Bioenergy and sustainable technology online graduate certificate offered by four land-grant universities

A new 15-credit online bioenergy and sustainable technology graduate certificate has launched at Kansas State University, Oklahoma State University, South Dakota State University, and the University of Arkansas. The certificate will equip a new generation of professionals to function in the interdisciplinary environment typical of a biotechnology economy.

"Expert faculty members in biomass production, chemical conversion, and agricultural economics have joined together to offer courses concentrating on bioenergy for students to develop a complete understanding of the supply in the renewable energy market," said Mary Rezac, chemical engineering faculty at Kansas State University, who led the program start-up. "We strive to provide skills necessary for industry professionals and full-time students to transition and succeed within this developing field."

Participants might have baccalaureate degrees in agriculture, engineering, business, physical sciences, biological sciences, social sciences or other disciplines. Core courses are conversion overview, bioenergy feedstock production, and bioenergy economics and sustainability. Students may take all three core courses for 9 credit hours and then select 6 credit hours of electives from among the courses offered about conversion, feedstocks, or sustainability.

Using a U.S. Department of Agriculture Higher Education Challenge grant, universities came together in 2009 to begin creating the certificate program through the Great Plains Interactive Distance Education Alliance (Great Plains IDEA). Faculty taught the first classes Fall 2011.

The tuition for the graduate certificate courses is a common price at all four institutions, currently $485 per credit. Students in the program select one of the partner universities as a home university. The home university for the student is the venue to be admitted to the program, enroll in the courses, get advisor help, access technology and library support, and be granted the certificate.

In testimony at a 2007 U.S. congressional hearing on meeting workforce demands of small bio-energy businesses, Kelly J. Tiller, Ph.D., of the Agricultural Policy Analysis Center at the University of Tennessee said: "The biotechnology, biofuels, and bio-energy industries have experienced unprecedented growth over the last few years, but I think most industry watchers suggest . . . the next few years could make the past growth look like the flat part of an exponential growth curve yet to come."

To pursue information about the Bioenergy and Sustainable Technology graduate certificate, see details at "Programs" under AG*IDEA, at the Great Plains IDEA website, www.gpidea.org.