



## CSTEP: Computer Science TransfEr Programs

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CSTEP is a 3-year collaborative demonstration project involving the University of South Florida (USF) and Hillsborough Community College (HCC), both located in Tampa, Florida. The primary goal of CSTEP is to bridge students from community colleges to Computer Science programs in 4-year universities and graduate schools.

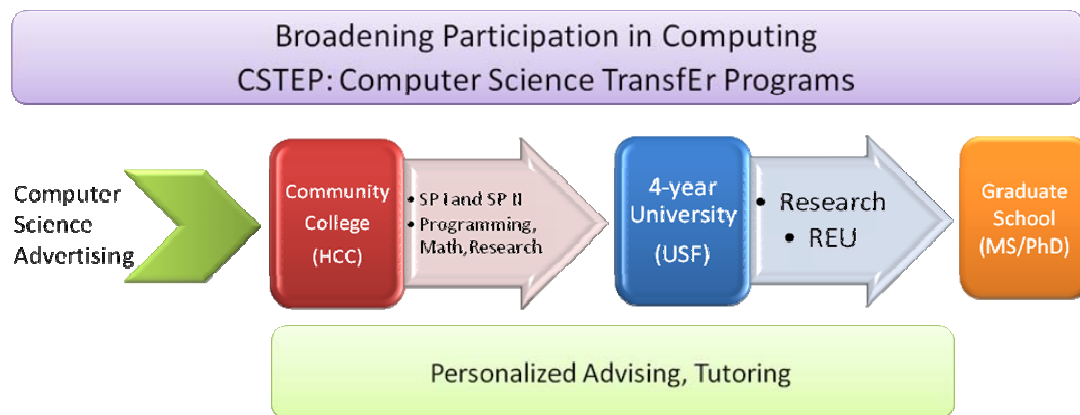
The project consists of a series of coordinated programs designed to broaden the participation of Hispanics and other underrepresented minority students in Computer Science. These programs include:

- **Personal Transition and Development Plans** – establish career paths for the students
- **Personalized advising service** – continuous advising to maintain students on track
- **Summer Programs I and II** – social, academic, and research activities
  - Academic courses: COP 2510: Programming Concepts, CDA 3103: Computer Organization and COP 3514: Program Design. These are “gate” courses to be admitted to the department of Computer Science at USF
  - Integration with summer REU program: CSTEP students participate in the social and research activities of the REU program
  - Leadership and personal enhancement activities: attendance to seminars and workshops
- **Tutoring service** - all year round tutoring in core courses

The figure below shows the proposed model and its main components. The project offers 10 CSTEP Scholarships for Minority Participation in Computer Science for HCC students to participate in Summer Program I and 10 more for Summer Program II. Once at USF, several scholarships will be offered for transfer students to participate in the REU program during the academic year and during the summer. Permanent tutoring and advising is also available during the entire academic year.

In the **first two years**, CSTEP has transferred 5 students to USF; enrolled a total of 3 African-Americans and 9 Hispanic students; created a peer-tutoring network with USF and CSTEP students; integrated summer REU program with Summer Program I; established permanent and personalized advising service; and integrated HCC professors in the summer courses.

**Lessons learned:** the role of the personalized advising service is essential; community college students without any previous programming experience find programming course at USF difficult; community college students (and professors) need time to adjust to university environment; recruitment timing is critical to graduate and transfer students on time; administrative time to run the program is considerable; the integration with the summer REU program turned out to be very beneficial.



More information about the project and its programs can be obtained at <http://www.csee.usf.edu/BPC>. Any additional questions can be directed to Prof. Miguel Labrador ([labrador@cse.usf.edu](mailto:labrador@cse.usf.edu)).