

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.

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

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.