

**Program Proposal
Associate Degree in Health Science
Major in Diagnostic Medical Sonography
Greenville Technical College
Barton Campus**

Summary

Greenville Technical College requests approval to offer a program of study leading to the Associate in Health Science degree with a major in Diagnostic Medical Sonography (DMS). The college currently offers a Diploma in Health Science with a major in Diagnostic Medical Sonography, but recognizes the need to incorporate training in vascular technology and to include further clinical hours in diagnostic imaging in its program. Implementation of the new program is requested for implementation in Fall 2007. The college proposes to eliminate the diploma program simultaneously with the implementation of this associate degree program.

The program proposal was approved by the Board of the State Technical College System on January 23, 2007, and subsequently, the proposal was submitted to Commission for review on February 22, 2007. The proposal was reviewed by the Advisory Committee on Academic Programs on March 21, 2007 and approved unanimously without substantive comment.

According to the proposal, the purpose of the program is to address the growing need for diagnostic medical sonographers (these professionals are also often referred to as ultrasound and/or vascular technologists) who are trained in the use of high frequency sound waves to image organs, masses and fluid accumulations within the bodies of patients. This field is expected to continue evolving rapidly and physicians today depend on quality images provided by highly skilled sonographers as part of diagnostic measures that are taken to ensure quality health care.

The institution reports that opportunities for employment in the field of diagnostic medical sonography are on the rise owing to the expansion of outpatient care centers and hospitals to meet the health care needs of the region's growing population. Diagnostic medical sonographers and registered vascular technologists (a specialty within the DMS field) find employment in the offices of private practice physicians, in medical clinics, and in hospitals. Projections indicate that employment in diagnostic medical sonography will increase faster than the average for all occupations through 2014 because of a growing and aging population and because new professionals will be needed in the field

to replace sonographers who retire or change careers. The College notes that a registered sonographer who holds an associate degree is in one of the top ten paid professions, with entry salary ranges of between \$40,000 and \$60,000 per annum. The institution also notes that the South Carolina Hospital Association has reported a significant workforce challenge regarding sonographers and that 35% of hospitals reported a time period of or exceeding 120 days in order to fill such positions in ultrasound. Moreover, a regional survey indicated a shortage of diagnostic medical sonographers and registered vascular technologists in the upstate area of South Carolina.

Greenville Technical College is the first in South Carolina to propose such a program. The current diploma program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) and the institution reports that it is in compliance with nationally-established standards, sustaining the fact that the program has an appropriate curriculum that includes the competencies needed for success in the field upon graduation. Through CAAHEP accreditation, graduates in the field have the opportunity to sit for certification examinations and to obtain employment in accredited medical facilities.

While the existing diploma program was begun relatively recently at Greenville Technical College (implemented in Fall 2002), enrollment is reported to have grown steadily. Thirty-seven were enrolled students in 2005-2006 and placement rates noted during the same year were reported at 100%. The institution notes that growth in graduates has been somewhat slower due to the sudden loss of a DMS instructor mid-semester of the 2005-2006 academic year. In response, the program was placed on probation due to low numbers of graduates as noted in the South Carolina Technical College System program evaluation report for that same year. The hiring of a new instructor has led to the expedition of providing sufficient graduates in the 2006-2007 program evaluation year to meet SCTCS program evaluation productivity standards. If the present request for approval of the program leading to the Associate in Health Science degree is approved, the College will terminate the DMS diploma program. Students presently enrolled in the diploma program will either be allowed to graduate from that program or may transfer into the proposed Associate Degree program.

The institution notes its established and strong record of conducting successful health care programs. Associate degree programs already exist at Greenville Technical College in nine fields. According to the proposal, the wide selection of health programs already in existence will complement the proposed program. General education courses necessary to the fulfillment of the requirements of the proposed program are already present in the College's course offerings. The proposed program will give students in other health science programs additional course selections. The College has experience in handling the requisite processes associated with health care education accreditation agencies, as well as with licensure requirements. This proposed program is designed primarily as a terminal degree.

The curriculum for the proposed program consists of a total of 76 credit hours. The College reports that the program will be administered through the Health Science Division and thus there will be no additional requirement for administrative personnel. There is currently one full-time faculty member who will serve as director of the program and will be granted administrative release (one course) in order to perform the required administrative duties. The program will have a permanent part-time instructor (75% FTE) to serve as clinical coordinator. This individual currently serves as faculty in the diploma program. The program share an administrative assistant with the Medical Imaging Sciences program. The institution states that all faculty and staff are currently employed by the College and that no additional faculty or staff will be required.

The proposal states that the College anticipates the program will enroll 12 new students (14.9 F.T.E) in the first year, rising to 20 (23.5 F.T.E.) in the second year, and 20 (23.5 F.T.E.) in the third year of the program's implementation. The college estimates graduating 13 students from the program per year. Enrollment in the program for 2008 and 2009 is estimated at 16 sophomores and 20 freshmen, for a total of 36 students. If the student enrollment is realized—and if the graduation rates of these enrolled students are adequate—the program will meet the statewide program productivity requirements

No new physical plant requirements are needed for the implementation of this program as it will be housed in the medical education and training facility located in the Allied Health building on the Barton campus. The institution states that the lab there is designed to replicate a hospital environment and is equipped with a full range of ultrasound equipment, sinks, stretchers, and an imaging storage system. Additionally, classrooms are equipped with instructional materials, desks, and all necessary audio-visual equipment, and renovation will not be necessary for implementation of the proposed program. All equipment is on-site currently and is being used solely for the existing diploma program.

The proposal states that library and learning resource services are available to both students and faculty at the main campus library, and the three satellite campuses through the college's broadband network. Through links to the library's web page, students may access the online library catalog and periodical databases including these from PASCAL.

Specialized accreditation for this program is required. Accordingly, the Diagnostic Medical Sonography diploma program is currently accredited through the Commission on Accreditation of Allied Health Education Programs through the Joint Review Commission for Diagnostic Medical Sonography. This body is the committee on accreditation within the Committee on Accreditation of Allied Health Education Programs systems and adheres to the CAAHEP policies and procedures. The Diagnostic Medical Sonography program at the college has completed an accreditation review and

was in compliance with the nationally-established standards. It will not require further review until March 2011.

Shown below are the estimated projections of new costs to the institution which are associated with implementation of the proposed program for its first three years as compared with the estimated revenues projected under the Mission Resource Requirement and the Resource Allocation Plan.

Year	Estimated MRR Cost for Proposed Program	Extraordinary (Non-MRR) Costs for Proposed Program	Total Costs	State Appropriation	Tuition	Total Revenue
Year 1	\$281,352	\$0	\$281,352	N/A	\$96,701	\$96,701
Year 2	\$444,738	\$0	\$444,738	\$47,985	\$152,515	\$200,500
Year 3	\$444,738	\$0	\$444,738	\$75,681	\$152,515	\$228,196

These data demonstrate that if Greenville Technical College can meet the projected student enrollments and contain costs as they are shown in the proposal, the program will not be able to cover new costs with revenues it generates by the third year of its implementation. Nevertheless, the institution has provided assurances that it possesses the resources necessary to implement the program with quality.

In conclusion, the proposed new program proposal has been designed by the institution to respond to the growing need for diagnostic medical sonographers, ultrasound and vascular technologists in a field that is expected to grow rapidly. Implementation of the program will help to ensure the availability of quality health care and diagnostic personnel in the upstate. Opportunities for employment in this field continue to rise in the region due to continued expansion in outpatient care centers and hospitals in response to the health care needs of the region's increasing population.

Recommendation

The Committee on Academic Affairs and Licensing recommends that the Commission approve Greenville Technical College's proposed program leading to the Associate in Health Science degree with a major in Diagnostic Medical Sonography at the Barton campus, to be implemented in Fall 2007, provided that no "unique cost" or special state funding be required or requested.