Agenda Item 2d

New Program Proposal
Bachelor of Science
Major in Information Systems
Coastal Carolina University

Summary

Coastal Carolina University requests approval to offer a program leading to the Bachelor of Science degree with a major in Information Systems, to be implemented in Spring 2010.

The Program Planning Summary was reviewed by the Advisory Committee on Academic Programs at its meeting on April 28, 2009, without substantive comment. The Board of Trustees of Coastal Carolina University approved the proposal on May 7, 2009. The full proposal was submitted for Commission review on May 15, 2009.

According to the institution, the purpose of the program is to prepare graduates to use information technology to solve problems in business, industry, government agencies, and institutions as well as to design, implement, manage and evaluate information systems in order to integrate emerging information technologies into organizations. The institution states that graduates of this program will be well prepared to pursue graduate studies in information systems and that the program will provide for the development of communication and management skills through courses such as technical writing, business management, and business communication.

The institution notes that it has offered a program leading to the B.S. degree in Computer Science since 1986 and that currently students may choose either an information systems emphasis or a theoretical emphasis. The proposed program will shift the information systems concentration to the new B.S. in Information Systems, while the current computer science degree will continue with a theoretical emphasis. The current information systems concentration within the B.S. in Computer Science will be terminated. According to the institution, while the need exists for graduates in computer science to receive theoretical preparation to enable them to continue in advanced studies and research, there also exists a critical need for information systems specialists. The proposed program addresses this need and further takes into account the needs of employers who require applications programmers, systems analysts, networking specialists and information systems managers. According to the proposal, by delineating the two programs in this manner, employers will be able to recognize more easily the

specialized preparation of graduates with the B.S. degree in Information Science. Furthermore, the institution has incorporated the curricular recommendations of both the Association for Computing Machinery (ACM) and the accrediting body, ABET, in the design of the new program.

Student demand for the program was determined by an email survey conducted in Fall 2008 among all applicants to the university. According to the institution, 29% of all respondents (62 of 212) expressed interest in the Information Systems degree. In its proposal, the institution cites statistics from the national Bureau of Labor Statistics which indicate that employment in the area of computer and information systems will grow faster than most other areas through the year 2016. Coastal Carolina also notes that computer system analyst positions are expected to grow by 146,000 new jobs between 2006 and 2016. The institution further notes that both the Governor's Office and the Department of Commerce have recognized the need for such a degree and have consequently created the South Carolina Technology Alliance which recommends "increased support for college and university education programs to align with the needs of technology-intensive industries."

Depending on the program of study chosen by the student, the curriculum will consist of a core of 37-41 credits, a freshman graduation requirement of up to three credits, foundation courses of 53-63 credits, major requirements of 25 credits, and electives of up to five credits. Collectively, the program will consist of a total of 120 credits. Of these credit hours, none will come from new courses.

Coastal Carolina acknowledges that the proposed program is in some respects similar to programs offered at Clemson University, the College of Charleston, Lander University, and the University of South Carolina; however, the institution states that there are important and noteworthy differences in its proposed program, including an emphasis on Internet application development which requires a semester of both introductory and advanced Internet application development courses and requirements for courses in information systems security and project management. The institution notes that Francis Marion University offers a program in Management Information Systems which also has some similarities to the proposed program; however, the former, according to Coastal Carolina, is more managerial and organizational with less technical emphasis than the proposed degree.

A total of ten faculty members (one full professor, two associate professors, five assistant professors, one instructor, and one lecturer) who currently teach in the computer science and information systems curricula will support the proposed degree. This will represent a core commitment of 9.5 FTE per year. The institution states that since the entire curriculum is currently offered as a

concentration within the existing Computer Science degree, no changes of assignment will be necessary for existing faculty. Coastal Carolina anticipates, however, that more full-time faculty members will be required as enrollments increase.

New enrollment in the proposed program is estimated to begin at five students (5.0 FTE) in FY 2010-2011, increasing to eight students (8.0 FTE) in FY 2011-2012, increasing to nine students (9 FTE) in FY 2012-2013, increasing to ten students (10 FTE) in FY 2013-2014, and increasing to 11 students (11 FTE) in FY 2014-2015. Due to the large number of current students projected to enroll in this program, the institution estimates that by the fifth year, total enrollment will be 117 headcount (117 FTE). If enrollment projections are met, the program will meet the current CHE program productivity standards.

The University will seek accreditation for the proposed program through the Accreditation Board for Engineering and Technology (ABET) and notes that the existing program leading to the B.S. degree in Computer Science has been accredited through the same body since 2002. ABET accreditation takes into account program improvement, facilities, institutional commitment, curricular content and student achievement. Coastal Carolina anticipates seeking accreditation of the new program within three years of its approval since the curriculum is already offered through the information systems emphasis and existing data will be sufficient to support an application for approval within this timeframe.

No additional physical plant will be needed to implement the proposed program for at least its first five years. The institution states there are already projects for the construction of several new science buildings on its campus and that the computer science and information systems department is slated to occupy space in one of these new facilities. Additionally, no further equipment costs will be incurred in order to implement the new program for at least its first five years.

The institution affirms that library resources are more than sufficient to support the proposed program and that holdings are both current and broad enough to support such a program. Previous successful ABET accreditation status further validates the adequacy of current resources. The institution does note that the library's budget would need to increase should new journal titles be added in the future.

Shown below are the estimated Mission Resource Requirement (MRR) costs to the state associated with implementation of the proposed program for its first five years. Also shown are the estimated revenues projected under the Mission Resource Requirement and the Resource Allocation Plan as well as student tuition.

Estimated Program Costs and Revenue

	Estimated Program Costs		**Estimated Program Revenue**				
	(A) MRR Cost	**(B) Other Costs***	**(C) Actual State Funding**	**(D) Tuition**	**(E) Additional Revenue**	**(F) Total Revenue (C+D+E)**	**(G) Total Revenue - Total Costs (F-(A+B))**
Year 1	$41,131	$0	N/A	$57,410	$0	$57,410	$16,279
Year 2	$65,809	$0	$16,066	$91,856	$0	$107,922	$42,113
Year 3	$74,035	$0	$25,705	$104,282	$0	$129,987	$55,952
Year 4	$82,261	$0	$28,459	$115,764	$0	$144,223	$61,962
Year 5	$90,487	$0	$31,672	$127,246	$0	$158,918	$68,431

*Includes costs of an extraordinary nature not otherwise included in the MRR cost calculation (e.g., costs for a new building required to support a program).

These data demonstrate that if the new program meets its enrollment projections as shown in the proposal, the program will be able to cover new costs with revenues it generates beginning in the first year of its implementation.

In summary, the proposed program will increase the choices of programs available to students of information systems and information technology in the state. It and will prepare students who choose the proposed program for success in either the workplace or for further academic pursuits in the field of information systems technology. It will also serve to fill a critical need for the preparation of much needed information systems professionals in the Palmetto state.

Recommendation

The staff recommends that the Committee on Academic Affairs and Licensing commend favorably to the Commission approval of the program leading

to the Bachelor of Science degree with a major in Information Systems at Coastal Carolina University, to be implemented in spring 2010, provided that no “unique cost” or other special state funding be required or requested, and provided further that the existing concentration in Information Systems under the existing B.S. degree program in Computer Science be terminated upon approval of the proposed new program.