

OHIO BOARD OF REGENTS

Agenda Item 6.3 University of Cincinnati, Bachelor of Science in Computer Science Technology

RESOLUTION

BE IT RESOLVED: upon the recommendation of the Chancellor and with the concurrence of the Initiatives committee of the Ohio Board of Regents that the University of Cincinnati Bachelor of Science (B.S.) degree in Computer Science Technology be approved.

BACKGROUND

UNIVERSITY OF CINCINNATI

Bachelor of Science degree in Computer Science Technology

The University of Cincinnati seeks approval for a Bachelor of Science degree in Computer Science Technology. The College of Applied Science at the University of Cincinnati previously received approval for two related baccalaureate degrees: B.S. in Information Engineering Technology (1996) and B.S. in Computer Engineering Technology (1999). The proposed B.S. in Computer Science Technology builds on many of the same courses as the previously approved programs. The program will be located in the Department of Mathematics, Physics and Computing Technology of the College of Applied Science.

The College of Applied Science was one of the oldest technical schools in the country. It joined the University of Cincinnati in 1969 and has specialized in engineering technology and applied science education. The technical education programs at the College of Applied Science were early models for two-year education in Ohio and elsewhere. The college has extensive experience in technical education at both the associate and baccalaureate level and has a long relationship with industry through its cooperative education program. Students in the proposed baccalaureate degree program will have the opportunity to participate in co-op experiences in industry and will also be required to complete a senior design project.

It should be noted that faculty in the College of Applied Science at the University of Cincinnati have been active participants in the Ohio Information Technology Task Force (ITTF). The ITTF was impaneled following a request from former Governor Voinovich that the Department of Education and the Ohio Board of Regents work together to develop a statewide response, based upon a TechPrep model, to the critical need for workers in information technology fields. Core technical and foundational learning components for academic programs were developed as well as information technology competencies. The proposed B.S. in Computer Science Technology builds on this foundational work. The College of Applied Science should be acknowledged for its participation in developing the competencies and designing degree programs that reflect these competencies.

The proposed baccalaureate degree will support an adequately trained workforce in computer technology through a program that is applied in its approach, and focuses on preparing graduates for a variety of positions that necessitate advanced skills in 1) information systems, 2) end-user applications development, 3) web/internet development, 4) computer networking, 5) database management, 6) multimedia production and technical presentations, to name a few. Similar programs exist both at University of Cincinnati and

other area institutions. These programs, in contrast to the B. S. in Computer Science Technology, are more theoretical in approach.

Employment opportunities for persons completing the proposed computer science technology program are excellent. The University has conferred with local, regional and international industries regarding the degree program and the employability of its graduates. The reaction has been overwhelmingly positive. Employment projections from the U.S. Bureau of Labor Statistics indicate that the U.S. will require more than 1.3 million new IT workers between 1996 and 2006, an average of 137,800 per year. Ohio projections depict a similar need. In the period between 1994-2005, IT-related occupations are projected by the Ohio Bureau of Employment Services to be among the fastest growing occupations in Ohio.

The proposed B. S. degree in Computer Science Technology will emphasize four major themes: 1)personal computer skills (programming and software development, design and development of information systems, computer networking and web development, interactive media), 2)practical experience (co-op positions in industry and senior capstone experience of a design project), 3)technical communication skills (technical writing, communications, technical presentations and multimedia production), and 4)general education (critical thinking and communication skills). A total of 196 credit hours will be required to complete the coursework.

It is anticipated that the program will begin with approximately twenty students per year and grow to an average entering class size of 40 full-time students and approximately 25 part-time students a year as the program moves forward. Some additional faculty resources will be required, although the primary faculty will be drawn from existing departments and programs.