

## Bachelor of Arts in Computer Science Plus BS in Biology dual degree

Courses needed for BACS			
Core General Education (24 credit hours)		Credits	Notes
ENGL 1020 Core Composition I		3	
ENGL 2030 Core Composition II		3	
Social Science		3	
Behavioral Science		3	
Humanities		3	
Arts		3	
Cultural Diversity		3	
International Perspectives		3	
Math (Calc 1 & MATH 2000+)			
MATH 1401 Calculus I		4	Counts for Biology reqmnt
MATH 2411 Calculus II OR MATH 4830 Applied Statistics*		4	Counts for Biology reqmnt
* Must also take college algebra			
Science (8 credit hours) A sequence of 2 Natural or Physical Sciences with lab			
Physics I with lab		4	Counts for Biology reqmnt
Physics II with lab		4	Counts for Biology reqmnt
CS Core (22 credit hours)			
CSCI 1410 Fundamentals of Computing		3	
CSCI 1411 Fundamentals of Computing Lab		1	
CSCI 2312 Object-Oriented Programming		3	
CSCI 2421 Data Structures & Programming Design		3	
CSCI 2511 Discrete Structures		3	
CSCI 3287 Database Systems		3	
CSCI 3412 Algorithms		3	
CSCI 3508 Introduction to Software Engineering		3	
CS Technical Electives (21 credit hours)			
CS Elective		3	
CS Elective		3	
CS Elective		3	
CS Elective		3	
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CS Elective		3	
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Free Electives (38 credit hours) Students Area of Concentration			Fulfilled by "Plus Biology" dual major component below
Courses needed for BS in Biology dual major component			
Biology Core (21 credit hours)			
General Biology I with lab (BIOL 2051 and BIOL 2071)		4	Counts for free elective
General Biology II with lab (BIOL 2061 and BIOL 2081)		4	Counts for free elective
Principles of Ecology (BIOL 3411)		3	Counts for free elective
Introduction to Evolution (BIOL 3445)		3	Counts for free elective
General Cell Biology (BIOL 3611)		3	Counts for free elective
General Genetics (BIOL 3832)		4	Counts for free elective
College of Liberal Arts and Sciences Requirements (22 credit hours)			
CLAS Communicative Skills		3	Counts for free elective
CLAS Foreign Language		10	Counts for free elective
CLAS Humanities		3	Counts for free elective
CLAS Behavioral Sciences		3	Counts for free elective
CLAS Social Sciences		3	Counts for free elective
Biology Electives (15 credit hours)			
one upper-division biology lab course		3	Counts for free elective
At least one 3 credit hour 4000-level BIOL course taken in residence from UCD Biology faculty		3	Counts for free elective
Biology Elective		3	Counts for free elective
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Required Ancillary Courses (31-33 credit hours) 15-16 Credits of Math/Science satisfied above			
General Chemistry I with lab (CHEM 2031 and 2038)		4	Counts for free elective
General Chemistry II with lab (CHEM 2061 and 2068)		5	Counts for free elective
Organic Chemistry I (CHEM 3411)		4	Counts for free elective
Total Credits for BACS Plus BS Biology dual major		<b>154</b>	
Minimum Credits to Dual BA in CS and BS in Biology Degree		<b>150</b>	Must take BIOL 3763

Note: This checklist was created based on 2019-20 catalog year requirements. See your advisor to create your CS+ plan of study.