## AIMS<sup>2</sup>(HSI-STEM Grant) Meeting # 10







- Welcome and Introductions External Advisory Committee
- Overview of grant
  - Goals, Objectives and Timelines
     – Ramesh
- Project Evaluation and Progress to date Nathan
- Cohort updates from GCC, COC and CSUN
  - Academic Progress of Students in the Cohort Richard, Susan, Nagwa
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## Welcome External Advisory Committee

- Mr. Rich Alvidrez, JPL
- Dr. Vaughn Cable, JPL
- Mr. Luis Carbajo, IEEE LA Council Vice Chair
- Ms. Linda Friedman, Northrop Grumman, Woodland Hills
- Mr. Neal Gaborno, Raytheon
- Mr. Bill James, Avery James Inc.,
- Prof. Miguel Macias, Emeritus faculty CSUN
- Mr. Tony Magee, PWR
- Mr. Michael Medina, Hill International, San Diego
- Dr. Rick Ratcliffe, Dean emeritus CSUN





# Thank you on behalf of The AIMS<sup>2</sup> Project Team





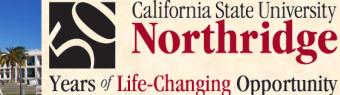
## Meeting dates

- Schedule for fall 2012
  - September 13
  - October 11
  - November 8
  - December 6





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Department of Education Grant

CSUN Receives \$5.5
Million Federal Grant
to Increase Number of
Minorities Studying in
Engineering, Computer
Science

http://blogs.csun.edu/news/2011/10/engineering-grant/

The San Fernando Valley Business Journal (10/6) reports, "California State University, Northridge has received a five-year, \$5.5 million" HSI STEM grant "to increase underrepresented and low-income students in engineering, science and math." The piece notes that the goal of the ED HSI STEM Program is to "help students transfer from area community colleges and then graduate from CSUN with degrees in engineering or computer science."

Cal State Northridge, Harbor College Awarded Federal Science, Tech Grants.

The Los Angeles Times (10/4, Rivera) "LA Now" blog reported, "Cal State Northridge received \$5.5 million from the Department of Education's Hispanic-Serving Institutions STEM program to boost the number of students who transfer from a community college and graduate with degrees in engineering and computer science." CSUN "will work with Glendale Community College and College of the Canyons in Santa Clarita to identify potential students who will receive tutoring, mentoring, research opportunities, career advice and stipends to help pay education costs. Faculty from the three institutions will also collaborate on curriculum." The Times reported



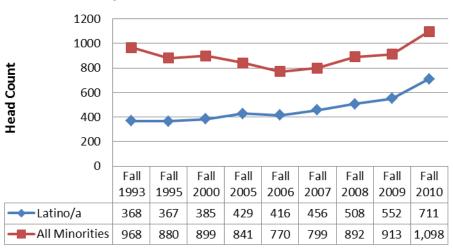
## Goals and Objectives

- To increase the number of Hispanic and low-income students who successfully transfer from Glendale Community College (GCC), and College of the Canyons (COC) to California State University, Northridge, to pursue majors in Engineering and/or Computer Science.
- To increase the number of Hispanic and low-income students who join CSUN as upper division transfer students and graduate with degrees from one of the undergraduate programs in the College of Engineering and Computer Science.
- To develop a model, seamless and sustainable transfer program to assist Hispanic and low-income students to successfully transfer from GCC and COC to California State University, Northridge where they will complete their studies in Engineering and/or Computer Science.

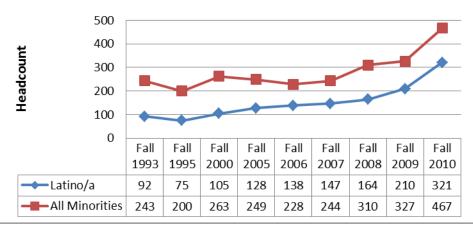




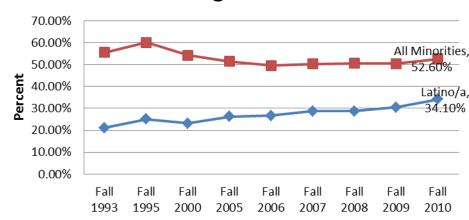
#### **Minority Student Enrollments in CECS**



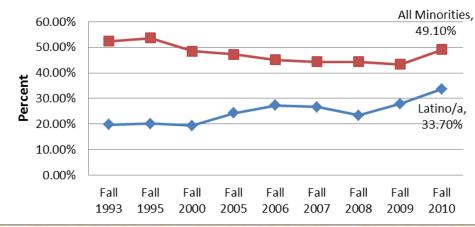
## New Undergraduate Minority Student Enrollments



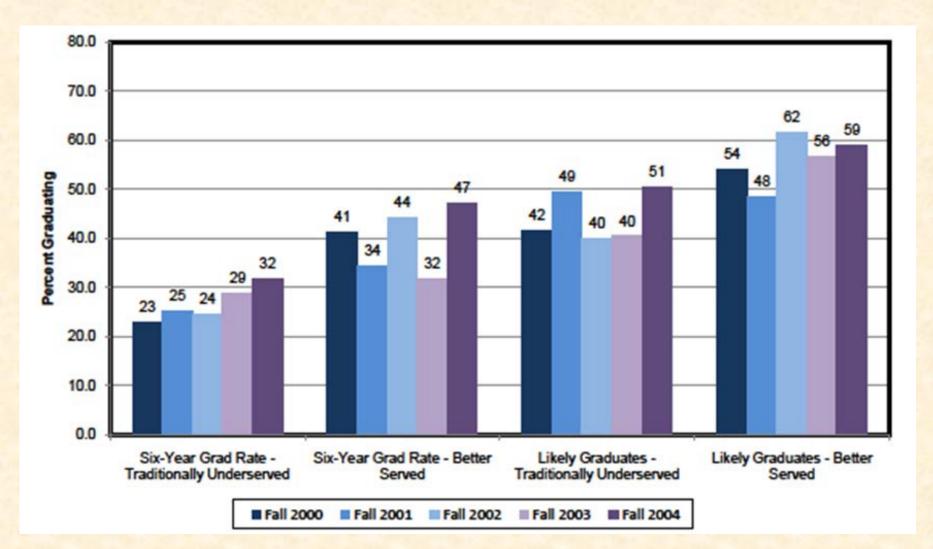
## Minority Enrollments as % of CECS undergraduates



#### % of New Undergraduate Minority Student Enrollments



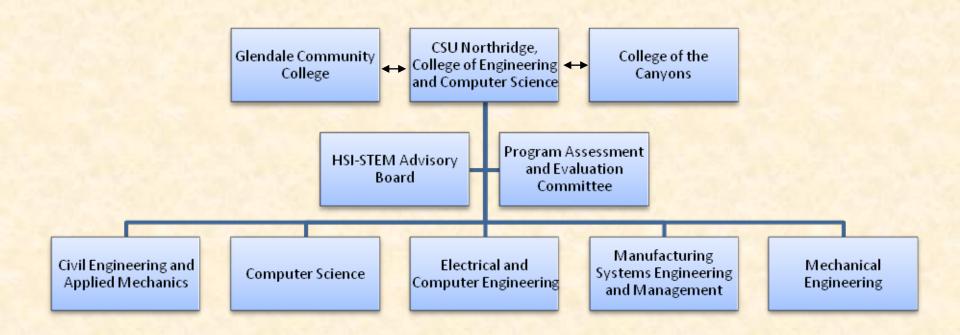








## AIMS<sup>2</sup> Attract, Inspire, Mentor and Support Students



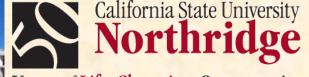




#### The CSUN 2011 Cohort







## **Timelines**

	GCC	COC	CSUN	Total
Year 1	15	15	30	60
Year 2	30	30	60	120
Year 3	15	15	60	90
Year 4			60	60
Year 5			30	30
Total	60	60	240	

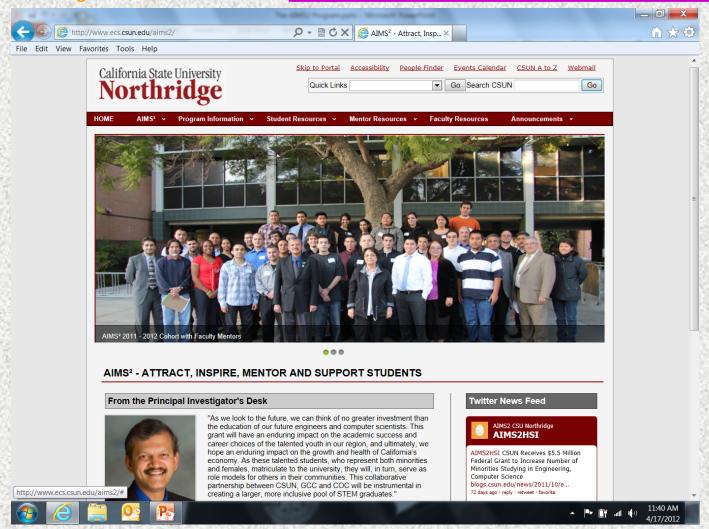
## Project Activities

- Tutoring to improve student performance in preparatory Math and Science courses.
- Advising and tracking of students in cohort
- Work closely with faculty and staff in feeder community colleges to develop seamless articulation agreements, especially for students transferring from 2 year colleges to CSUN.
- Create a mobile digital environment with Tablet PCs and appropriate software, so that the project team can work with the cohorts to enhance communication, engagement, collaboration and creativity, and instant learning assessment.
- Expand Facilitated Academic Workshops (FAW) in required introductory courses and key upper division courses offered by the college's programs
- Faculty/Peer mentoring and career advising of students in the cohort
- College wide events focused on careers and jobs such as the biannual Tech Fest events held in February and September.
- Provide students with opportunities to work on hands-on projects and research activities that encourage them to stay connected with their majors





#### AIMS<sup>2</sup> Project Website: <a href="http://www.ecs.csun.edu/aims2/">http://www.ecs.csun.edu/aims2/</a>





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## Overall Evaluation Approach

- Overall evaluation grounded in project goals, objectives, and outcomes
  - Comply with funding agency requirements
- Facilitate stakeholder involvement in the evaluation process as much as possible
  - Support development of community college project evaluations to meet the needs of project sites
  - Approach appropriate for expertise/interests/resources



## CSUN Evaluation Design

- Embedded mixed methods design
  - Multiple data sources, types, methods
    - Mixed method design that incorporates quantitative data and qualitative data
    - Cross sectional and longitudinal data collection and analysis of project and non-project (comparison) groups
- Case study/grounded theory approach
  - Develop an explanatory model of how program shapes participants grounded in empirical data
    - Examine factors that influence experiences, outcomes



### CSUN Data Sources and Collection

- Data sources will include project faculty, participants, and non-participants
  - Primary and secondary (institutional) data
- Data collection will include documents, journals, and interviews
  - Participant journals, faculty mentor journals, participants interviews, document data (e.g., articulated courses)





- Frequencies and/or percentages (handouts)
  - Transfers (from COC/GCC), program completion, persistence, units completed, GPA
  - Articulated courses, advisors, advising,
     peer/tutoring, peer/faculty/mentoring, cohort,
     research
- Thematic narrative model
  - Quality of advising/tutoring/mentoring and relationships of project participation to outcomes



Evaluation Tasks

- Work consultatively with community college evaluators on data for APR
  - Support development of evaluations as needed
- Conduct first cohort participant interviews and monitor cohort participant journals
  - Prepare data for December APR and share results with evaluation team
- Prepare for data collection with incoming cohort
  - New Moodle site, baseline data



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