

**MEMORANDUM OF COOPERATION**  
**BETWEEN**  
**HARTNELL COMMUNITY COLLEGE MATHEMATICS AND SCIENCE DIVISION**  
**AND**  
**UC SANTA CRUZ JACK BASKIN SCHOOL OF ENGINEERING**  
**REGARDING THE ESTABLISHMENT OF THE**  
**PARTNERSHIP FOR UNDERGRADUATE RESEARCH EXPERIENCE**  
**(PURE)**

This Memorandum of Cooperation is entered into this 17th day of January, 2007 by and between the Hartnell Community College Mathematics and Science Division, hereinafter referred to as "Hartnell" and the University of California Santa Cruz, Jack Baskin School of Engineering, hereinafter referred to as "UCSC".

Hartnell and UCSC both agree that:

Hartnell is a recognized community college accredited by WASC, and offering a two year course of study in Engineering for students;

UCSC is a recognized university accredited by WASC, and offering a course of study and advanced degrees in Engineering for students;

UCSC acknowledges the need for a diverse pool of engineering students:

- Hartnell provides access to a student population that is over 70% minority and is a federally designated Hispanic Serving Institution;

Hartnell and UCSC desire to prepare Hartnell students for seamless articulation pathways to UCSC and other universities; and

- Hartnell desires to expose Science, Technology, Engineering, and Mathematics (STEM) students to research and project management experience early in their academic careers.

In consideration of the foregoing, and the desire of both parties to work cooperatively to establish a mutually beneficial partnership, we propose to cooperate on the following:

**RESPONSIBILITIES OF HARTNELL**

- Continue to assist the student support services of the Mathematics, Engineering, Science Achievement (MESA) Program by funding the MESA director and MESA clerk positions;
- Arrange field trips to UCSC and provide transportation;

- Arrange the proper forum and provide adequate support for presentations made by invited speakers to STEM students at Hartnell;
- Revise and expand Hartnell's engineering curriculum to better prepare students for transfer; and
- Work to infuse concepts of project management into the curriculum of appropriate engineering related courses at Hartnell.

## 2. RESPONSIBILITIES OF UCSC

UCSC will provide clear guidelines on requirements for guaranteed admissions and available campus resources at UCSC. Further, UCSC will provide students from Hartnell with a range of opportunities that provide exposure and connection to the variety of engineering programs and majors available at UCSC. Specific responsibilities include:

- Offer internships and research experiences on or off site;
- Provide mentoring/advising/counseling services;
- Offer workshops and short courses;
- Lead laboratory tours and demonstrations;
- Give presentations and forums at Hartnell;
- Provide information on financial aid options;
- Offer apprenticeships on senior design projects;
- Offer access to UCSC faculty and students;
- Provide project management skill development opportunities;
- Guarantee admission and housing space for qualified students at UCSC; and
- Accept for academic credit established agreed upon courses taken by students at Hartnell.

## 3 RESPONSIBILITIES OF BOTH PARTIES

- Participate in regular meetings to discuss/evaluate/implement the agreement;
- Market the program to STEM students;
- Provide project management training;

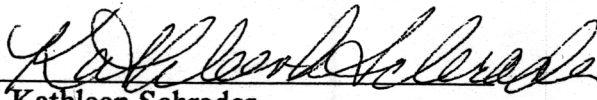
Collaborate on articulation and curriculum improvements;

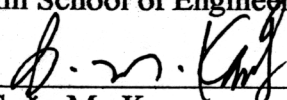
- Maintain a dedicated website;
- Work to expand the number and availability of research experiences and internships for Hartnell STEM students;
- Work to develop and fund scholarships designed to support and encourage outstanding Hartnell students to transfer to UCSC;
- Work to ensure that engineering, physics, math and other relevant courses offered by Hartnell articulate with similar courses offered by UCSC; and
- Collaborate on the identification of funding resources and partnerships that will support the PURE initiatives.

IN WITNESS WHEREOF, the parties have caused this Memorandum of Cooperation to be executed by their duly-authorized representatives effective on the day and year noted above.

Hartnell Community College

University of California Santa Cruz Jack Baskin School of Engineering

By   
 Dr. Kathleen Schrader  
 Dean, Mathematics and Science Division

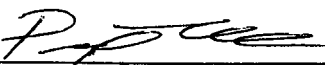

By   
 Dr. Sung-Mo Kang  
 Dean, Jack Baskin School of Engineering

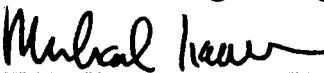
Date 1-17-07

Date Jan. 19, 2007

Hartnell Community College

University of California Santa Cruz Jack Baskin School of Engineering

By   
 By   
 Dr. Pimol Moth and Ms. Shannon McCann  
 Co-PI's, NASA CIPA II Grant

By   
 Dr. Michael Isaacson  
 Chair, Electrical Engineering Department

Date 1/17/07

Date 1/17/07