

APPENDIX H

Request for Authorization to Establish a Master of Science in Science and Entrepreneurship at Western Carolina University

Introduction

Western Carolina University notified UNC General Administration of its intent to plan a Master of Science in Science and Entrepreneurship (CIP 52.0701) in January 2005. WCU requests authorization to establish the program in August 2006.

Program Description

WCU is proposing to establish a Professional Science Master's program in Science and Entrepreneurship with the goal of providing bachelor's level scientists with graduate training in science, real world industrial experiences, and fundamental business skills. Graduates will be positioned to work in technological businesses, to launch new businesses, or to support employers in developing entrepreneurial ventures. The scientific focus will be customized for the interests of each student using existing university programs in biotechnology, chemistry, and environmental science. In addition to these existing courses, new courses will include an introductory seminar, case study courses taught in industry, a required industrial internship, and a capstone project defining a scientific entrepreneurial venture. This will be the first program of its kind in NC, and it is anticipated that it will be beneficial to the region by providing a well-trained technical workforce and improving academic-industrial relationships to support the creation of new markets and products.

Program Need

Student surveys and employer interviews indicate a strong demand for the program. The scientific directions of the program (biotechnology, chemistry, and environmental science) were established by evaluation of faculty strengths, regional economic data, and statewide labor information. Regional data were obtained from the strategic plan of the regional economic development organization, AdvantageWest, and ten clusters of innovation were noted that leverage regional assets. In NC, firms with 50 or fewer employees created approximately 27,000 new jobs between 1998 and 2002, demonstrating the economic significance of entrepreneurial activity. It is anticipated that program enrollments will be capped at 20 with some part-time enrollments.

Resources

The program was developed through planning (\$10,000) and implementation (\$25,000) grants from the Council of Graduate Schools/Sloan Foundation initiative to create innovative Professional Science Master's programs. A new faculty member was hired in July 2005 to develop the program using funding from enrollment growth, and other faculty are in place. Space is anticipated to be adequate upon completion of a building renovation in August 2006. Current technology resources and library holdings are adequate to support the program.

Recommendation

It is recommended that the Board of Governors approve the request to establish a Master of Science in Science and Entrepreneurship at Western Carolina University effective August 2006.