

## PROPOSAL TO CHANGE THE ACADEMIC MASTER PLAN

Proposed Name of Degree: Bachelor of Science in Information Technology  
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Faculty Proposing New Program: William Wolfe, Peter Smith, Ivona Grzegorzczuk  
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### **Review and Approval:**

Date of Proposal: 3/5/04

Date of Faculty Meeting: 2/25/04

Date of Consultation with Academic Affairs: 2/25/04

#### 1. Curriculum Committee Approval:

Curriculum Chair: \_\_\_\_\_ Date: \_\_\_\_\_

#### 2. Academic Senate Approval:

Chair, Academic Senate: \_\_\_\_\_ Date: \_\_\_\_\_

#### 3. Administration Approval:

President (or designee): \_\_\_\_\_ Date: \_\_\_\_\_

**1. Definition of the Proposed Degree Major Program**

**a. Name of the proposed degree major program, and academic year of intended implementation.**

California State University Channel Islands  
Bachelor of Science in Information Technology  
Fall, 2005.

**b. Name of the department, departments, division or other unit of the campus that would offer the proposed degree major program. Identify the unit that will have primary responsibility.**

Academic Affairs, Computer Science Program.

**c. Name, title, and rank of the individual(s) primarily responsible for drafting the proposed degree major program.**

William J. Wolfe, Associate Professor of Computer Science  
Peter D. Smith, Professor of Computer Science  
Ivona Grzegorzczuk, Professor of Mathematics  
With consulting help from Professor Sharlene Katz, Electrical Engineering, CSUN.

**d. Objectives of the proposed degree major program.**

- Provide students with a four year degree in information technology.
- Prepare students to enter industry in the area of information technology.
- Prepare students to manage computer systems and implement information technology.
- Compliment the academic work in technology areas initiated at community colleges.
- Develop broad understanding and skills in database technology.
- Develop broad understanding and skills in networking technology.
- Develop broad understanding and skills in web technology.
- Develop project management skills and experience.
- Develop basic mathematical skills.
- Develop basic program management skills.
- Develop basic science skills.
- Develop in depth knowledge of one of: networking, database, web technology.

**2. Justification for the Proposed Degree Major Program**

**a. List of other California State University campuses currently offering or projecting the proposed degree major program; list of neighboring institutions, public and private, currently offering the proposed degree major program.**

We know of no other CSU campus that offers a BSIT, although there is a BS Information Systems program offered at CSUN, College of Business and Economics, in the Department of Accounting and Information Systems, that has some similarities.

We know of no other local institution that offers a BSIT program.

**b. Differences between the proposed program and programs listed in Section 2a above.**

The CSUN degree is a B.S. in Information Systems with an option in Information Technology, it is not an Information Technology degree. It is a combination of computer science and business courses. There are also courses referred to as IS courses. However, the main focus is "business" since that is the school offering the course work.

Furthermore, the CSUCI BSIT program is designed to be compatible with the lower division technology programs being offered in community colleges across the state of California. The CSUN program has many lower division requirements, such as Engineering Calculus. The technology students from the community colleges would not normally meet those requirements.

Local institutions that offer related degrees, such as Information Systems, are heavily vested in Business courses, as opposed to Technology courses.

**c. Professional uses of the proposed degree major program.**

Students with a BSIT can enter industry as:

- Computer Systems Integrator.
- Computer Systems Manager.
- Information Technology Designer.
- Information Technology Support.
- Database Systems Manager
- Database Systems Designer.
- Network Manager.
- Network Designer.
- Web Technology Manager.
- Web Technology Support.

**d. Community/Regional/Statewide need for the proposed program.**

Information technology continues to be at the backbone of all business enterprises. Although there are computer science programs and business programs that provide support for this high demand area, there are no programs that fill the gap between the highly analytical/theoretical computer science programs and the mostly managerial business programs. In particular, this BSIT program will provide an avenue of advancement for the many students graduating from the community colleges with technology oriented degrees.

The BSIT is meant to satisfy a community/regional/statewide need for a program that emphasizes the fast growing segments of enterprises: Web Technology, Databases, and Networks. For a foundation, the BSIT program draws from: basic mathematics, science, and computer programming from Computer Science, and basic business organization and project management from Management Information Systems. From there it adds depth in Web Technology, Database Theory and Design, and Data Communications and Networking, while allowing for electives in related areas such as e-Commerce, Computer Security, and Multimedia.

Furthermore:

1. Network systems and data communications analysts are projected by the Bureau of Labor Statistics to be the second fastest growing occupation over the period from 2002 to 2012. See: <http://www.bls.gov/news.release/ecopro.t04.htm>
2. Computer systems design and related services, and Internet services, data processing and other information services are two industries with the fastest projected wage and salary growth between 2002 and 2012. See: <http://www.bls.gov/news.release/ecopro.t03.htm>
3. Employment in computer and mathematical occupations is expected to grow over 34% in the period from 2002 to 2012. This is the highest projected growth of all major occupational groups as specified by the Bureau of Labor Statistics. See: <http://www.bls.gov/news.release/ecopro.t02.htm>

e.       **The expected number of majors in the year of initiation and three years and five years thereafter. The expected number of graduates in the year of initiation and three years and five years thereafter.**

	<u>Number of Majors</u>	<u>Number of Graduates</u>
Initiation Year	20	0
Third year	60	40
Fifth year	150	80

**3. Resources Needs for the Proposed Degree Major Program (faculty, instructional, library, other)**

**a. Existing.**

At the beginning the program needs the expertise of Professors Wolfe, Smith and Grzegorzczuk, with consulting support from Professors Cordiero, Vaidya, and Reilly, with additional consulting help from Professor Sharlene Katz (Professor of Electrical Engineering, CSUN).

Computer lab equipment will be rented or purchased via the Office of Extended Education and will therefore have no impact on exiting CSUCI labs.

**b. Future.**

In the future (approximately 3 years from now) the program will need a computer lab (20 PC computers) and a networking lab (10 PC computers, hubs, switches, routers). As a self-support program the acquisition of these facilities, rented or purchased, will be funded through the office of Extended Education.