

# Computer Science Curriculum Overview (3 Year Sample Path)

	Fall Term	Winter Term	Spring Term	
Year 1	<p>Programming experience for CIS major courses may be covered in high school or in the first year (CIS 122). In year 1 students also complete the majority of their General Education Courses. In this example CIS major courses begin year 2.</p>	General Education Course	CIS 122 Intro to Programming	
		General Education Course	Math 112 Elementary Functions	
		General Education Course	General Education Course	
		WR 121 College Composition I	WR 122 College Composition II	
Year 2	CIS 210 Computer Science I	CIS 211 Computer Science II	CIS 212 Computer Science III	
	MATH 231 Discrete Math I	MATH 232 Discrete Math II	Calculus [Math 246, 251, or 261]	
	Three-term Laboratory Science Sequence in Biology, Chemistry, Physics, Geological Sciences, Geography or Psychology (see list on reverse side), or Computer Related minor.			
	General Education/ Elective Course	General Education/ Elective Course	Elective Course	
Year 3	CIS 314 Comp. Organization	CIS 330 C/C ++ & Unix	CIS 415 Operating Systems	Summer Internship or Research Opportunity
	CIS 313 Data Structures	CIS 315 Algorithms	CIS Elective	
	Calculus [MATH 247, 252, or 262]	Additional Math (see list reverse side)	Additional Math (see list reverse side)	
	Minor/Elective Course	Minor/Elective Course	Minor/Elective Course	
Year 4	CIS 425 Principle of Programming	CIS 422 Software Methodology	CIS Elective	
	CIS Elective	CIS Elective	CIS Elective	
	MATH Elective	WR 320/321 Technical Writing	(CIS Elective)	

## Math Core Requirements

Students must take Discrete Mathematics 231 and 232, and two terms of Calculus (I and II). In addition, students must take two of the following:

Additional Math

- *Choose 1:* [MATH 253 Calculus III OR MATH 263 Calculus with Theory III]
- MATH 341 Linear Algebra I

Additional Math

- *Choose 1:* [MATH 343 Statistical Models/Methods OR MATH 425 Statistical Methods I]

## Laboratory Science Requirements

Students must complete one three-term sequence chosen from the following:

Science Course 1

Science Course 2

Science Course 3

- General Physics: PHYS 201, 202, 203
- Foundations of Physics: PHYS 251, 252, 253
- General Chemistry: CH 221, 222, 223
- Honors General Chemistry: CH 224H, 225H, 226H
- Geological Sciences: EARTH 201, 202, 203 (GEOL 201, 202, 203)
- Geography: GEOG 141, *choose 2:* [GEOG 321, GEOG 322, GEOG 323]
- Biology: *choose 1:*[CH 111, CH 113, CH114, CH 221, CH 224H],  
BI 211, *then choose 1:*[BI 212, BI 213]
- Psychology: PSY 201, *then choose 2:* [PSY 301, 304, 305, 348]