

# BACHELOR of Science in COMPUTER SCIENCE

For students who entered the College of Liberal Arts & Sciences starting Fall 2005 through Summer 2009  
Total Credits Required: 122

NAME:	ID#:	DATE:
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Course No.	Title	Credit	Grade	Semester	Notes:
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**FUNDAMENTAL LITERACIES: (13 - 19 credits)**

A	ENG-W 131	English Composition	(3 cr.)		A grade of C or better is required.
B		Critical Thinking	(3 cr.)		e.g., PHIL- P 105, P 110, P 150, P250
C	SPCH-S 121	Oral Communication	(3 cr.)		SPCH-S 121
D		Visual Literary	(3 cr.)		e.g., INFO-I310, FINA A109, JOUR J210
E		Quantitative Reasoning	(3 cr.)		Satisfied by required Mathematics courses
F	COAS Q110	Information Literacy	(1 cr.)		Should be taken with ENG W131
G		Computer Literacy	(3 cr.)		Satisfied by required Computer Science courses

**COMMON CORE (12 Credits) At least one of the following must be at the 300 level.**

A		The Natural World	(3 cr.)		N190 or N390 (BIOL, CHEM, GEOL, PHYS, etc.)
B		Human Behavior & Social Institutions	(3 cr.)		B190 or B399 (POLS, PSY, SOC, etc.)
C		Literary and Intellectual Traditions	(3 cr.)		T190 or T390 (CMLT, ENG, FINA, HIST, PHIL, etc.)
D		Art, Aesthetics and Creativity	(3 cr.)		A190 or A399 (FINA, MUS, THTR, etc.)

**CONTEMPORARY SOCIAL VALUES (8 Credits)**

A		Non-Western Cultures	(3 cr.)		(e.g., ANTH E105, POLS Y109)
B		Diversity in U.S. Society	(3 cr.)		(e.g., SOC S161, HIST-H105 or H106)
C		Health and Wellness	(2 cr.)		(e.g., HPER N220, NURS-B109 plus HPER-E100-level )

**For additional GEN-ED courses please see: [www.iusb.edu/~lasi/campusgened.xls](http://www.iusb.edu/~lasi/campusgened.xls)**

**LANGUAGE Studies (6 Credits)**

			(3 cr.)		Two semesters in a single non-English language, or equivalent.
			(3 cr.)		

**PHYSICAL & LIFE SCIENCES (13 Credits) Courses in at least two different sciences must be taken.**

PHYS P303	Digital Electronics	(4 cr.)			Includes a laboratory component. (Required)
N190 or N390	Natural World	(3 cr.)			N190 or N390. Satisfied by completing the General Education Requirement (See Common Core A)
		(3 cr.)			Electives chosen from astronomy, biology, chemistry, geology, and physics.
		(3 cr.)			

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**MATHEMATICS (13 Credits)** (A grade of C or better is required)

MATH M208	Calculus I	(3 cr.)			or M215 (5cr.) In place of M208 and M209
MATH M209	Calculus II	(3 cr.)			
MATH M301	Applied Linear Algebra	(3 cr.)			
MATH M260	Probability	(3 cr.)			
MATH M261	Statistics	(2 cr.)			

**COMPUTER SCIENCE (44 Credits)** (A grade of C or better is required)

C101	Computer Programming I	(4 cr.)			Prereq: MATH A100 or Placement Exam Level III. Test out is available.
C151	Multiuser Operating Systems	(2 cr.)			Prereq: C101. Test out is available.
C201	Computer Programming II	(4 cr.)			Prereq: C101
C243	Elementary Data Structures	(4 cr.)			Prereq: C151, C201
C251	Foundations of Digital Computing	(3 cr.)			Prereq: C243
C308	System Analysis & Design	(4 cr.)			Prereq: C243
C311	Organization of Programming Languages	(3 cr.)			Prereq: C243, C335
C335	Computer Structures	(4 cr.)			Prereq: C201
C435	Operating Systems & Computer Architecture	(3 cr.)			Prereq: C243, C335, plus 3 additional courses above the level of C243.
C455	Analysis of Algorithms	(3 cr.)			Prereq: C251, M260
		(3 cr.)			Three additional computer science courses at 400 or 500 level. Consult your advisor.
		(3 cr.)			
		(3 cr.)			

**GENERAL ELECTIVES (approximately 16 Credits)**


For further information, please contact: Department of Computer and Information Sciences, Northside 301A, 520-5521. **Please visit us on the World Wide Web at [www.cs.iusb.edu](http://www.cs.iusb.edu)**

Any student who intends to major in computer science should contact the chairperson of the Department of Computer and Information Sciences as soon as possible.

Please refer to: IU South Bend Bulletin.