

PROGRAM SUMMARY

- **Credit Hours:** 120 hours
- **Concentrations:** Human-Computer Interaction; and Information Technology
 - See separate Academic Plan of Study for concentration in Financial Services Informatics (CS Department)
- **Declaring the Major:** Minimum GPA of 2.5 required; no pre-requisite courses; change of major form accepted year-round; advising session required after declaration
- **Advising (For the Major):** Required on admission to the major and before each semester, assigned advisors available by appointment
- **Advising (For General Education):** Required on admission to the major and before each semester, assigned advisors available by appointment
- **Minimum Grades/GPA:** GPA of 2.0 in the major required for graduation
- **Teacher Licensure:** No
- **Evening Classes Available:** Some
- **Weekend Classes Available:** No
- **Other Information:** Freshman Learning Community, CCI Honors, Internships, Co-ops, Graduate Early Entry
- **Contact(s):** For Human-Computer Interaction or Information Technology Concentrations: Bruce Long, Assistant Chair and Director of Undergraduate Programs, 704-687-8441, nblong@uncc.edu, Woodward Hall 310-E.

PROGRAM REQUIREMENTS

The B.A. in Computer Science is a relatively structured degree with three (3) concentrations: Financial Services Informatics, Information Technology (IT), and Human-Computer Interaction (HCI). The B.A. includes a core of 5 courses that are generally prerequisites for upper level courses. Due to the large number of major requirements it is recommended that students declare the major in their freshman year and the concentration in their sophomore year to complete their degree on time. Two of the concentrations (IT and HCI) require 15 semester hours of related work in a discipline outside computer science, possibly forming a minor in that discipline area.

Areas	Credit Hours	Description
Pre-Major/Prerequisites	-	
Major	75-90	Computer Science Core 15 hours – ITSC 1212/L, 1213/L, 1600, 2175, 2214; Computer Science Concentration one of three concentration areas: Financial Services Informatics (51 hours), Human-Computer Interaction (24 hours), or Information Technology (27 hours); Major Electives 9 hours for HCI and 6 hours for IT – all at the 3000 level or above, and in the College of Computing and Informatics; Capstone 3 hours for HCI and IT, 6 hours for Financial Services Informatics. Major requirements (all concentrations): Communication- ENGL 2116, ITCS 3688; Analytic- PHIL 1106, MATH 1120, STAT 1220, and STAT 2223.
General Education (not satisfied by other major requirements)	25-28	UWRT 1101 and 1102 (or UWRT 1103 or UWRT 1104); 7 hours of approved natural sciences with one lab; 3 hours of approved social sciences – for Financial Services Informatics, ECON 2101 fulfills this requirement; LBST 1101, 1102, 1103, 1104 or 1105; LBST 2101 and 2102; ITIS 2211 (fulfills the LBST 221X requirement); ITCS 3688 fulfills the writing in the discipline and the oral communication requirement; ENGL 2116 fulfills the second writing requirement.
Related Work	0-15	May be satisfied by a second major, a minor, or a set of coordinated courses developed through consultation with an advisor. For Financial Services Informatics, these credits are preselected from courses in the College or Business, as shown in the APS.
Foreign Language	-	
Electives	2-5	Varies depending on concentration
Total Credit Hours	120	

SUGGESTED PLAN OF STUDY – CONCENTRATION: HUMAN-COMPUTER INTERACTION

Freshman Year

Course Number	Course Title	Credit Hours	General Education	W/O Course	Notes
<i>Fall Semester</i>					
ITSC 1600	Computing Professionals	1			
ITSC 1212+L	Introduction to Computer Science I (with Lab)	4			
MATH 1120	Calculus	3	X		
UWRT 1101	Writing and Inquiry in Academic Contexts I	3	X		
XXXX XXXX	Natural Science with Lab (General Education Requirement)	4	X		
<i>Spring Semester</i>					
ITCS 1213+L	Introduction to Computer Science II (with Lab)	4			
UWRT 1102	Writing and Inquiry in Academic Contexts II	3	X		
STAT 1220	Elements of Statistics I	3	X		
LBST 110X	LBST 1100 Series: Arts and Society	3	X		
XXXX XXXX	Natural Science (General Education Requirement)	3	X		

31 Credit Hours for Year

Sophomore Year

Course Number	Course Title	Credit Hours	General Education	W/O Course	Notes
<i>Fall Semester</i>					
ITSC 2214	Data Structures and Algorithms	3			
ITSC 2175	Logic and Algorithms	3			
STAT 2223	Elements of Statistics II	3			
XXXX XXXX	Social Science (General Education Requirement)	3	X		
LBST 2101	Western Cultural and Historical Awareness	3	X		
<i>Spring Semester</i>					
ITIS 3130	Human-Computer Interaction	3			
ITIS 2300+L	Web-Based Application Development	3			
ENGL 2116	Introduction to Technical Communication	3	X	W	Fulfills second writing requirement
XXXX XXXX	Related Work (1 of 5)	3			
PHIL 1106	Critical Thinking	3			

30 Credit Hours for Year

Junior Year

Course Number	Course Title	Credit Hours	General Education	W/O Course	Notes
<i>Fall Semester</i>					
ITIS 3150	Rapid Prototyping & Interface Building	3			
ITIS 3200	Introduction to Information Security and Privacy	3			
XXXX XXXX	Technical writing and communication (1 of 2)	3		W	
XXXX XXXX	Related Work (2 of 5)	3			
ITIS 2211	Ethical Issues in Personal, Professional, and Public Life	3	X		Fulfills LBST 22XX requirement
<i>Spring Semester</i>					
XXXX XXXX	CCI Technical Elective: ITCS/ITIS 3XXX or above (1 of 3)	3			
ITCS 3688	Computers and Their Impact on Society	3	X	W,O	Fulfills writing in the discipline
XXXX XXXX	Technical writing and communication (2 of 2)	3		W	
LBST 2102	Global and Intercultural Connections	3	X		
XXXX XXXX	Related Work (3 of 5)	3			

30 Credit Hours for Year

Senior Year

Course Number	Course Title	Credit Hours	General Education	W/O Course	Notes
<i>Fall Semester</i>					
ITCS 3216	Introduction to Cognitive Science	3			
ITIS 4180	Mobile Application Development	3			
XXXX XXXX	CCI Technical Elective: ITCS/ITIS 3XXX or above (2 of 3)	3			
XXXX XXXX	CCI Technical Elective: ITCS/ITIS 3XXX or above (3 of 3)	3			
XXXX XXXX	Related Work (4 of 5)	3			
<i>Spring Semester</i>					
ITIS 4440	Interactive Systems Design and Implementation	3			
XXXX XXXX	Capstone ITCS 4155, 4232, 4650/4651, 4990 or 4991	3			
ITIS 4011	Interaction Design Studio	3			
XXXX XXXX	Related Work (5 of 5)	3			
XXXX XXXX	Free Elective	2			

29 Credit Hours for Year

ADVISING RESOURCES

- General Education Requirements for ALL Students: ucol.uncc.edu/general-education
- Undergraduate Catalog: catalog.uncc.edu
- Central Advising website: advising.uncc.edu
- College of Computing & Informatics advising website: cci.uncc.edu/students/advising
- University Advising Center website: advisingcenter.uncc.edu

SUGGESTED PLAN OF STUDY – CONCENTRATION: INFORMATION TECHNOLOGY

Freshman Year

Course Number	Course Title	Credit Hours	General Education	W/O Course	Notes
<i>Fall Semester</i>					
ITSC 1600	Computing Professionals	1			
ITSC 1212+L	Introduction to Computer Science I (with Lab)	4			
MATH 1120	Calculus	3	X		
UWRT 1101	Writing and Inquiry in Academic Contexts I	3	X		
XXXX XXXX	Natural Science with Lab (General Education Requirement)	4	X		
<i>Spring Semester</i>					
ITSC 1213+L	Introduction to Computer Science II (with Lab)	4			
UWRT 1102	Writing and Inquiry in Academic Contexts II	3	X		
STAT 1220	Elements of Statistics I	3	X		
LBST 110X	LBST 1100 Series: Arts and Society	3	X		
XXXX XXXX	Natural Science (General Education Requirement)	3	X		

31 Credit Hours for Year

Sophomore Year

Course Number	Course Title	Credit Hours	General Education	W/O Course	Notes
<i>Fall Semester</i>					
ITSC 2214	Data Structures and Algorithms	3			
STAT 2223	Elements of Statistics II	3			
PHIL 1106	Critical Thinking	3			
LBST 2101	Western Cultural and Historical Awareness	3	X		
XXXX XXXX	Social Science (General Education Requirement)	3	X		
<i>Spring Semester</i>					
ITSC 2175	Logic and Algorithms	3			
ITIS 3130	Human-Computer Interaction	3			
ITIS 2300+L	Web-Based Application Development	3			
ENGL 2116	Introduction to Technical Communication	3	X	W	Fulfills second writing requirement
XXXX XXXX	Related Work (1 of 5)	3			

30 Credit Hours for Year

Junior Year

Course Number	Course Title	Credit Hours	General Education	W/O Course	Notes
<i>Fall Semester</i>					
ITCS 3160	Database Design and Implementation	3			
ITIS 3200	Introduction to Information Security and Privacy	3			
LBST 2102	Global and Intercultural Connections	3	X		
XXXX XXXX	Technical writing and communication (1 of 2)	3		W	
XXXX XXXX	Related Work (2 of 5)	3			
<i>Spring Semester</i>					
ITSC 3155	Software Engineering	3			
ITCS 3688	Computers and Their Impact on Society	3	X	W,O	Fulfills writing in the discipline
ITIS 3300	Software Requirements and Project Management	3			
ITIS 2211	Ethical Issues in Personal, Professional, and Public Life	3	X		Fulfills LBST 22XX requirement
XXXX XXXX	Related Work (3 of 5)	3			

30 Credit Hours for Year

Senior Year

Course Number	Course Title	Credit Hours	General Education	W/O Course	Notes
<i>Fall Semester</i>					
ITIS 3310	Software Architecture and Design	3			
ITIS 3320	Introduction to Software Testing and Assurance	3			
XXXX XXXX	Technical writing and communication (2 of 2)	3		W	
XXXX XXXX	CCI Technical Elective: ITCS/ITIS 3XXX or above (1 of 2)	3			
XXXX XXXX	Related Work (4 of 5)	3			
<i>Spring Semester</i>					
ITIS 4420	Usable Security and Privacy	3			
XXXX XXXX	Capstone ITCS 4155, 4232, 4650/4651, 4990 or 4991	3			
XXXX XXXX	CCI Technical Elective: ITCS/ITIS 3XXX or above (2 of 2)	3			
XXXX XXXX	Related Work (5 of 5)	3			
XXXX XXXX	Free Elective	2			

29 Credit Hours for Year

ADVISING RESOURCES

- General Education Requirements for ALL Students: ucol.uncc.edu/general-education
- Undergraduate Catalog: catalog.uncc.edu
- Central Advising website: advising.uncc.edu
- College of Computing & Informatics advising website: cci.uncc.edu/students/advising
- University Advising Center website: advisingcenter.uncc.edu

**SUGGESTED PLAN OF STUDY – CONCENTRATION: FINANCIAL SERVICES INFORMATICS
- SEE ACADEMIC PLAN OF STUDY FOR B.A. IN COMPUTER SCIENCE (CS DEPARTMENT) –**

ADVISING RESOURCES

- General Education Requirements for ALL Students: ucol.uncc.edu/general-education
- Undergraduate Catalog: catalog.uncc.edu
- Central Advising website: advising.uncc.edu
- College of Computing & Informatics advising website: cci.uncc.edu/students/advising
- University Advising Center website: advisingcenter.uncc.edu