UMass Dartmouth
COLLEGE OF ENGINEERING

Computer and Information Science Department

Computer Science Program: Standard Option

Curriculum Requirements

Catalog Year 2014-15 (Class of 2018) to present

FRESHMAN YEAR

First Semester			R	L	C	Second Semester			R	L	C
ENL	101	Critical Writing & Reading I	3	0	3	ENL	102	Critical Writing & Reading II	3	0	3
CIS	180	Object-Oriented Programming I	3	2	4	CIS	181	Object-Oriented Programming II	3	2	4
EGR	111	Intro to Engineer & Computing	3	2	3			University Studies [1]	3	0	3
MTH	153	Calc for Appl Science Engineering I	4	0	4	MTH	154	Calc for Appl Science Engineering II	4	0	4
					14						**14**

SOPHOMORE YEAR

First Semester			R	L	C	Second Semester			R	L	C
MTH	181	Discrete Structures I	3	0	3	MTH	182	Discrete Structures II	3	0	3
CIS	190	Intro. To Procedural Programming	3	2	4	CIS	273	Computer Organization & Design	3	2	4
CIS	272	Introduction to Computing Systems	3	2	4	CIS	280	Software Specification & Design	3	2	4
		Laboratory Science I [2, 4]	3	3	4			Laboratory Science II [3, 4]	3	3	4
					15						**15**

JUNIOR YEAR

First Semester			R	L	C	Second Semester			R	L	C
CIS	360	Algorithms and Data Structures	3	0	3	CIS	361	Models of Computation	3	0	3
CIS	370	Design of Operating Systems	3	2	4	CIS	362	Empirical Methods for CS	3	0	3
MTH	331	Probability	3	0	3	CIS	381	Social & Ethical Aspects of CS [5]	3	0	3
ENL	266	Technical Communications	3	0	3			Science Elective [4,6]	3	0	3
		University Studies [1]	3	0	3			University Studies [1]	3	0	3
					16						**15**

SENIOR YEAR

First Semester			R	L	C	Second Semester			R	L	C
CIS	498	Software Engineering Project I	3	2	4	CIS	499	Software Engineering Project II	2	2	3
CIS		CIS Technical Elective [7]	3	0	3	CIS	481	Parallel & Distributed Computing	3	0	3
CIS		CIS Technical Elective [7]	3	0	3	CIS		CIS Technical Elective [7]	3	0	3
		University Studies [1]	3	0	3	CIS		CIS Technical Elective [7]	3	0	3
		Free Elective	3	0	3			University Studies[1]	3	0	3
					16						**15**

Total Credits = 120 R = Recitation & Lecture (hours) L = Laboratory (hours) C = Number of Credits

[1]See University Studies requirements for Clusters 3 and 4.
[2]Must be either PHY 113 or CHM 151/161 or BIO 121/131.
[3]Must be a continuation of Laboratory Science I (PHY 114 or CHM 152/162 or BIO 122/132).
[4]Ideally one of these courses should also meet University Studies Cluster 2A
[5]This course meets the University Studies Cluster 2B requirement.
[6]Any course in BIO, CHM, MAR, MLS, or PHY.
[7]Must be taken from approved list of courses.