

APPENDIX M

Request for Authorization to Establish a Bachelor of Science Degree in Geomatics at North Carolina A&T State University

Introduction

North Carolina A&T State University notified General Administration of its intent to plan a Bachelor of Science Degree in Geomatics (14.3801) on February 22, 2005. The university now requests approval to establish the program in August 2006.

Program Description

North Carolina A&T State University is proposing to offer a degree program in the field of Geomatics in the College of Engineering. The proposed program is an integrated approach to the measurement, analysis, management, storage, and display of descriptive geographically-referenced earth-based data. The primary purpose of the proposed program is to offer a four year degree program for individuals wishing to become licensed surveyors in the State of North Carolina. The proposed program will seek accreditation from the Accreditation Board for Engineering and Technology (ABET), and it is structured as a 2+2 program to complement existing surveyor degree programs at community colleges.

Surveying, mapping, and roles in land administration are within the field of geomatics. Geographic Information Systems (GIS), the Global Positioning System (GPS), and Remote Sensing are examples of technological tools used by land surveyors. Except for four or five laboratory courses, all other courses in the proposed program will be offered by North Carolina A&T either on-line or through streaming video. This delivery method is needed since many persons who hold associate degrees will be employed full-time as land surveyor technicians, while they pursue their B.S. degree. The proposed degree will prepare surveyors to be able to become licensed surveyors in North Carolina and to successfully employ advancements in technology to acquire, analyze, and manage spatial data.

Program Need

In the 2005 General Assembly Session, House Bill 810 was passed and signed by the Governor to require persons with an associate degree to have twelve years of work experience for a surveyor license (instead of the previous required work experience of four years). Persons with a bachelor's degree as a land surveyor would require only two years work experience for a surveyor license. Moreover, the passing rate for the surveyor licensure exam for persons with bachelor's degrees is 75 percent, and it is 35 percent for persons with associate degrees. Further, the work of surveyors is changing due to advancements in technology which include GPS, new earth resources' data satellites, improved aerial photography, and computerized data banks of spatial data. Thus, the College of Engineering at North Carolina A&T has been working for four years with the North Carolina Society of Land Surveyors and the North Carolina Community College to develop a 2+2 degree program. The proposed program will be established primarily as a 2 + 2 program to avoid duplication of surveyor courses currently being offered at numerous community colleges across the state.

There are currently 709 licensed surveyor companies in the State of North Carolina with an estimated 10,000 people currently employed in the profession. The demand for surveyors and affiliated fields is expected to increase steadily for the foreseeable future. In 2005, 686 people took the surveyor licensure exam in North Carolina. At this time, there is no indication that another UNC campus will offer a similar program. At the end of the fourth year, it is projected that there will be sixty students enrolled in the program.

Resources

The proposed Geomatics program can be initiated in Fall 2006 with existing faculty and primarily current resources. North Carolina A&T State University has received a grant of \$40,000 from the North Carolina Board of Examiners for Engineers and Land Surveyors to assist in the development of the Geomatics degree program. Some state-of-the art equipment has been purchased from this grant. The North Carolina Society of (Land) Surveyors is also raising money for scholarships for students who pursue a degree in Geomatics. Facility improvements will be realized when the renovation of Graham Hall is complete in 2007. Other support will come from university funds.

Recommendation

It is recommended that the Board of Governors approve North Carolina A&T State University's request to establish the Bachelor of Science in Geomatics, effective August 2006.