

BEREA COLLEGE
2009 - 2010 CURRICULUM GUIDE (revised 10/29/09)
B.A. in COMPUTER AND INFORMATION SCIENCE
WITH COMPUTER SCIENCE CONCENTRATION

NOTE: This guide is subject to change and represents actions approved by Faculty to date. Please refer often to the 2009-2010 Online Catalog & Student Handbook (www.berea.edu/cataloghandbook), which will be updated with the most current information.

GENERAL EDUCATION PROGRAM

Core Courses

	<u>Term</u>	<u>Credit</u>
MAT 010: Prealgebra ^a	_____	NC
MAT 011: Elementary Algebra I ^a	_____	NC
MAT 012: Elementary Algebra II ^a	_____	NC
GSTR 110: Writing Sem. I: Critical Thinking in the Liberal Arts	_____	1
GSTR 210: Writing Sem. II: Identity and Diversity in the United States	_____	1
GSTR 310: Und. of Christianity	_____	1
GSTR 332: Scien. Knowl. & Inquiry	_____	1
GSTR 410: Sr. Sem. in Cont. Global Issues	_____	1

Lifetime Health & Fitness: PEH 100 & Phys. Activity

PEH 100: Introduction to Lifetime Wellness	_____	.50
<i>(if swimming proficiency test not passed, one of next two courses must be PED 200)</i>		
PED 2____: _____	_____	.25
PED 2____: _____	_____	.25

Practical Reasoning Across the Curriculum (PR & PRQ)

Two courses—at least one firmly grounded in math or statistics (PRQ); the other can be an approved practical reasoning (PR) course or another PRQ course.

_____:	_____	1
_____:	_____	1

Perspectives—Six Areas Required

Students will satisfy each of the six Perspective areas by taking or waiving a course, or through an approved experience. Individual courses may be approved to satisfy more than one Perspective, but no single course may satisfy more than two Perspective areas.

1. Arts _____
2. Social Science _____
3. Western History _____
4. Religion _____
5. Afr. Amer., Appal., Women's _____
6. International (two courses either in area 6A or area 6B):
 - A) Same Non-English Language _____
 - Same Non-English Language _____
(one course may be waived by placement exam)

OR

- B) World Culture (Non-western) _____
- World Culture (Western/non-western) _____

Active Learning Experience (ALE)

An approved experience, taken for credit or as noncredit.

_____:	_____	_____
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Writing Competency Requirement (thru Spring 2009)

(NOTE: Required for students entering in/before Spring 2009—not required for those entering in/after Fall 2009)

Students may satisfy this requirement by passing the Writing Competency Examination administered in Fall and Spring, or by successfully completing GST 150: College Composition or ENG 104: Advanced ESL.

_____:	_____	_____
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MAJOR COURSES

Core Courses

	<u>Term</u>	<u>Credit</u>
CSC 226: Intro to Programming with C++	_____	1
CSC 236: Algorithms, Objects, Data Abstrac.	_____	1
CSC 435: Computer Organization	_____	1
TEC 130: Engineering Graphics	_____	1
TEC 265: Electrical Fundamentals	_____	1

Capstone Course or Experience (counts inside the major)

Completion of one (1) of the following course credits:

CSC 495: Internship ^b	_____	OR
UGR 010: Undergraduate Research (URCPP) ^b	_____	OR
UGR 020: Undergraduate Research (non-URCPP) ^b	_____	OR
CSC 492: Senior Seminar	_____	_____

Distribution Courses (Required; count inside the major)

Four (4) additional course credits, as described; each may only be used to satisfy one credit in this major:

- 1) Two additional CSC course credits selected from CSC 303, 325, 330, 386, 433, 440, and 486

CSC _____:	_____	1
CSC _____:	_____	1
- 2) The two remaining course credits selected from: CSC 100-499, TEC 180, 330, 382, 455, 460, and SENS 320.

_____:	_____	1
_____:	_____	1

Collateral Courses (Required; counts outside the major)

One course chosen from the following:

MAT 105: Intro to Discrete Mathematics	OR
MAT 312: Operations Research	_____ 1
<i>(See additional collateral course required for this concentration below)</i>	

Concentration Courses (Required; count inside the major)

In addition to the above Core, Capstone, and Collateral Courses, the following must be completed (and cannot be used above):

- a) CSC 440: Design & Analysis of Algorithms _____
- b) CSC 325: Oper. Systems w/Emph. on Unix _____
- c) CSC 303: Theory of Computation **OR**
CSC 433: Numerical Analysis _____

AND

MAT 125: Trigonometry with Applications	OR
MAT 135: Calculus I	OR
MAT 225: Calculus II	_____ 1

^a May be waived on basis of test scores.

^b In order for CSC 495, URG 010, or UGR 020 to meet the capstone requirement, it must have been approved for this purpose by the Department.

NOTE: Students who opt for the Concentration in Computer Science cannot also minor in Computer Science. See separate curriculum guide for the Computer and Information Science major without the Computer Science concentration.

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