

Name: _____

**COMPUTER SCIENCE
BACHELOR OF SCIENCE - MATH/SCIENCE OPTION
MAJOR REQUIREMENTS 2003 - 2005**

Students in this program are required to complete General Requirements for Bachelor of Arts degree. Courses may be counted toward both Major and General Requirements. However, no course may fulfill two categories of General Requirements. (If you use any course for both Major and General Requirements, be sure to count the credits only ONCE toward the degree total.)

ADMISSION TO THE PROGRAM

Students wishing to pursue a major in computer science must have a grade point average of 2.5 or better in the following two courses: 50:198:111 and 50:198:113. Transfer students must achieve a grade point average of 2.5 or better in their first two computer science courses taken at Rutgers, not including 50:198:110 and 50:198:151. In addition, they must already have completed or received transfer credit for calculus (50:640:121 or 130). At the top of the next page, please list first two computer science courses used to satisfy above requirement.

TECHNICAL TRACKS

Major requirements are listed on the reverse side. Special tracks within the major are available by completing the following sequence of courses as part of the upper division Computer Science electives.

Scientific Computing Track (daytime only)

198:316 Parallel Programming

198:381 Introduction to Numerical Methods

198:458 Scientific Visualization or 198:487 Visualizing Mathematics by Computer

198:481 Advanced Numerical Methods

One 300 or 400 level department approved course in computer science, mathematics, or natural science

Required math courses: 640:250 Linear Algebra and 640:314 Elementary Differential Equations

Information Systems Track

198:347 Computer Systems Administration

198:346 Computer Networks

198:351 Database Systems

198:426 Information Systems Analysis and Design

One 300 or 400 level Computer Science elective

Two Business electives from the following list:

010:101 Introduction to Financial Accounting

010:202 Managerial Accounting

220:105 Microeconomic Principles

220:106 Macroeconomic Principles

390:301 Principles of Finance

623:334 Management Information Systems

TOTAL DEGREE CREDITS REQUIRED : 120

TOTAL CREDITS COMPLETED: _____

SENIOR REVIEW APPROVAL BY FACULTY ADVISOR: _____

DATE OF REVIEW: _____

C = Complete

YOUR SIGNATURE & DATE: _____ 2003-2005

COMPUTER SCIENCE - BACHELOR OF SCIENCE - MATH/SCIENCE OPTION

<u>COURSE TITLE</u>	<u>SUBJ. / COURSE</u>	<u>GRADE</u>
	198: _____	_____
	198: _____	_____

To continue in the program and graduate with a degree in computer science, a student must achieve a grade of C (2.0) or better in all computer science courses required for the major.

<u>COURSES REQUIRED</u>	<u>MIN. CREDITS</u>	<u>COURSES COMPLETED Subj.#: Course #</u>	<u>COMPLETED CREDITS SEM/YR</u>	<u>OFFICE SENIOR REVIEW</u>
INTRO. TO COMPUTER SCIENCE	3	198:111	_____	_____
SOFTWARE LABORATORY I	1	198:112	_____	_____
PROGRAMMING WITH DATA STRUCTURES	3	198:113	_____	_____
SOFTWARE LABORATORY II	1	198:114	_____	_____
PROGRAMMING LANGUAGE CONCEPTS	3	198:221	_____	_____
COMPUTER ORGANIZATION & ASSEMBLY LANGUAGE PROGRAMMING	3	198:231	_____	_____
DESIGN AND ANALYSIS OF ALGORITHMS	3	198:271	_____	_____
COMPUTER HARDWARE AND INTERFACING	3	198:333	_____	_____
COMPUTER HARDWARE AND INTERFACING LAB	1	198:334	_____	_____
SOFTWARE METHODOLOGY AND ENGINEERING	3	198:323	_____	_____
PRINCIPLES OF OPERATING SYSTEMS	3	198:341	_____	_____
INTRO. TO THEORY OF COMPUTATION	3	198:376	_____	_____
SENIOR DESIGN PROJECT	3	198:493	_____	_____
COMPUTER SCIENCE ELECTIVES (15 credits - 300-400 level) At most 3 credits each of 198:494 and 198:497	3	198: _____	_____	_____
_____	3	198: _____	_____	_____
_____	3	198: _____	_____	_____
_____	3	198: _____	_____	_____
_____	3	198: _____	_____	_____
_____	3	198: _____	_____	_____
<u>COURSES REQUIRED OUTSIDE MAJOR:</u>				
UNIFIED CALCULUS I, II, III	12	640:121, 122, 221	_____	_____
DISCRETE MATHEMATICS	3	640:237	_____	_____
APPLIED STATISTICS or INTRO. STATISTICS I, II	3 or 6	960:336 or 960:283,284	_____	_____
MATHEMATICS ELECTIVE 200 OR HIGHER	3	640: _____	_____	_____
ELEMENTS OF PHYSICS I AND LAB	4	750:131,133	_____	_____
ELEMENTS OF PHYSICS II AND LAB	4	750:132,134	_____	_____
NATURAL SCIENCE ELECTIVES (4 cr.) in Biological Sciences, Chemistry or Physics (excluding nonscience major courses)	4	_____	_____	_____