#### **Program Planning Summary**

**Institution:** South Carolina State University

**Program Designation:** New Program Proposal (B.S. Professional

Land Surveying, 128 credits)

**Designation of Undergraduate Program:** Four–Year STEM Program

**Proposed Date of Implementation:** Spring 2009

**Program Title:** Bachelor of Science in Professional Land

Surveying

**Academic Unit Involved:** Department of Civil and Mechanical

Engineering Technology and Nuclear Engineering, College of Science,

Mathematics and Engineering Technology

**Delivery Mode:** Traditional – Day and Evening

#### **Justification of Need:**

Land Surveying, also known as Geomatics in some parts of the world, is the art and science of measuring and mapping of land. Land surveyors help in determining land boundaries. Surveying is often a crucial part of the design and project construction process. In addition to determining land boundaries, land surveyors map topography of land for engineering design, establish elevation for building sites for flood insurance, conduct real estate title survey, layout buildings, layout subdivisions and other construction projects, map river bottoms for dredging, layout photo control for aerial photography, prepare or write legal descriptions for properties, write or map the layout for tunnels, roads, airport, pipelines and more.

With industries locating in Orangeburg county and other parts of the state as well as published data indicating that the State of South Carolina is the fifth fastest growing state in the nation with a population of 4.4 million people, there is need for housing and other construction related activities. Land surveyors will play a major role in the economic transformation of the State.

#### **Anticipated Program Demand and Productivity:**

As indicated earlier, many factors will fuel the demand for qualified land surveyors. Chief among them is the population growth in the State. The increase in the population will undoubtedly lead to more real estate transactions. Furthermore, as Orangeburg county and the State of South Carolina continue to be home to more industries and the impending retirement of the so-called baby boomers, there will clearly be a need for engineers, technologists, land surveyors and other professionals. South Carolina State University anticipates a steady and strong growth in the proposed program in the next five years.

Year	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013
Enrollment	5	10	15	20	25

### Assessment of Extent to which the Proposed Program Duplicates Existing Programs in the State:

South Carolina State University will be the only institution in the State offering this program. Given the aforementioned growth in population and other factors, South Carolina State University is prepared to and is in a unique position to contribute to meeting the demand for professional land surveyors.

### Relationship of the Proposed Program to Existing Programs at the Proposing Institution:

The College of Science, Mathematics and Engineering Technology at South Carolina State University offers several undergraduate degree programs. The proposed program in Land Surveying has a close affinity to the Civil Engineering Technology program. Several of the proposed program courses will be taught by the Civil Engineering Technology faculty.

## Relationship of the Proposed Program to Other Institutions via-Inter Institutional Cooperation:

South Carolina State University has articulation agreements with several technical colleges in the State. These agreements allow for transfer of earned college credits to enable students who wish to earn a Bachelor's degree to do so. The proposed program will not be an exception. South Carolina State University has initiated informal talks with officials at Midlands Technical Institute about possible collaboration with reference to students at Midland Technical Institute pursuing a similar associate degree there transitioning into the SCSU four year program after graduation from Midlands Technical Institute. The University will formalize that relationship in due course and will pursue partnerships with other technical colleges.

# Total New Costs Associated with Implementing the Proposed Program (General Estimates):

The proposed program will be administered by the Department of Civil and Mechanical Engineering Technology and Nuclear Engineering within the College of Science, Mathematics and Engineering Technology. Several courses within the proposed program are already being offered in the Civil Engineering Technology program. However, there is need to hire additional faculty, acquire additional equipment among other costs as outlined below.

• Salary for new faculty:	\$80,000.00
Additional Equipment	\$100,000.00
• Supplies and materials	\$10,000.00
• Travel	\$5,000.00
<ul> <li>Miscellaneous</li> </ul>	\$5,000.00
Total	\$100,000.00

South Carolina State University submits this Program Planning Summary for a Bachelor's of Science degree in Professional Land Surveying for your consideration and approval.

Respectfully,	
Leonard McIntrye	_April 30, 2008
Leonard A. McIntyre, Ph.D.	Date
President, South Carolina State University	