

## Computer Science Program: Standard Option Curriculum Requirements Catalog Year 2021-22 to present

FRESHMAN YEAR											
First Sen	nester		<u>R</u>	<u>L</u> 0	<u>C</u> 3	Secon	d Semo	ester_	<u>R</u> 3	<u>L</u> 0	<u>C</u> 3
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 <sup>1</sup>	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 Sen								R	L	C	
MTH	181	Discrete Structures I	3	0	3	MTH	182	Discrete Structures II	<u>R</u> 3	0	<u>C</u> 3
CIS	190	Intro. To Procedural Programming			4	CIS	273	Computer Organization & Design	3	0	3
CIS	272	Introduction to Computing Systems	3	2 2	4	CIS	280	Software Specification & Design	3	2	4
CIS	2,2	Laboratory Science I <sup>2, 4</sup>	3	3	4	CIS	200	Laboratory Science II <sup>3, 4</sup>	3	3	4
					15						14
JUNIOR YEAR											
First Sen		15	<u>R</u>	<u>L</u> 2	<u>C</u>	Secon			<u>R</u>	$\frac{L}{}$	<u>C</u> 3
CIS	360	Algorithms and Data Structures	3		4	CIS	361	Models of Computation	3	0	
CIS	381	Social & Ethical Aspects of CS 5	3	0	3	CIS	362	Empirical Methods for CS	3	0	3
MTH	266	MTH Elective <sup>6</sup>	3	0	3	CIS	370	Design of Operating Systems	3	2	4
ENL	266	Technical Communications	3	0	3			Science Elective 4,7	3	0	3
		University Studies <sup>1</sup>	3	0	3 16			University Studies <sup>1</sup>	3	U	3 16
					10						10
				SE	ENIO	R YEAR					
First Sen	<u>nester</u>		<u>R</u>	<u>L</u> 2	<u>C</u>	Secon	d Semo		<u>R</u> 2	<u>L</u> 2	<u>C</u> 3
CIS	498	Software Engineering Project I	3	2	4	CIS	499	Software Engineering Project II			
CIS		CIS Technical Elective <sup>8</sup>	3	0	3	CIS	481	Parallel & Distributed Computing	3	0	3
CIS		CIS Technical Elective <sup>8</sup>	3	0	3	CIS		CIS Technical Elective <sup>8</sup>	3	0	3
		University Studies <sup>1</sup>	3	0	3	CIS		CIS Technical Elective <sup>8</sup>	3	0	3
		Free Elective	3	0	3			University Studies <sup>1</sup>	3	0	3
					16						15
Total Credits = 120 R = Recitation & Lecture (hours) L = Laboratory (hours) C = Number of Credits											
Total Creates – 120 R – Rectation & Lecture (notes) L – Laboratory (notes) C – Number of Creates											

<sup>&</sup>lt;sup>1</sup>See University Studies requirements for Clusters 3 and 4.

<sup>&</sup>lt;sup>2</sup>Must be either PHY 113 or CHM 151/161 or BIO 121/131.

<sup>&</sup>lt;sup>3</sup>Must be a continuation of Laboratory Science I (PHY 114 or CHM 152/162 or BIO 122/132).

<sup>&</sup>lt;sup>4</sup>Ideally one of these courses should also meet University Studies Cluster 2A

<sup>&</sup>lt;sup>5</sup>This course meets the University Studies Cluster 2B requirement.

<sup>&</sup>lt;sup>6</sup>Must be either MTH 211 (or MTH 213), MTH 221, or MTH 331. Speak with your advisor for guidance on which to choose.

<sup>&</sup>lt;sup>7</sup>Any course in BIO, CHM, MAR, MLS, or PHY.

<sup>&</sup>lt;sup>8</sup>Must be taken from approved list of courses.