardino County math Teacher’s Association, the *Understanding the Culture of Poverty Conference* arranged by the City of Ontario, and *Inquiry Science Instruction Design* available through UCR University Extension.) Moreover, SMI has entered into agreements with University Extension to provide seats in various Mathematics and Science Inland Area Workshops, and other extension courses at reduced costs. Financial assistance to complete pre-credential state requirements (e.g. CSET and CBEST exams) is also available. Pass rate for the CBEST and CSET exams increased once our program provided financial assistance for exam registration payments. Among junior and senior level students, nearly 70% have either completed or are on track to complete the CBEST and CSET examinations requirements prior to graduation.