

**Program Requirements for a  
B.S. Degree in Computer Science  
(Including General Education Requirements)**

**Computer Science Core                      38 Hrs.**

CS 1110 Computer Science I.....	4
CS 1120 Computer Science II .....	4
CS 2230 Computer Organization & Assembly Language .....	3
CS 2240 System Programming Concepts .....	3
CS 3310 Data and File Structures.....	3
CS 4540 Operating Systems .....	3
CS 4850 Programming Languages .....	3
CS 4900 Software Systems Development I: Requirements & Design <sup>1</sup> .....	3
CS 4910 Software Systems Development II: Implementation & Testing .....	2
<b><i>Low-Level Computer Science Electives*</i></b> .....	
(2 courses, at least 4 hours) .....	4
<b><i>High-Level Computer Science Electives*</i></b> .....	
(2 courses, at least 6 hours) .....	6

\*Computer Science Electives must be approved by an Advisor.

**Mathematics Minor                              19 Hrs.**

MATH 1220 Calculus I.....	4
MATH 1230 Calculus II.....	4
MATH 1450 Discrete Structures .....	3
MATH 2300 Elementary Linear Algebra.....	4
STAT 3640 Statistical Methods .....	4

**Engineering Cognate                              3 Hrs.**

ECE 2500 Digital Logic .....	3
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**Low-Level Computer Science Electives:**

CS 2000 Programming Language Experience .....	2-3 hrs.
CS 2050 Programming in Java .....	2 hrs.
CS 2060 Programming in Visual BASIC ....	2 hrs.
CS 2100 Introductory Topics in Computing Technology .....	2-3 hrs.
CS 3400 Graphical User Interface Design....	3 hrs.

**High-Level Computer Science Electives:**

CS 3400 Graphical User Interface Development .....	3 hrs.
CS 4310 Design and Analysis of Algorithms	3 hrs.
CS 4800 Theory of Computation I .....	3 hrs.
CS 4950 Special Topics in Computer Science .....	3 hrs.
CS 5180 Introduction to Computer Modeling & Simulation .....	3 hrs.
CS 5250 Computer Architecture .....	3 hrs.
CS 5260 Parallel Computations I .....	3 hrs.
CS 5270 Theory of Computer Graphics .....	3 hrs.
CS 5300 Artificial Neural Systems.....	3 hrs.
CS 5400 Designing of User Interfaces .....	3 hrs.
CS 5430 Principles of Database Management Systems ....	3 hrs.
CS 5550 Computer Networks & Distributed Systems.....	3 hrs.
CS 5600 Software Requirements & Design	3 hrs.
CS 5700 Computer Security & Information Assurance .....	3 hrs.
CS 5800 Theory of Computation II .....	3 hrs.
CS 5810 Compiler Design & Implementation .....	3 hrs.
CS 5820 Introduction to Artificial Intelligence Techniques .	3 hrs.
CS 5950 Advanced Topics .....	3 hrs.
CS 5990 Independent Study .....	1-3 hrs.

**Other Requirements                              37 Hrs.**

These program requirements are met with 37 credits taken from the WMU General Education Requirements.

Students should see a departmental advisor to confirm that appropriate courses are being taken to satisfy these 37 required hours.

<sup>1</sup> CS 4900 Software Systems Development I satisfies the computer science baccalaureate-level writing requirement.

