

California State University Channel Islands

Program Update

For Minor Program Updates Only

Program updates must be submitted by October 15, 2013 and finalized by the end of the fall semester for the next catalog production.

Date (Change if modified and update the file name with the new date): 7/29/13~~2013/4~~

Program Area: Information Technology, B.S.

Semester/Year first affected: Fall 2014

Instructions: Please use this Program Update form for minor changes to existing programs. **Highlight all changes in YELLOW.** Appropriate updates for this form include faculty or address changes, additions of approved electives, minor editing for clarity, and other minor updates. Any change to program requirements, units, outcomes, emphases or options, or other programmatic concerns require the standard two column Program Modification form, available at the Curriculum website.

CURRENTLY APPROVED PROGRAM WITH CHANGES TRACKED

Paste the latest approved version of your entire program in the below the line and before the Summary of Changes before you begin (If you are unsure about which version is the most recent, contact Kathy Musashi). If the form does not preset to the tracked changes mode, turn on tracked changes using Word Tools before making the necessary edits. Please set the view to ORIGINAL SHOWING MARKUP.

Information Technology

This BSIT program prepares students for careers in Information Technology such as Computer Systems Integrator, Computer Systems Manager, Information Technology Designer, Information Technology Support, Database Systems Manager, Database Systems Designer, Data Communications Analyst, Network Manager, Network Designer, Web Technology Manager and Web Technology Support.

In addition to serving CSU Channel Islands (CI) freshmen, the program provides an avenue of advancement for students with associate's degrees in a technology discipline such as networking gained at a two-year institution (e.g. Moorpark College's Associate in Science Degree in Computer Network Systems Engineering).

The coursework will provide a foundation in mathematics, programming, networking, databases, web systems, computer architecture and information systems. The BSIT covers the interdisciplinary ground between a BS in Computer Science and a BS in Management Information Systems, emphasizing the fastest growing segments of both: web systems, databases, and networks. This interdisciplinary program draws from both Computer Science and Management Information Systems: mathematics, science, and computer programming from Computer Science, and business organization and project management from Management Information Systems. From there it adds depth in IT Programming, Web Technology, Database Theory and Design, and Data Communications and Networking, while allowing for further depth in these or related areas such as e-Commerce, and Computer Security.

Program Learning Outcomes

Students graduating from the Information Technology program will be able to:

- Demonstrate critical thinking and problem solving skills by identifying, evaluating, analyzing and presenting fundamental software solutions and their applications;
- Demonstrate the knowledge of current computing practices and broad technology use in industry and society, including a working knowledge of software development techniques;
- Be cognizant of emerging new technologies and industrial practices connected to the computer industry;
- Demonstrate communication, research and cooperation skills by working effectively with others in interdisciplinary group settings - both inside and outside the classroom; and
- Demonstrate a sense of exploration that enables them to pursue rewarding careers in high-tech and bio-tech industries with life-learning.

Faculty

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Contact Information

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SUMMARY OF CHANGES (Mark applicable change box below)

- ☐ Adding elective courses
☒ Updating faculty or addresses
☐ Minor editing for clarity
☐ Other, Please briefly explain

Information Technology, B.S. – 120 units

Special Grade Requirements

A grade of C- or better is required in all prerequisites courses in the major

Summary of Units:

Lower Division Requirements 17

Core Courses 27

Upper Division Electives 18

Technology Electives 9

Capstone 4

General Education and Title V 42

University Electives 3

Total 120 units

Lower Division Requirements - 17 units

1. Statistics 3 units

Select one of the following:

- MATH 201 - Elementary Statistics Units: 3
- MATH 202 - Biostatistics (Cross-listed as PSY 202) Units: 3
- MATH 329 - Applied Statistics for Business and Economics Units: 3

2. Two semesters of a Laboratory science: Physics, Chemistry, or Biology 8 units

BIOL 200 - Principles of Organismal and Population Biology Units: 4
and

- BIOL 201 - Principles of Cell and Molecular Biology Units: 4

or

- CHEM 121 - General Chemistry I Units: 4

and

- CHEM 122 - General Chemistry II Units: 4

or

- PHYS 100 - Introduction to Physics I Units: 4

and

- PHYS 101 - Introduction to Physics II Units: 4

3. First course in programming 3 units

- COMP 105 - Computer Programming Introduction Units: 3

4. First course in Computer Architecture and Assembly Language 3 units

- COMP 162 - Computer Architecture and Assembly Language Units: 3

Note:

Appropriate community college courses may meet these requirements.

Core Courses - 27 units

- MATH 300 - Discrete Mathematics Units: 3

or

- MATH 301 - Discrete Mathematics for IT Units: 3

- IT 151 - IT Programming Units: 3
- IT 221 - Unix System Programming I (Cross-listed as COMP 221) Units: 3
- IT 420 - Database Theory and Design (Cross-listed as COMP 420) Units: 3
- IT 421 - Unix System Programming II (Cross-listed as COMP 421) Units: 3

- IT 424 - Computer System Security (Cross-listed as COMP 424) Units: 3
- IT 429 - Computer Networks (Cross-listed as COMP 429) Units: 3
- MIS 310 - Management Information Systems Units: 3
- MGT 307 - Management of Organizations Units: 3

Upper Division Electives - 18 units

Choose 18 units from the following:

- COMP 345 - Digital Image Processing (Cross-listed as PHYS 345, MATH 345) Units: 3
- COMP 350 - Introduction to Software Engineering Units: 3
- COMP 362 - Operating Systems Units: 4
- COMP 425 - Computer Game Programming Units: 3
- IT 380 - Web Programming Units: 3
- IT 400 - eCommerce Units: 3
- IT 401 - Web Intelligence Units: 3
- IT 402 - Advanced Web Programming Units: 3
- IT 464 - Computer Graphic Systems and Design I (Cross-listed as COMP 464) Units: 3
- IT 490 - Special Topics for IT Units: 3
- IT 492 - Internship Units: 1-3
- IT 494 - Independent Research Units: 1-3
- IT 497 - Directed Studies Units: 3
- MGT 471 - Project Management Units: 3

(Additional electives to be added based on faculty availability).

Technology Electives - 9 units

For a listing of suitable CI courses, see the BSIT program advisor

Capstone - 4 units

- IT 491 - Capstone Preparation Units: 1
- IT 499 - Capstone Project Units: 3

General Education and American Institutions - 42 units

General Education	33
American Institutions	6
University Electives	3

Proposer of Program Modification	Date

APPROVAL SHEET

Program: [REDACTED]

If your course has a General Education Component or involves Center affiliation, the Center will also sign off during the approval process.

Multiple Chair fields are available for cross-listed courses.

The CI program review process includes a report from the respective department/program on its progress toward accessibility requirement compliance. By signing below, I acknowledge the importance of incorporating accessibility in course design.

Program Chair		
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Signature

Date

Curriculum Chair		
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Signature

Date

AVP		
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Signature

Date