



Computer Science Program: Standard Option

Curriculum Requirements

Catalog Year 2020-21

FRESHMAN YEAR

<u>First Semester</u>			<u>R</u>	<u>L</u>	<u>C</u>	<u>Second Semester</u>			<u>R</u>	<u>L</u>	<u>C</u>
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

<u>First Semester</u>			<u>R</u>	<u>L</u>	<u>C</u>	<u>Second Semester</u>			<u>R</u>	<u>L</u>	<u>C</u>
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	0	3
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						14					

JUNIOR YEAR

<u>First Semester</u>			<u>R</u>	<u>L</u>	<u>C</u>	<u>Second Semester</u>			<u>R</u>	<u>L</u>	<u>C</u>
CIS	360	Algorithms and Data Structures	3	2	4	CIS	361	Models of Computation	3	0	3
CIS	381	Social & Ethical Aspects of CS ⁵	3	0	3	CIS	362	Empirical Methods for CS	3	0	3
MTH	331	Probability	3	0	3	CIS	370	Design of Operating Systems	3	2	4
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						16					

SENIOR YEAR

<u>First Semester</u>			<u>R</u>	<u>L</u>	<u>C</u>	<u>Second Semester</u>			<u>R</u>	<u>L</u>	<u>C</u>
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

¹See University Studies requirements for Clusters 3 and 4.²Must be either PHY 113 or CHM 151/161 or BIO 121/131.³Must be a continuation of Laboratory Science I (PHY 114 or CHM 152/162 or BIO 122/132).⁴Ideally one of these courses should also meet University Studies Cluster 2A⁵This course meets the University Studies Cluster 2B requirement.⁶Any course in BIO, CHM, MAR, MLS, or PHY.⁷Must be taken from approved list of courses.