COMPUTER INFORMATION SYSTEMS

Bachelor of Science



SEMESTER 1

Course	Credits	Grade	~
ENGL 101: Composition & Rhetoric I	3	C*	
MATH 103: College Algebra or MATH 107: Precalculus	3-4		
CS 151: Introduction to Computer Science	3		
General Education Course	3		
General Education Course	2-3		
UNIV 100: CU Foundations	1		

15-17

SEMESTER 2

Course	Credits	Grade	~
ENGL 102: Composition & Rhetoric II	3	C*	
CS 252: Data Structures & Object Oriented Programming	3		
CS 282: Database and Information Management	3		
MATH 104: College Trigonometry (If took MATH 107, take a CS Concentration Course)	3		
General Education Course	3		
	15		

SEMESTER 3

Course	Credits	Grade	~
CS 272: Human Centered Design	3		
CS 281: Linux System Administration	3		
CS 351: Web Development	3		
MATH 253: Calculus with Analytic Geometry I	4		
General Education Course	3		
	1.0		

16

SEMESTER 4

Course	Credits Grade	~
CS 221: Computer Networking	3	
CS 232: Introduction to Computer Security	3	
MATH 219: Discrete Mathematics	3	
MATH 105: Elementary Statistics	3	
General Education Course	3	
	15	



The Bachelor of Science in Computer Information

Systems curriculum is designed to give students a strong background in computing that they

can then apply to an area of interest. The core prepares students for a wide variety of careers and graduate school, but students can also choose one of five concentrations in which to specialize.

CONCENTRATIONS

Each of the elective CIS concentrations is designed for different career interests:

Accounting and Control Geospatial Science Information Technology Management Web

MILESTONE COURSES Courses marked as Milestone

Courses are crucial for staying on track to complete your degree in four years. Take them in the recommended semester to stay on track! If you see a recommended minimum grade, this is the grade you need to earn to have the best chance for success in this degree! Grades marked with an

HELPFUL HINTS

 CS 151 is prerequisite to all other computer science courses.

asterisk are required to pass.

- Only offered Fall semester, every year: CS 272.
- Only offered Fall semester, every other year: CS 281, CS 351.
- Only offered Spring semester, every year: CS 232, CS 252, CS 282, MATH 219.
- Only offered Spring semester, every other year: CS 221.

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SEMESTER 5

Course	Credits Grade	~
CS 253: Software Engineering	3	
CS 283: Data Analytics	3	
CS 325: Computer Organization and Hardware	3	
CS 381: System Analysis and Design	3	
Elective or Concentration Course	3	
	15	

SEMESTER 6

Course	Credits Grade	~
CS 332: Network Security	3	
CS 374: Introduction to Simulation and Modeling	3	
Elective or Concentration Course	3	
General Education Course	3	
General Education Course	3	
	15	

SEMESTER 7 T

Course	Credits Grade		~
CS 456: Capstone 1	2	T	
Elective or Concentration Course	3		
Elective or Concentration Course	3		
General Education Course	3-4		
General Education Course	3		

14-15

SEMESTER 8 T

Course	Credits Grade	✓
CS 384: DevOps	3	
CS 457: Capstone 2	2	
Elective or Concentration Course	3	
Elective or Concentration Course	3	
General Education Course	4	



ADVISING

When you choose to pursue this degree, you will be assigned an advisor who is an expert in the field of Computer Information Systems. This advisor can help you with course selection, career planning, resume building, and help you with tracking your path to degree completion.

CAREERS

With a degree in Computer Information Systems, you will be trained for careers such as: Computer Support Specialist; Network & Computer Systems Administrator; Database Administrator; Web Developer; Computer Systems Analyst.

STUDENT ORGANIZATIONS

Hopper-Turing Society

COMPLEMENTARY MINORS

CIS pairs well with most minors.

The **Accounting and Control**, and **Management** concentrations pair well with a double major in **Business Administration**.

The **Web** concentration pairs well with a minor or double major in **Advertising/Graphic Design** or **Studio Art**.

CAPSTONE

The Computer Information Systems degree culminates in a Capstone Project. Students

will take CS 456 and 457 in their senior year to fulfill this requirement.

HELPFUL HINTS

- Only offered Fall semester, every year: CS 325.
- Only offered Fall semester, every other year: CS 253, CS 283, CS 381.
- Only offered Spring semester, every other year: CS 332, CS 374, CS 384.