

Computer Science (B.S.) 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 degree prior to transferring to UNC Charlotte. Pathways are structured for students who have completed all requirements for their Associate 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](https://cci.charlotte.edu)

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

		NC Community College Course	UNC Charlotte Equivalent Course	Notes
Semester 2 16 Credit Hrs	3	CSC 251: Advanced Java Programming **	ITSC 1213: Introduction to Computer Science II **	
	3	Additional GEN ED or Pre-Major/Transfer Elective	Additional GEN ED or Pre-Major/Transfer Elective	
	4	MAT 172: Precalculus Trigonometry	MATH 1103: Precalc Math Science and Engr	
	3	ENG 112: Writing and Research in the Disciplines UGETC: Composition	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	

		NC Community College Course	UNC Charlotte Equivalent Course	Notes
Semester 3 17 Credit Hrs	3	CSC 249: Data Structures and Algorithms**	ITSC 2214: Data Structures and Algorithms**	
	4	MAT 271: Calculus I*	MATH 1241: Calculus I *	
	3	Student Choice UGETC: Humanities/ Fine Arts	General Education Course	
	4	Natural Science w/ lab UGETC: Natural Science	General Education - Natural Science w/ lab	
	3	Student Choice UGETC: Social/Behavioral	General Education Course	

UNC Charlotte Baccalaureate Degree Plan

		NC Community College Course	UNC Charlotte Equivalent Course	Notes
Semester 4 16 Credit Hrs	4	MAT 272: Calculus II	MATH 1242: Calculus II	
	3	MAT 280: Linear Algebra *	MATH 2164: Matrices & Linear Algebra *	
	3	Student Choice UGETC: Humanities/ Fine Arts	General Education Course	
	3	Student Choice UGETC: Social/Behavioral	General Education Course	
	3	Additional GEN ED	Additional GEN ED	

Critical Course Indicator	
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

Color Key	Category
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 Equivalent Course	Notes
Semester 5 16 Credit Hrs	4	BINF 1101 with lab	
	3	ITSC 3155: Software Engineering	
	3	STAT 2122: Introduction to Probability and Statistics	
	4	BINF 2111 with lab	
	2	ITSC 2600: Computing Professionals	

		UNC Charlotte Equivalent Course	Notes
Semester 6 16 Credit Hrs	3	ITSC 3146: Operating Systems and Networking	
	3	ENGL 2116: Intro to Technical Communications	
	4	ITSC 3181: Logic and Computer Systems	
	3	BINF 3101: Sequence	
	3	BINF: Database Analytics Elective	

		UNC Charlotte Equivalent Course	Notes
Semester 7 13 Credit Hrs	3	Elective Course in Outside Discipline	
	3	BINF: Professional Development Elective	
	4	BINF: Upper Division Elective	
	3	Elective Course in Outside Discipline	

		UNC Charlotte Equivalent Course	Notes
Semester 8 13 Credit Hrs	3	ITCS 3688: Computers & Their Impact on Society	
	3	Elective Course in Outside Discipline	
	1	BINF 4600	
	3	Elective Course in Outside Discipline	
	3	BINF 4650 or 4900: CS Capstone	

63	Total NCCCS Credit Hours
58	Total UNC Charlotte Hours
121	Total Credit Hours