

BACKGROUND AND REQUEST

Stark State College of Technology Associate of Applied Science in Geographic Information Systems Technology

Recommendation

**This program clearly meets the Chancellor's standards for associate degree programs.
There were no serious concerns raised in this review.**

Request: Stark State College of Technology proposes an Associate of Applied Science in Geographic Information Systems (GIS) Technology in response to the growing need for trained GIS technicians. The use of geographic information systems and its applications has evolved into a specialized technical field used by engineers, law enforcement officers, utility and municipality planners, emergency responders, soil conservation and agricultural groups, construction companies, banks and others. A GIS technician is trained to collect, analyze and maintain geographic information provided by geological surveys, topographical maps, aerial photographs, satellite images and infrared photographs.

The U.S. Department of Labor, Bureau of Labor Statistics, indicates this field is growing rapidly as more companies, municipalities, farmers, emergency responders, marketing firms, and travel groups use the information and its various applications. Employment opportunities for GIS technicians are expected to increase by more than twenty-one percent through 2016, due to the increase and use of online mapping systems. In Ohio, the need for GIS technicians in business, industry, government, health, tourism, transportation and other fields may expand by more than 5,000 individuals over the next three to five years.

Upon completion of the proposed program, students will be able to recognize, evaluate, combine and use the different forms of data acquisitions used in GIS mapping and will be able to formulate techniques for implementing a geographic information system. Graduates of the program will find career opportunities as GIS analysts and technicians, surveying and mapping technicians, or cartographers, with a starting salary ranging from \$34,000 to \$42,000 a year.

Program Purpose/Mission: The purpose of the proposed program is to provide students with the education they need to serve as GIS technicians in a growing profession needed in northeast Ohio and in other areas of the state. Stark State College of Technology aims to provide the competitive edge in today's knowledge-based economy by enabling students to attain their educational goals with a full schedule of credit and continuing education classes. The college's mission is, "to be a first-choice in higher education and a catalyst for economic growth." The vision of the college is, "to provide high-value, student-centered associate degrees and professional development and dedicated to individual learning, transferable higher education and career success. "

Enrollment: The college is projecting an enrollment of forty-five (45) full-time students and eighteen (18) part-time students beginning fall semester 2009. The college further projects that student enrollment will grow to sixty-five (65) full-time students and twenty-four (24) part-time students, beginning January 2010. Prospective students have already inquired about the program and plan to enroll this fall.

Ohio College Tech Prep representatives from several of the region's high schools expressed an interest in the development of a College Tech Prep GIS program. The addition of the GIS program to the region's College Tech Program will ensure high school students interested in this career path will experience a seamless transition into the associate degree program at Stark State College.

GIS Technology Advisory Committee members and other industry leaders from the region expressed their willingness to help in the recruitment of students and to serve as mentors/coaches for students as needed.

Curriculum: The curriculum is structured to provide students with the general education courses required for this proposed program and the specialized technical courses such as, GIS Software I and II, Data Modeling and Database Design, Elements of Cartography, Spatial Analysis, Surveying I and others needed to meet the educational requirements for this proposed program.

Several Ohio universities offer a bachelor's degree in GIS technology including Kent State University and The University of Akron. Currently, the college is in discussion with both universities to develop an articulation agreement. The Ohio State University, Ohio University and Cleveland State also offer a bachelor's degree in GIS technology.

Faculty/Resource Needs: The proposed Geographic Information Systems program will be located within the Information Technology/Engineering Technology Division and administered by the Information/Computer Science Department Chair. The college plans to use a qualified and experienced full-time faculty member to teach some of the new courses, reducing the need to hire a new faculty member. As program enrollment grows, the college is prepared to add additional full-time faculty members as needed.

The college has state-of-the-art labs, equipment, and computers in the college's new Information Technology building. Students enrolled in the program will have access to the campus library, student support services, financial aid, and other services to ensure their academic success. The college is financially prepared to offer this program.

Program Duplication: The proposed program is not being offered at any other two-year institution within one hundred miles of the college. College representatives indicated their willingness to share the program's development and "best practices" with other institutions interested in offering this and/or a similar program.