

## Computer Science (B.A.) Concentration in Bioinformatics

North Carolina Community College classes are listed below in left column. The UNC Charlotte equivalent course is listed in the column next to the NCCCS courses.

The University of North Carolina at Charlotte strongly recommends students complete their Associate's degree prior to transferring to UNC Charlotte. Pathways are structured for students who have completed all requirements for their Associate's degree and qualify for the CAA.

Please Note: BDP's are developed based on the approved curriculum for each catalog year. Based on admitted term of entry and the curriculum posted for the catalog year, programs of study are subject to change.

UNC Charlotte Baccalaureate Degree Plans

[cci.charlotte.edu](http://cci.charlotte.edu)

Additional Requirements / Special Note for Admission to the upper division in major:	<p>Transfer Admission Requirements: for direct admission into the College of Computing &amp; Informatics</p> <ul style="list-style-type: none"> <li>• 24 transferable credits complete</li> <li>• Cumulative GPA of 2.5 or higher</li> <li>• Grade of C or higher is required in all computer science courses attempted prior to transferring</li> <li>• College level algebra (equivalent to MAT 171 at NC Community Colleges) or higher must be complete with a grade of C or higher prior to transferring</li> </ul>
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		NC Community College Course	UNC Charlotte Equivalent Course	Notes
<b>Semester 1</b> 14 Credit Hrs	4	MAT 171: Pre-Calculus Algebra * UGETC: Math	MATH 1100: College Algebra *	
	3	CSC 151: Java Programming **	ITSC 1212: Introduction to Computer Science I **	
	3	ENG 111: Writing and Inquiry UGETC: Composition	WRDS 1103 Wrng & Inqry Acdmc Ctx I & II	
	3	Student Choice UGETC: Social/Behavioral	General Education Course	
	1	ACA 122: College Transfer Success	TRNF 1ELE: Transfer Elective	

		NC Community College Course	UNC Charlotte Equivalent Course	Notes
<b>Semester 2</b> 17 Credit Hrs	4	MAT 263: Brief Calculus *	MATH 1120: Calculus *	
	3	CSC 251: Advanced Java Programming **	ITSC 1213: Introduction to Computer Science II **	
	3	ENG 112: Writing and Research in the Disciplines	CTCM 2530: Critical Thinking and Communications	
	3	COM 120: Interpersonal Communications or COM 231: Public Speaking UGETC Arts/Humanities	COMM 2107: Interpersonal Communications or COMM 1101: Public Speaking	
	4	CHM 151: General Chemistry I	CHEM 1251: General Chemistry I	

		NC Community College Course	UNC Charlotte Equivalent Course	Notes
<b>Semester 3</b> 16 Credit Hrs	3	MAT 152: Statistical Methods	STAT 1220: Elements of Statistics I	
	3	Student Choice UGETC: Humanities/ Fine Arts	General Education Course	
	4	BIO 111: General Biology I UGETC: Natural Science	BIOL 2120: General Biology I and 2120L	
	3	Student Choice UGETC: Social/Behavioral	General Education Course	
	3	Additional GEN ED or Pre-Major/Transfer Elective	Additional GEN ED or Pre-Major/Transfer Elective	

## UNC Charlotte Baccalaureate Degree Plan

		NC Community College Course	UNC Charlotte Equivalent Course	Notes
<b>Semester 4</b> 17 Credit Hrs	3	CSC 249 Data Structures and Algorithms**	ITSC 2214: Data Structures and Algorithms**	
	3	Student Choice UGETC: Humanities/ Fine Arts	General Education Course	
	3	Student Choice UGETC: Social/Behavioral	General Education Course	
	4	BIO 112: General Biology II	BIOL 2130: General Biology II and 2130L	
	4	CHM 152: General Chemistry II	CHEM 1252: General Chemistry II	

<b>Critical Course Indicator</b>	
2 Star (***) Critical Course	Critical Success Course that is a required introductory or prerequisite course within the Major and/or prerequisite course for UNC Charlotte Upper Division coursework for intended major
1 Star (*) Critical Course	Critical Success Course necessary for seamless transition and required for UNC Charlotte Upper Division coursework for intended major
0 Star (Lt Green color only) Critical Course	Key Success Marker Course that is important for seamless transition but can be secured after transfer

<b>Color Key</b>	<b>Category</b>
Light Green	Success Marker Course (Critical Course)
Light Blue	UGETC: General Education Course
Light Orange	Additional GEN ED or Pre-Major/Transfer Elective

## UNC Charlotte Baccalaureate Degree Plan

		UNC Charlotte Equivalent Course	Notes
<b>Semester 5</b> 15 Credit Hrs	4	BINF 1101: Introduction to Bioinformatics and Genomics	
	3	BINF 2111: Bioinformatics Computing	
	3	BIOL 3111: Cell Biology	
	2	ITSC 2600: Computing Professionals	
	3	Elective Courses in Other Disciplines	

		UNC Charlotte Equivalent Course	Notes
<b>Semester 6</b> 15 Credit Hrs	3	BINF 3121: Statistics for Bioinformatics	
	3	BIOL 3166: Genetics	
	3	ENGL 2116: CS Technical Writing	
	3	BINF: Database and Analytics	
	3	BINF: Professional Development	

		UNC Charlotte Equivalent Course	Notes
<b>Semester 7</b> 15 Credit Hrs	3	BINF 3101: Sequence Analysis	
	3	BINF: Upper Division Elective	
	3	ITSC 3688: Computers & Society	
	3	Unrestricted Elective	
	3	Unrestricted Elective	

		UNC Charlotte Equivalent Course	Notes
<b>Semester 8</b> 13 Credit Hrs	3	Unrestricted Elective	
	3	Unrestricted Elective	
	3	Unrestricted Elective	
	1	BINF 4600: Seminar	
	3	BINF 4650 or 4900: Capstone	

64	Total NCCCS Credit Hours
58	Total UNC Charlotte Hours
<b>122</b>	<b>Total Credit Hours</b>