

### SEMESTER 1

Course	Credits	Grade		✓
ENGL 101: Composition & Rhetoric I	3	C*		<input type="checkbox"/>
MATH 103: College Algebra or MATH 107: Precalculus	3-4			<input type="checkbox"/>
CS 151: Introduction to Computer Science	3			<input type="checkbox"/>
General Education Course	3			<input type="checkbox"/>
General Education Course	2-3			<input type="checkbox"/>
UNIV 100: CU Foundations	1			<input type="checkbox"/>

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### SEMESTER 2

Course	Credits	Grade		✓
ENGL 102: Composition & Rhetoric II	3	C*		<input type="checkbox"/>
<b>CS 252: Data Structures &amp; Object Oriented Programming</b>	3			<input type="checkbox"/>
<b>CS 282: Database and Information Management</b>	3			<input type="checkbox"/>
MATH 104: College Trigonometry (If took MATH 107, take a CS Concentration Course)	3			<input type="checkbox"/>
General Education Course	3			<input type="checkbox"/>

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### SEMESTER 3

Course	Credits	Grade		✓
<b>CS 272: Human Centered Design</b>	3			<input type="checkbox"/>
<b>CS 281: Linux System Administration</b>	3			<input type="checkbox"/>
<b>CS 351: Web Development</b>	3			<input type="checkbox"/>
MATH 253: Calculus with Analytic Geometry I	4			<input type="checkbox"/>
General Education Course	3			<input type="checkbox"/>

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### SEMESTER 4

Course	Credits	Grade		✓
<b>CS 221: Computer Networking</b>	3			<input type="checkbox"/>
<b>CS 232: Introduction to Computer Security</b>	3			<input type="checkbox"/>
<b>MATH 219: Discrete Mathematics</b>	3			<input type="checkbox"/>
MATH 105: Elementary Statistics	3			<input type="checkbox"/>
General Education Course	3			<input type="checkbox"/>

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### 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 asterisk are required to pass.

### HELPFUL HINTS

- CS 151 is prerequisite to all other computer science courses.
- 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.

## SEMESTER 5

Course	Credits	Grade	✓
CS 253: Software Engineering	3		<input type="checkbox"/>
CS 283: Data Analytics	3		<input type="checkbox"/>
CS 325: Computer Organization and Hardware	3		<input type="checkbox"/>
CS 381: System Analysis and Design	3		<input type="checkbox"/>
Elective or Concentration Course	3		<input type="checkbox"/>


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## SEMESTER 6

Course	Credits	Grade	✓
CS 332: Network Security	3		<input type="checkbox"/>
CS 374: Introduction to Simulation and Modeling	3		<input type="checkbox"/>
Elective or Concentration Course	3		<input type="checkbox"/>
General Education Course	3		<input type="checkbox"/>
General Education Course	3		<input type="checkbox"/>


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## SEMESTER 7

Course	Credits	Grade	✓
CS 456: Capstone 1	2		<input type="checkbox"/>
Elective or Concentration Course	3		<input type="checkbox"/>
Elective or Concentration Course	3		<input type="checkbox"/>
General Education Course	3-4		<input type="checkbox"/>
General Education Course	3		<input type="checkbox"/>

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## SEMESTER 8

Course	Credits	Grade	✓
CS 384: DevOps	3		<input type="checkbox"/>
CS 457: Capstone 2	2		<input type="checkbox"/>
Elective or Concentration Course	3		<input type="checkbox"/>
Elective or Concentration Course	3		<input type="checkbox"/>
General Education Course	4		<input type="checkbox"/>

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### 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.