

DMACC's Engineering Orientation Class to Expand

Des Moines Area Community College (DMACC) is preparing to expand its successful Engineering Orientation (EGR 100) class. The class has been held at DMACC's Ankeny, Iowa, campus since spring 2008. In fall 2010 it will be offered at their Boone, Iowa, campus and at the Urban/Des Moines, Iowa, campus in spring 2011. "Without the SEEC project, we would not have developed the course," says Harry McMaken, math and engineering instructor at DMACC.

Iowa State faculty, staff, and graduate students have assisted in the development and instruction of this course since its inception. EGR 100 was originally developed with an emphasis on providing DMACC pre-engineering students who would be transferring to Iowa State's College of Engineering with information about the transfer process. It now includes more general information about the transfer process to meet the needs of those who will go into engineering at any four-year institution. However, the ties to Iowa State remain strong, as currently over 95% of the EGR 100 students transfer to Iowa State.

To that end, students are introduced to Iowa State's Admissions Partnership Program (APP), which connects them with an Iowa State engineering adviser and the specific Engineering Admissions Partnership Program Learning Community. Most EGR 100 students who will transfer to Iowa State take advantage of this program. "The type of advising they can get through the program is invaluable in terms of helping them stay on track to graduation and earning an engineering degree," explains McMaken.

EGR 100 provides students with a broad overview of the engineering disciplines and includes guest speakers from Iowa State and the industry as well as plant tours. "We try to get them acquainted with all the options—there are so many areas of engineering they could become interested in," states McMaken. "I like the interaction with Iowa State and the guest speakers from there. Learning about the 2050 Challenge was a great way to learn about national and international things engineering is working on," says Rachel Garrison, an EGR 100 student.

Students not only learn about engineering career opportunities but are given information about internships and co-ops they could participate in as students. A guest speaker explains behavioral-based interviewing to help prepare students for their interviews. The class also makes a trip to the Iowa State Engineering Career Fair each semester.

Broader transfer information includes material about financial aid and ways to finance an engineering education. Developing a transfer plan that encompasses both the student's graduation from DMACC and their plan for graduation from a four-year institution is a critical assignment in this course. Additionally, information about the differences in culture between DMACC and a four-year institution is discussed to help students make a smoother transition to a larger institution.

The course is also having a positive impact on the pre-engineering program at DMACC. The course makes students more aware of pre-engineering courses at DMACC, and enrollment in these classes has steadily increased since the advent of ENG 100. "It's been a very, very positive class to add. We're confident it can run on other campuses and increase enrollment in pre-engineering courses there. It's here to stay," concludes McMaken.