

**Department of Computer & Information Science - UMass Dartmouth
Requirements for Bachelor of Science in Computer Science**

Updated 2/7/08

Student Name _____

Date Entered _____

 Last name First Name Middle

SID _____ Email Address: _____

Advisor _____

Completion of this form assures satisfaction of all CIS Department and University graduation requirements, including General Education.

<p><input type="checkbox"/> I CIS Core Courses (Grade of "C" or better)</p> <p>_____ CIS 180 – Object Oriented Programming I (4)</p> <p>_____ CIS 181 – Object-Oriented Programming II (4) (Pre: CIS 180)</p> <p>_____ CIS 190 – Introduction to Procedural Programming (4)</p> <p>_____ CIS 272 – Introduction to Computing Systems (4) (Co: CIS 190, MTH 181)</p> <p>_____ CIS 273 – Computer Organization and Design (4) (Pre: CIS 272)</p> <p>_____ CIS 280 – Software Specification and Design (4) (Pre: CIS 181)</p> <p>_____ CIS 360 – Algorithms and Data Structures (3) (Pre: CIS 181)</p> <p>_____ CIS 361 – Models of Computations (3) (Pre: CIS 181, MTH 182)</p> <p>_____ CIS 370 – Design of Operating Systems (4) (Pre: CIS 273)</p> <p>_____ CIS 481 – Parallel and Distributed Software Systems (3) (Pre: CIS 280, CIS 370)</p> <p>_____ CIS 498 – Software Engineering Project I (4) (Pre: CIS 280, CIS 362)</p> <p>_____ CIS 499 – Software Engineering Project II (3) (Pre: CIS 498)</p> <p><input type="checkbox"/> II CIS Electives 4 courses required, (Grade of "C" or better)</p> <p>_____ CIS 314 – Computer Architecture (4) (Pre: CIS 273, CIS 360)</p> <p>_____ CIS 410 – Programming Language Design (3) (Pre: CIS 360)</p> <p>_____ CIS 412 – Artificial Intelligence (3) (Pre: CIS 360)</p> <p>_____ CIS 421 – Introduction to Theory of Computation (3) (Pre: CIS 361)</p> <p>_____ CIS 422 – Design of Parallel Algorithms (4) (Pre: CIS 360)</p> <p>_____ CIS 430 – Data Mining and Knowledge Discovery (3) (Pre: CIS 360)</p> <p>_____ CIS 431 – Human Computer Interaction (4) (Pre: CIS 362)</p> <p>_____ CIS 452 – Database Systems (3) (Pre: CIS 280)</p> <p>_____ CIS 454 – Computer Graphics (3) (Pre: CIS Jr./Sr.)</p> <p>_____ CIS 455 – Bioinformatics (3) (Pre: CIS 360, CIS 362)</p> <p>_____ CIS 464 – Computer Game Design (3) (Pre: CIS 360)</p> <p>_____ CIS 465 – Topics in Computer Vision (3) (Pre: CIS 360)</p> <p>_____ CIS 466 – Introduction to Mobile Robotics (3) (Pre: CIS 370)</p> <p>_____ CIS 467 – Image Analysis and Processing (3) (Pre: CIS 360)</p> <p>_____ CIS 471 – Compiler Design (3) (Pre: CIS 361)</p> <p>_____ CIS 475 – Computer Networks (3) (Pre: CIS 370)</p> <p>_____ CIS 476 – Network Programming (3) (Pre: CIS 370)</p> <p>_____ CIS 477 – Computer and Information System Security (3) (Pre: CIS 360, CIS 370)</p> <p>_____ CIS 490 – Machine Learning (3) (Pre: CIS 360)</p> <p><input type="checkbox"/> III Mathematics Requirements</p> <p>_____ MTH 111 – Calculus I (4)</p> <p>_____ MTH 112 – Calculus II (4) (Pre: MTH 111)</p> <p>_____ MTH 181 – Discrete Structures I (3)</p> <p>_____ MTH 182 – Discrete Structures II (3) (Pre: MTH 181)</p> <p>_____ MTH 331 – Probability (3) (Pre: MTH 112)</p>	<p><input type="checkbox"/> IV Science/Quantitative Requirements</p> <p>_____ PHY 113 or CHM 151/161 or BIO 121/131 (4) (Circle one)</p> <p>_____ PHY 114 or CHM 152/162 or BIO 122/132 (Must be continuation of above) (4)</p> <p>_____ CIS 362 – Empirical Methods for Computer Science (3) (Pre: MTH 331)</p> <p>_____ _____ Science Elective (3)</p> <p><input type="checkbox"/> V English Requirements</p> <p>_____ ENL 101 – Critical Writing and Reading I (3)</p> <p>_____ ENL 102 – Critical Writing and Reading II (3)</p> <p>_____ ENL 266 – Technical Communications (3)</p> <p><input type="checkbox"/> VI Ethics and Social Responsibility</p> <p>_____ CIS 381 – Social and Ethical Aspects of Computing (3)</p> <p><input type="checkbox"/> VII Cultural and Artistic Literacy (Area C, at most 2 from same dept.)</p> <p>_____ _____(3) _____(3)</p> <p>_____ _____(3)</p> <p><input type="checkbox"/> VIII Global Awareness (Area G)</p> <p>_____ _____(3)</p> <p><input type="checkbox"/> IX Diversity (Area D)</p> <p>_____ _____(3)</p> <p><input type="checkbox"/> X Free Electives</p> <p>_____ _____(3)</p> <p>_____ _____(3)</p> <p><input type="checkbox"/> XI GPA of 2.000 or better</p> <p>Comments: _____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>
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Note: Any CIS core course or technical elective that is a prerequisite to another CIS course, must be passed with a grade of C or better in order to satisfy the prerequisite.