

Workshop to develop an engineering technology degree at Iowa State University

Currently Iowa State University offers BS degrees in Computer Science, Computer Engineering, and Software Engineering. Students typically enter these degree programs straight out of high school as college freshman. The students who graduate from these programs fill a need throughout the country for design and research engineers. ISU has been very successful in meeting the demands of employers for these degrees. However, there is an unfulfilled need by employers for students who have the technical and managerial skills necessary to enter careers in the design, application, installation, operation, and/or maintenance of computer or network systems. In addition to a gap in student production the programs at ISU do not offer a smooth transition for students who have earned credits or a degree at a community college. Often community college transfer students need to take over 3 years of courses at ISU to obtain one of the classical computing degrees.

ISU is in the process of creating a new BS degree in Computer and Network Engineering Technology which will be designed to fill the gaps in both the employers and in the incoming students needs. This degree will provide an educational path for students that are currently not served by ISU. Our goal is to seek ABET accreditation for the degree (see <http://www.abet.org/Linked%20Documents-UPDATE/Criteria%20and%20PP/T001%2008-09%20TAC%20Criteria%2011-30-07.pdf> for information on the program criteria. In order to develop this new degree program we need to gather input from our primary constituents (potential employers, community colleges, and potential students). We have established a very aggressive goal of admitting our first students in the fall of 2010. In order to facilitate this we will be holding a series of workshops designed to gather input and to establish an external advisory board to provide long term input into the new degree.

The first workshop will be held on December 6th as part of our community college Cyber Defense Competition. This workshop will focus on gathering input from community college instructors who teach in departments that would produce students that might articulate into the new degree program. The second workshop will be held on December 16th and will be focused on gathering input from businesses and industries that would be potential employers of the graduates. The first two workshops are being supported by a grant from the Iowa Department of Economic Development. Additional workshops will be held as needed during the first part of 2009.

I would like to invite you or someone from your school to participate in the community college workshop held on December 6th from 10 to 2 at the CyberInnovation Institute 2321 North Loop Drive, Ames Iowa.

Workshop agenda:

- Introductions and goals
- Overview of ABET process and program criteria
- Identification of feeder courses offered in the community colleges
- Identification of possible course work gaps
- Action plan

You should come prepared to discuss the types of courses and programs available at your college at you think would be a feeder into the new program.

The following individuals will be attending with their cyber defense teams. A college can send more than one person. Please contact Doug Jacobson (dougj@iastate.edu) if you planning to attend or need more information.

College

Indian Hills	Mark	Miller
Southwestern Community College	Loyal	Winborn
Iowa Lakes Community College	Greg	Reimer
Iowa Central Community College	Marc	Matthes
Western Iowa Tech Community College	Brian	Smith
Kirkwood	Jim	Thompson
Des Moines Area Community College	Bryan	Burkhardt
NIACC	Mary	Mosiman