

**Computer Science and Information Technology Department**  
**Undergraduate Course Offerings**

*Courses will generally be offered on this schedule. In unusual circumstances, a course may not be offered in a planned semester.*

*Regular meetings with your academic advisor remain crucial to effective planning.*

*Courses offered on a periodic, irregular basis should not be planned for a particular semester without consultation with the offering department.*

Course Number	Title	Required in these Majors	Fall	Spring	Winter	Summer	Irregular Terms	Pre/Corequisite and Comments
CPSC101	Computer Applications		√	√				None
CPSC102	Computer Graphics						√	None
CPSC105	Introduction to Data Visualization	DS	√					None
CPSC111	Computer Forensics			√				Any Math Course
CPSC120	Introduction to Creative Graphical Coding	GD <sup>2</sup>	√	√				None
CPSC122	Client-side Web Development	IT	√					None
CPSC123	Introduction to Scientific Programming	IT <sup>1</sup> , DS <sup>1</sup>		√				None
CPSC125	Discrete Math for Computing I	CS, IT, GD, DS	√	√				(ALEKS >= 61) or (MAT 105 or higher)
CPSC135	Computer Science I	CS, IT <sup>1</sup> , GD <sup>2</sup> , DS <sup>1</sup>	√	√				None
CPSC136	Computer Science II	CS, GD <sup>3</sup>	√	√				CPSC135 or equivalent with a C or better
CPSC150	Ethical, Legal & Professional Impacts of the Digital Age	CS, IT, GD, DS	√	√				None
CPSC220	Object-Oriented Multimedia Programming	GD <sup>3</sup>		√				(CPSC120 or CPSC123 or CPSC135 or CPSC243) with a grade of C or better
CPSC223	Advanced Scientific Programming	IT <sup>4</sup> , DS	√					(C or better in CPSC123) or (C or better in CPSC135)
CPSC225	Discrete Math for Computing II	CS	√	√				CPSC 125 and (CPSC120 or CPSC123 or CPSC 135)
CPSC235	Computer Organization & Assembly Language	CS	√					CPSC125 and CPSC136
CPSC237	Data Structures	CS	√	√				CPSC125 and (C or better in (CPSC136 or CPSC223 or CPSC243))
CPSC240	Fundamentals of Game Development	GD	√	√				A grade of "C" or better in one of the following courses: CPSC120 or CPSC123 or CPSC135
CPSC242	Server-side Web Development	IT <sup>4</sup>		√			√	C or better in (CPSC120 or CPSC122 or CPSC123 or CPSC135)
CPSC243	Java Programming						√	C or better in (CPSC120 or CPSC123 or CPSC135)
CPSC252	Unix Scripting & Administration	IT		√				CPSC120 or CPSC122 or CPSC123 or CPSC135
CPSC253	Information Technology Systems	IT	√	√				(C or better in one of (CPSC111 or CPSC120 or CPSC122 or CSS123 or CPSC135)) and (Sophomore Status or CyberSecurity Certificate)
CPSC256	SQL Programming	DS	√					CPSC120 or CPSC123 or CPSC135 or CPSC243
CPSC273	Computing Systems Integration	IT		√				CPSC237 or CPSC253
CPSC310	Programming Languages	CS		√				CPSC237 AND Junior status AND a GPA in the CPSC courses of 2.25
CPSC311	Computer Networks	IT		√				(CPSC237 or CPSC253) and Junior status
CPSC320	Two-Dimensional Game Development	GD	√					(CPSC220 or CPSC136 or CPSC223 or CPSC243) AND ("C" or better in CPSC240)
CPSC323	Three-Dimensional Game Development	GD		√				(CPSC220 or CPSC136 or CPSC223 or CPSC243) AND ("C" or better in CPSC240)
CPSC325	Introduction to Computer Science Theory						√	(C or better in CPSC225) AND (C or better in CPSC237) AND Junior Status
CPSC328	Network and Secure Programming	CS	√					(CPSC237 or CPSC253) and Junior status
CPSC330	Introduction to Mobile Architecture and Systems						√	(CPSC237 or CPSC253) and CPSC243
CPSC341	Introduction to Information Security	IT	√					(CPSC237 or CPSC253) AND (Junior status or Cybersecurity Certificate)
CPSC342	Web Technologies						√	C or better in CPSC242 and Junior Standing
CPSC343	Operating Systems	CS		√				(CPSC237 or CPSC253) AND Junior status AND at least a 2.25 GPA in CPSC courses
CPSC351	Digital Forensics			√				CPSC341
CPSC354	Software Engineering I	CS, IT	√	√				Completion of 24 CPSC credits, numbered 122 or higher AND a GPA of 2.25 in the CPSC Courses AND Junior Status
CPSC355	Software Engineering II	CS, IT	√	√				Completion of CPSC354 with a grade of C or better AND a GPA of 2.25 in the CPSC Courses
CPSC356	Introduction to Database Management Systems	IT, DS	√					(CPSC237 or CPSC253 or CPSC256) AND (Junior status AND at least a 2.25 GPA in CPSC courses OR (admission to Database certificate program))

CPSC363	Interdisciplinary Software Rapid Prototyping	GD <sup>5</sup>	√	√				Completion of 18 CPSC credits, numbered 120 or higher AND a GPA of 2.25 in the CPSC Courses AND Junior Status
CPSC385	Computer Science Seminar						√	Completion of 24 CPSC credits, numbered 125 or higher AND a GPA of 2.25 in the CPSC Courses
CPSC402	Data Structures II		√					CPSC237 or unconditional admission to the Graduate program in CS
CPSC411	Advanced Networking						√	CPSC311 or unconditional admission to the Graduate program
CPSC415	Design and Analysis of Algorithms						√	(CPSC225 and CPSC237) or unconditional admission to the Graduate program in CS
CPSC421	Web-based Software Design & Development						√	((CPSC237 or CPSC253) and CPSC243) or unconditional admission to the Graduate program in CS
CPSC422	Object Oriented Programming I						√	CPSC237
CPSC425	Principles of Compiler Design I						√	CPSC310 or unconditional admission to the Graduate program in CS
CPSC441	Advanced Information Security and Ethical Hacking			√				CPSC341 or unconditional acceptance in the graduate program
CPSC445	Introduction to Intelligent Robots						√	CPSC237 or CPSC253 or unconditional admission to the Graduate program in CS
CPSC447	Artificial Intelligence I						√	(CPSC237 or CPSC253) or acceptance into a graduate program in CS
CPSC456	Database Management Systems I						√	CPSC356 or unconditional acceptance in graduate program or instructor's permission
CPSC458	Data Mining and Predictive Analytics I	DS					√	Scheduled every three semesters; At least sixty university credits completed and (a grade of "C" or better in one of the following courses: CPSC 123 or CPSC223) and (a grade of "C" or better in one of the following courses: MAT140 or MAT150, or MAT 301 or POL/PSY/SOC200 or SOC201 or BUS120); or unconditional acceptance into a graduate program in CPSC.
CPSC459	Introduction to Big Data	DS					√	Scheduled every three semesters; At least sixty university credits completed and (a grade of "C" or better in one of the following courses: CPSC 123 or CPSC223) and (a grade of "C" or better in one of the following courses: MAT140 or MAT150, or MAT 301 or POL/PSY/SOC200 or SOC201 or BUS120); or unconditional acceptance into a graduate program in CPSC.
CPSC464	Human Computer Interaction						√	CPSC237 or CPSC253 or unconditional admission to the Graduate program in CS
NOTES	1 - IT & DS programs require either CPSC123 or CPSC135							
	2 - GD program requires either CPSC120 or CPSC135							
	3 - GD program requires either CPSC136 or CPSC220							
	4 - IT program requires either CPSC223 or CPSC242							
	5 - GD program requires either CPSC363 or CDS355							