

Computer Science – Health and Life Sciences

September Entry

Year	Term	Course	Title	Credit	Prerequisite	Co-requisite	
Year 1	Fall	COMP 232	Mathematics for Computer Science	3.00	MATH 203, 204		
		COMP 248	Object-Oriented Programming I	3.50		MATH 204	
		COMP 233	Probability and Statistics for Computer Science	3.00	MATH 205		
		BIOL 261	Molecular and General Genetics	3.00	BIOL 201; CHEM 205, CHEM 206		
		BIOL 266	Cell Biology	3.00	BIOL 201; CHEM 205, CHEM 206		
	Winter	COMP 228	System Hardware	3.00	COMP 248	MATH 203, 204	
		COMP 249	Object-Oriented Programming II	3.50	COMP 248; MATH 203	MATH 205	
		CHEM 212	Analytical Chemistry for Biologists	3.00	CHEM 205, CHEM 206; PHYS 204, PHYS 224, PHYS 206, PHYS 226; MATH 205		
		CHEM 221	Introductory Organic Chemistry I	3.00	CHEM 205, CHEM 206		
			Elective*				
Year 2	Fall	ENCS 282	Technical Writing and Communication	3.00	Students must pass the Engineering Writing Test (EWT), or pass ENCS 272 with a grade of C- or higher		
		CHEM 271	Biochemistry I	3.00	CHEM 221		
		COMP 348	Principles of Programming Languages	3.00		COMP 249	
		COMP 352	Data Structures and Algorithms	3.00	COMP 249	COMP 232	
			Elective*				
	Winter	BIOL 367	Molecular Biology	3.00	BIOL 261; CHEM 271		
		COMP 346	Operating Systems	4.00	COMP 228 or SOEN 228; COMP 352		
			Elective*				
	Year 3	Fall	COMP 335	Introduction to Theoretical Computer Science	3.00	COMP 232 or COEN 231; COMP 249 or COEN 244	
			BIOL 481	Genome Structure	3.00	BIOL 367 and permission of the Department	
ENCS 333			Research Methods, Ethics, Law and Regulation for Computational Biology	3.00	ENCS 282; minimum of 27 credits taken as part of the BCompSc in Health and Life Sciences		
			Elective*				
Winter		COMP 354	Introduction to Software Engineering	4.00	COMP 352; ENCS 282		
		BIOL 479	Computational Biology	3.00	BIOL 261; COMP 352		
			Elective*				

***Please note, only core courses are listed above and not all electives are assigned a row in the above sequence.**

For the list of electives which students must complete, please consult section 71.75.1 of the Undergraduate Calendar.

Students in the Bachelor of Computer Science should follow the academic calendar for the year to which they have been admitted/readmitted.

To be considered full-time, students must register for a minimum of 12 credits per term.

Computer Science – Health and Life Sciences

January Entry

Year	Term	Course	Title	Credit	Prerequisite	Co-requisite
Year 1	Winter	CHEM 212	Analytical Chemistry for Biologists	3.00	CHEM 205, CHEM 206; PHYS 204, PHYS 224, PHYS 206, PHYS 226; MATH 205	
		CHEM 221	Introductory Organic Chemistry I	3.00	CHEM 205, CHEM 206	
		COMP 232	Mathematics for Computer Science	3.00	MATH 203, 204	
		COMP 248	Object-Oriented Programming I	3.50		MATH 204
			Elective*			
	Summer	ENCS 282	Technical Writing and Communication	3.00	Students must pass the Engineering Writing Test (EWT), or pass ENCS 272 with a grade of C- or higher	
		COMP 228	System Hardware	3.00	COMP 248	MATH 203, 204
		COMP 233	Probability and Statistics for Computer Science	3.00	MATH 205	
		COMP 249	Object-Oriented Programming II	3.50	COMP 248; MATH 203	MATH 205
			Elective*			
Year 2	Fall	BIOL 261	Molecular and General Genetics	3.00	BIOL 201; CHEM 205, CHEM 206	
		BIOL 266	Cell Biology	3.00	BIOL 201; CHEM 205, CHEM 206	
		CHEM 271	Biochemistry I	3.00	CHEM 221	
		COMP 335	Introduction to Theoretical Computer Science	3.00	COMP 232 or COEN 231; COMP 249 or COEN 244	
		COMP 352	Data Structures and Algorithms	3.00	COMP 249	COMP 232
	Winter	BIOL 367	Molecular Biology	3.00	BIOL 261; CHEM 271	
		COMP 346	Operating Systems	4.00	COMP 228 or SOEN 228; COMP 352	
			Elective*			
Year 3	Fall	BIOL 479	Computational Biology	3.00	BIOL 261; COMP 352	
		BIOL 481	Genome Structure	3.00	BIOL 367 and permission of the Department	
		ENCS 333	Research Methods, Ethics, Law and Regulation for Computational Biology	3.00	ENCS 282; minimum of 27 credits taken as part of the BCompSc in Health and Life Sciences	
			Elective*			
	Winter	COMP 348	Principles of Programming Languages	3.00		COMP 249
		COMP 354	Introduction to Software Engineering	4.00	COMP 352; ENCS 282	
			Elective*			

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Computer Science – Health and Life Sciences Co-op Entry

Year	Term	Course	Title	Credit	Prerequisite	Co-requisite
Year 1	Fall	COMP 232	Ma the matics for Computer Science	3.00	MATH 203, 204	
		COMP 248	Obj ect-Oriented Programming I	3.50		MATH 204
		BIOL 261	Molecular and General Genetics	3.00	BIOL 201; CHEM 205, CHEM 206	
		BIOL 266	Cell Biology	3.00	BIOL 201; CHEM 205, CHEM 206	
		CHEM 221	Intro ductory Organic Chemistry I	3.00	CHEM 205, CHEM 206	
	Winter	COMP 228	System Hardware	3.00	COMP 248	MATH 203, 204
		COMP 249	Obj ect-Oriented Programming II	3.50	COMP 248, MATH 203	MATH 205
		CHEM 212	Ana lytical Chemistry for Biologists	3.00	CHEM 205, CHEM 206; PHYS 204, PHYS 224, PHYS 206, PHYS 226; MATH 205	
		CHEM 271	Biochemistry I	3.00	CHEM 221	
			Elective *			
	Summer	COMP 233	Proba bility and Statistics for Computer Science	3.00	MATH 205	
		COMP 348	Pri nci ples of Programming Languages	3.00		COMP 249
		COMP 352	Da ta Structures and Algorithms	3.00	COMP 249	COMP 232
		ENCS 282	Technical Writing and Communication	3.00	Students must pass the Engineering Writing Test (EWT), or pass ENCS 272 with a grade of C- or higher	
			Elective *			
Year 2	Fall	Work Term 1				
	Winter	BIOL 367	Molecular Biology	3.00	BIOL 261; CHEM 271	
		COMP 346	Oper ating Systems	4.00	COMP 228 or SOEN 228; COMP 352	
			Elective *			
	Summer	Work Term 2				
Year 3	Fall	BIOL 479	Computational Biology	3.00	BIOL 261; COMP 352	
		BIOL 481	Genome Structure	3.00	BIOL 367 and permission of the Department	
		ENCS 333	Research Methods, Ethics, Law and Regulation for Computational Biology	3.00	ENCS 282; minimum of 27 credits taken as part of the BCompSc in Health and Life Sciences	
			Elective *			
	Winter	Work Term 3				
	Summer	COMP 335	Intro duction to Theoretical Computer Science	3.00	COMP 232 or COEN 231; COMP 249 or COEN 244	
		COMP 354	Intro duction to Software Engineering	4.00	COMP 352; ENCS 282	
			Elective *			

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