

Program Modification

Program modifications must be submitted by October 15, 2010, and finalized by the end of the fall semester for catalog production.
Enter data in **YELLOWED** areas.

Date (Change date if modified and update the file name with the new date): 9/15/11; REV 9.23.11 REV 10.10.11; rev 11.3.11

Program Area: INFORMATION TECHNOLOGY

Semester /Year First affected: FALL 2012

Instructions: Please use this Program Modification form for changes to existing program requirements, units, outcomes, emphases or options, or for other programmatic concerns. For minor changes (faculty or address changes, additions of approved electives, minor editing for clarity, and other minor updates) use the Program Update form, available at the Curriculum website.

Paste the latest approved version of your entire program in the left AND right boxes below. Make your deletions in the LEFT column by using the strikeout feature in Word or underlining, **and highlight**. Insert new language or other changes to the program on the RIGHT and highlight in **YELLOW** for easy identification. If possible, please align the two columns so that changes appear side-by-side with the original text.

CURRENTLY APPROVED PROGRAM

INFORMATION TECHNOLOGY

Bachelor of Science in
Information Technology

Programs Offered

- Bachelor of Science in 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

PROPOSED PROGRAM

INFORMATION TECHNOLOGY

Bachelor of Science in
Information Technology

Programs Offered

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<p>Support.</p> <p>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).</p> <p>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.</p> <p>Faculty</p> <p>William J. Wolfe, Ph.D. Professor of Computer Science Bell Tower West, Room 2225 (805) 437-8985 william.wolfe@csuci.edu</p> <p>Peter Smith, Ph.D. Professor of Computer Science Chair, Computer Science Program Academic Advisor Bell Tower West, Room 2265 (805) 437-8882 peter.smith@csuci.edu</p> <p>Andrzej A. J. Bieszczad, Ph.D. Associate Professor of Computer Science Director of the Masters Program Bell Tower West, Room 2285 (805) 437-2773 aj.bieszczad@csuci.edu</p>	<p>Support.</p> <p>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).</p> <p>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.</p> <p>Faculty</p> <p>William J. Wolfe, Ph.D. Professor of Computer Science Bell Tower West, Room 2225 (805) 437-8985 william.wolfe@csuci.edu</p> <p>Peter Smith, Ph.D. Professor of Computer Science Chair, Computer Science Program Academic Advisor Bell Tower West, Room 2265 (805) 437-8882 peter.smith@csuci.edu</p> <p>Andrzej A. J. Bieszczad, Ph.D. Associate Professor of Computer Science Director of the Masters Program Bell Tower West, Room 2285 (805) 437-2773 aj.bieszczad@csuci.edu</p>
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Contact Information

<http://compsci.csuci.edu>

Program Learning Outcomes and Contact Information

<http://www.cs.csuci.edu/>

Bachelor of Science in Information Technology - (121 units)

Special Grade Requirements

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

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	3
MATH 329	Statistics for Business and Economics ..	3
MATH 202	Biostatistics	3

2. *Two semesters of a Laboratory science:*

Physics, Chemistry, or Biology 8 units

BIOL 200	Principles of Organismal and
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Contact Information

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MATH 329	Statistics for Business and Economics ..	3
MATH 202	Biostatistics	3

2. *Two semesters of a Laboratory science:*

Physics, Chemistry, or Biology 8 units

BIOL 200	Principles of Organismal and
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and	Population Biology	4	and	Population Biology	4
BIOL 201	Principles of Molecular and Cellular Biology	4	BIOL 201	Principles of Molecular and Cellular Biology	4
or			or		
CHEM 121	General Chemistry I	4	CHEM 121	General Chemistry I	4
and			and		
CHEM 122	General Chemistry II	4	CHEM 122	General Chemistry II	4
or			or		
PHYS 100	Introduction to Physics	4	PHYS 100	Introduction to Physics	4
and			and		
PHYS 101	Introduction to Physics II	4	PHYS 101	Introduction to Physics II	4
3. <i>First course in programming 3 units</i>			3. <i>First course in programming 3 units</i>		
COMP 105	Computer Programming Introduction ..	3	COMP 105	Computer Programming Introduction ..	3
4. <i>First course in Computer Architecture and Assembly Language 3 units</i>			4. <i>First course in Computer Architecture and Assembly Language 3 units</i>		
COMP 162	Computer Architecture and Assembly Language	3	COMP 162	Computer Architecture and Assembly Language	3
Note: Appropriate community college courses may meet these requirements.			Note: Appropriate community college courses may meet these requirements.		
Core Courses - 27 units			Core Courses - 27 units		
MATH 300	Discrete Mathematics	3	MATH 300	Discrete Mathematics	3
or			or		
MATH 301	Discrete Mathematics for IT	3	MATH 301	Discrete Mathematics for IT	3
IT 151	Data Structures and Program Design for IT	3	IT 151	Data Structures and Program Design for IT	3
COMP/IT221	Unix System Programming I	3	COMP/IT221	Unix System Programming I	3
COMP/IT421	Unix System Programming II	3	COMP/IT421	Unix System Programming II	3
COMP/IT420	Database Theory and Design	3	COMP/IT420	Database Theory and Design	3
COMP/IT424	Computer System Security	3	COMP/IT424	Computer System Security	3
COMP/IT429	Computer Networks	3	COMP/IT429	Computer Networks	3
MIS 310	Management Information Systems	3	MIS 310	Management Information Systems	3

MGT 307 Management of Organizations3

Upper Division Electives - 18 units

Choose 18 units from the following:

- COMP 345 Digital Image Processing (MATH/PHYS).....3
- COMP 350 Introduction to Software Engineering3
- COMP 362 Operating Systems 4
- COMP 425 Computer Game Programming3

- IT 380 Web programming.....3
- IT 400 e-Commerce3
- IT 401 Web Intelligence.....3
- IT 402 Advanced Web Programming3
- COMP/IT424 Computer System Security3
- COMP/IT464 Computer Graphics3

- IT 490 Special Topics for IT3
- IT 492 ...Internship 1-3
- MGT 471 Project Management 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 1
- IT 499 Capstone3

General Education and American Institutions - 42 units

- General Education36
- American Institutions6

MGT 307 Management of Organizations3

Upper Division Electives - 18 units

Choose 18 units from the following:

- COMP 345 Digital Image Processing (MATH/PHYS).....3
- COMP 350 Introduction to Software Engineering3
- COMP 362 Operating Systems 4
- COMP 425 Computer Game Programming3

- IT 380 Web programming.....3
- IT 400 e-Commerce3
- IT 401 Web Intelligence.....3
- IT 402 Advanced Web Programming3
- COMP/IT424 Computer System Security3
- COMP/IT464 Computer Graphics3

- IT 490 Special Topics for IT3
- IT 492 ...Internship 1-3
- MGT 471 Project Management 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 1
- IT 499 Capstone3

General Education and American Institutions - 42 units

- General Education36
- American Institutions6

University Electives - 3 units

Typical Course of Study

Freshman Year

Fall - 15 units

ENGL 105*	Composition and Rhetoric	3
MATH 201	Elementary Statistics	3
MATH 230	Logic and Mathematical Reasoning (GE A3).....	3
	General Education.....	6
* or ENGL 102 and 103		6

Spring - 15 units

COMP 105	Introduction to programming.....	3
Title V		3
	General Education.....	6
	University Elective.....	3

Sophomore Year

Fall - 15 units

COMP 162	Computer Architecture and Assembly	3
Title V		3
	General Education	3
IT 151	Data Structures for IT.....	3
MATH 301	Discrete Structures for IT.....	3

Spring - 16 units

Lab Science (Bio 200 or Chem 121 or Phys 100)	4	
MIS 310	Information Management Systems	3
COMP/IT 221	Unix System Programming i.....	3
General Education.....	3	

Junior Year

Fall - 16 units

Lab Science II (Second semester Bio, Chem, or Phys)4		
Technical Elective.....	3	
COMP/IT 421	Unix System Programming II.....	3
MGT 307	Management of Organizations	3

University Electives - 3 units

Typical Course of Study

Freshman Year

Fall - 15 units

ENGL 105*	Composition and Rhetoric	3
MATH 201	Elementary Statistics	3
MATH 230	Logic and Mathematical Reasoning (GE A3).....	3
	General Education.....	6
* or ENGL 102 and 103		6

Spring - 15 units

COMP 105	Introduction to programming.....	3
Title V		3
	General Education.....	6
	University Elective.....	3

Sophomore Year

Fall - 15 units

COMP 162	Computer Architecture and Assembly	3
Title V		3
	General Education	3
IT 151	Data Structures for IT.....	3
MATH 301	Discrete Structures for IT.....	3

Spring - 16 units

Lab Science (Bio 200 or Chem 121 or Phys 100)	4	
MIS 310	Information Management Systems	3
COMP/IT 221	Unix System Programming i.....	3
General Education.....	6	

Junior Year

Fall - 16 units

Lab Science II (Second semester Bio, Chem, or Phys)4		
Technical Elective.....	3	
COMP/IT 421	Unix System Programming II.....	3
MGT 307	Management of Organizations	3

General Education3	General Education3
Spring - 16 units	Spring - 15 units
Technical Elective.....3	Technical Elective.....3
COMP/IT 429 Computer Networks.....3	COMP/IT 429 Computer Networks.....3
COMP/IT 420 Database Theory and Design.....3	COMP/IT 420 Database Theory and Design.....3
COMP/IT424 Computer System Security.....3	COMP/IT424 Computer System Security.....3
General Education 4	General Education 3
Senior Year	Senior Year
Fall - 13 units	Fall - 13 units
Upper Division Elective... ..3	Upper Division Elective... ..3
Upper Division Elective3	Upper Division Elective3
Upper Division Elective3	Upper Division Elective3
IT 491 Capstone Preparation1	IT 491 Capstone Preparation1
Technical Elective.....3	Technical Elective.....3
Spring - 15 units	Spring - 15 units
Upper Division Elective.....3	Upper Division Elective3
Upper Division Elective.....3	Upper Division Elective.....3
Upper Division Elective.....3	Upper Division Elective.....3
University Elective3	General Education3
IT 499 BSIT Capstone.....3	IT 499 BSIT Capstone.....3

SUMMARY OF CHANGES

Corrections and modifications made to the Typical Program of Study to align it with the 4-year roadmap on the program website

JUSTIFICATION

Reduce student confusion

Peter Smith
 Proposer of Program Modification

10/12/11
 Date

Program: BS in Information Technology

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		
Signature		Date

Curriculum Chair		
Signature		Date

Dean of Faculty		
Signature		Date