

APPENDIX G

Request for Authorization to Establish a Master of Science Degree in Analytics at North Carolina State University

Introduction

North Carolina State University notified UNC-GA of its intent to plan a Master of Science in Analytics degree in November 2006. NCSU requests authorization to establish the MS in Analytics (CIP 11.0802) effective July 2007.

Program Description

The proposed MS in Analytics is an intensive one-year professional degree that will give students a thorough understanding of the concepts, methods, and tools of advanced analytics applied to complex problems using massive amounts of data. It is an interdisciplinary program directed at science, technology, engineering and mathematics (STEM) undergraduates or recent graduates. The program would begin in summer with a 6-hour course in Analytics tools and their use, a prerequisite for all courses that follow in the curriculum. The cohort of admitted students would enroll in 12 designated credit hours in each of the following two semesters for a total of 30 hours with degree completion in May. The program will promote an understanding of advanced analytical concepts and methods such as data quality and integration, data and text mining, forecasting, optimization, business intelligence methods, online analytical processing, data storage, integrated analytics and visualization, and data security.

Program Need

Advanced analytics is a rapidly growing sector of the economy. Two of the leading suppliers of analytics software tools and solutions are located in the Triangle region, and many more of NC's largest employers in banking, finance, pharmaceuticals, information technology, and other fields are deeply engaged in the applications of advanced analytics in their operations. NCSU's ability to produce graduates with strong quantitative and analytic skills applied to important "data intensive" problems will fuel a rapidly growing segment of the modern economy in NC and throughout the US. It is anticipated that the program will enroll 120 full-time students by its fourth year.

Resources

Current facilities and information technology services are adequate. The program received a \$1.9 million gift to develop the curriculum. NCSU has committed a matching amount for operational costs and facilities. Additional software and services have been pledged to support the program. Enrollment expansion funds will be used to hire additional faculty as enrollments grow.

Recommendation

It is recommended that the Board of Governors approve the NCSU request to establish the Master of Science in Analytics degree (CIP 11.0802) effective July 2007.