



University of Maryland University College

**Baccalaureate Degree Program in Computer Information Technology  
Department of Computer Information Systems and Technology**

**PROGRAM ASSESSMENT PLAN**  
**Program Outcomes and Learning Assessment Criteria**

Summer 2007

**Baccalaureate Degree Program in Computer Information Technology**

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## Baccalaureate Degree Program in Computer Information Technology

### PROGRAM OVERVIEW

Courses within the Computer Information Technology (CMIT) may be applied as appropriate toward:

- General education requirements;
- A major in computer information technology, computer and information science, or computer studies;
- A minor in computer studies;
- A certificate in Computer Networking or UNIX System Administration; and
- Electives.

The CMIT curriculum prepares adult students for both technology workforce enhancement and internationally recognized vendor certification examinations. CMIT provides a unique focus by simultaneously preparing the foundation for internationally recognized industry certification, as well as a bachelor's degree.

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**PROGRAM OF STUDY**

The program of study for the Baccalaureate Degree Program in Computer Information Technology is as follows:

**GENERAL EDUCATION REQUIREMENTS**

Communications	12 credit hours
Arts and Humanities	6 credit hours
Behavioral and Social Sciences	6 credit hours
Biological and Physical Sciences	7 credit hours
Mathematics	3 credit hours
Interdisciplinary or Emerging Issues	7 credit hours

**CROSS-CURRICULAR PERSPECTIVE REQUIREMENTS**

Historical Perspective	3 credit hours
International Perspective	3 credit hours
Civic Responsibility Perspective	3 credit hours

**REQUIRED COURSES**

COMM 393/393X	Technical Writing	3 credit hours
CMIT 364	Windows XP Professional or other upper-level CMIT course	3 credit hours
CMIT 368	Windows Server 2003 or other upper-level CMIT course	3 credit hours
CMIT 376	Windows Network Infrastructure or other upper-level CMIT course	3 credit hours

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**PROGRAM OF STUDY (continued)**

CMIT 377	Windows Directory Services Infrastructure or other upper-level CMIT course	3 credit hours
CMIT 320	Network Security or other upper-level CMIT course	3 credit hours
CMIT 350	Interconnecting CISCO Devices or other upper-level CMIT course	3 credit hours
CMIT 486A	Internship in Computer Information Technology through the Co-op	3 credit hours

**MINOR AND ELECTIVE COURSES**

43 credit hours

Minor and/or elective courses are to be taken in the last 60 hours along with required major courses. Refer to the current UMUC School of Undergraduate Studies Catalog for the minor and/or elective course requirements.

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**DEVELOPMENT OF PROGRAM OUTCOMES**

The table below identifies the curricular influences that support the program outcomes specific to the Baccalaureate Degree Program in Computer Information Technology.

<b>SOURCES/RESOURCES PROVIDING CURRICULAR FOUNDATION FOR PROGRAM OUTCOMES</b> <b>Baccalaureate Degree Program in Computer Information Technology</b>		
<b>SOURCE</b>	<b>DESCRIPTION</b>	<b>WEB ADDRESS OR DOCUMENT NAME</b> <b>(if applicable)</b>
Core Learning Areas of the UMUC School of Undergraduate Studies	<p>All UMUC degree programs are required to imbed identified Core Learning Areas into the program of study. The Core Learning Areas are:</p> <ul style="list-style-type: none"> <li>• Written Communication (COMM)</li> <li>• Technology Fluency (TECH)</li> <li>• Information Literacy (INFO)</li> <li>• Quantitative Literacy (QUAN)</li> <li>• Critical Thinking (THIN)</li> <li>• Scientific Literacy (SCIE)</li> </ul> <p>The expanded definition for each Core Learning Area was considered in creating the respective program outcome.</p>	UMUC <a href="#"><u>Institutional Plan for the Assessment of Student Learning</u></a>
Working Groups	UMUC faculty members provide input into changes in the major.	

**Baccalaureate Degree Program in Computer Information Technology**

**PROGRAM OUTCOMES**

The program outcomes specific to the Baccalaureate Degree Program in Computer Information Technology are delineated below. The program outcomes describe the expectations for all graduates of the Baccalaureate Degree Program in Computer Information Technology.

<b>CORE LEARNING AREA</b>	<b>PROGRAM OUTCOMES</b> <b>Baccalaureate Degree Program in Computer Information Technology</b>
COMM	Create written communication appropriate for the purpose and which meets standards of style and grammatical correctness.+
	Create written materials documenting computer networks using appropriate writing skills.*
TECH	Evaluate technological concepts related to computers and components of information systems.+
	Incorporate relevant theory and practice in developing computer-related solutions to practical problems.*
INFO	Address recognized research needs by retrieving, evaluating, and using information appropriately.+
	Use online information resources to support research on computer networks.*
QUAN	Apply mathematical and numerical reasoning skills.+
	Apply mathematical concepts to assure data integrity.*
THIN	Apply knowledge of computer concepts to the evaluation of information technology issues.*
SCIE	Identify key concepts and principles of natural sciences.+
	Analyze computer network problems and their logical and technical solutions.*

+ Denotes a program outcome specific to core skills, knowledge, and values gained from completion of the general education requirements. This program outcome is common across all UMUC baccalaureate degree programs.

\* Denotes a program outcome specific to core skills, knowledge, and values gained from completion of requirements in the baccalaureate degree program. This program outcome is unique to each UMUC baccalaureate degree program.

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**ALIGNMENT OF PROGRAM OUTCOMES WITH LEARNING OBJECTIVES AND ASSESSMENT METHODS**

The following grid aligns the program outcomes of the Baccalaureate Degree Program in Computer Information Technology with: 1) learning objectives from the designated program coursework and 2) specific methods used to assess student learning within the degree program.

<b>CURRICULAR ALIGNMENT</b>			
<b>Baccalaureate Degree Program in Computer Information Technology</b>			
<b>CORE LEARNING AREA</b>	<b>PROGRAM OUTCOMES</b>	<b>LEARNING OBJECTIVE(S) AND CORRELATING COURSEWORK</b>	<b>METHOD(S) OF ASSESSMENT</b>
COMM	Create written communication appropriate for the purpose and which meets standards of style and grammatical correctness.+	Plan and write a research-based essay that makes effective use of resources found in databases available from UMUC's Office of Information and Library Services as well as resources located through Web search engines. (WRTG 101)	Research Paper
		Research, compile, and document relevant, credible information and use it to support ideas presented in your writing. (WRTG 393)	Research Paper
		Collect, select, analyze, interpret, and organize data, and use it appropriately in business communications, including a long formal report. (WRTG 394)	Research Paper
		Conduct a systematic audience analysis and apply it to a report, essay, or research paper. (WRTG 391)	Research Paper
	Create written materials documenting computer networks using appropriate writing skills.*	Write a technical research paper utilizing a variety of relevant resources. (CMIT 376)	Research Paper

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<b>CURRICULAR ALIGNMENT</b>			
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<b>CORE LEARNING AREA</b>	<b>PROGRAM OUTCOMES</b>	<b>LEARNING OBJECTIVE(S) AND CORRELATING COURSEWORK</b>	<b>METHOD(S) OF ASSESSMENT</b>
TECH	Evaluate technological concepts related to computers and components of information systems.+	Analyze issues faced by information system professionals, including security, ethical, and privacy problems. (IFSM 201)	Exam (Course/Chapter)
	Incorporate relevant theory and practice in developing computer-related solutions to practical problems.*	Select the type of network design most appropriate for a given site and justify the selection. (CMIT 265)	Essay/Writing Task
INFO	Address recognized research needs by retrieving, evaluating, and using information appropriately.+	Select relevant print and electronic sources to answer research questions. (LIBS 150)	Exam (Course/Chapter)
	Use online information resources to support research on computer networks.*	Write a technical research paper utilizing a variety of relevant resources. (CMIT 320)	Research Paper
QUAN	Apply mathematical and numerical reasoning skills.+	Solve linear, quadratic, higher-order polynomial, fractional, radical, exponential, logarithmic, and absolute value equations and inequalities. (MATH 107)	Exam (Course/Chapter)
		Develop problem solving skills. (MATH 105 or MATH 106)	Exam (Course/Chapter)
	Apply mathematical concepts to assure data integrity.*	Able to explain how cryptography (involves mathematical algorithms) is used to secure information. (CMIT 320)	Exam (Course/Chapter)
THIN	Apply knowledge of computer concepts to the evaluation of information technology issues.*	Use the process of stepwise refinement to construct programs. (CMIS 102)	Other: Programming Project

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<b>CORE LEARNING AREA</b>	<b>PROGRAM OUTCOMES</b>	<b>LEARNING OBJECTIVE(S) AND CORRELATING COURSEWORK</b>	<b>METHOD(S) OF ASSESSMENT</b>
SCIE	Identify key concepts and principles of natural sciences. +	Recognize the differences and the interrelationships among physics, chemistry, the earth sciences, and astronomy. (NSCI 100)	Exam (Course/Chapter)
		Explain the significance of DNA in determining the composition, characteristics, reproduction, and behavior of an organism. (BIOL 101)	Exam (Course/Chapter)
	Analyze computer network problems and their logical and technical solutions.*	Identify strategic LAN support tools and resources and determine how to use them in troubleshooting basic network problems. (CMIT 265)	Exam (Course/Chapter)

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