

Graduate Course Offerings

This table lists prerequisites for all graduate CS courses and our best estimate as to when courses will be offered in the 2017–2018 academic year. Additional offerings may appear if the demand is high enough and resources permit; similarly, offerings may be cancelled if fewer than 10 students register. All courses are three semester hours, unless indicated otherwise. Disclaimer: the projected course offerings below may differ from the RIT course catalog due to availability of department resources.

Key ♦ indicates the term we expect to offer the course -- indicates no plan to offer the course that term

Course #	Course Name	Fall 2171	Spring 2175	Summer 2178	Prerequisite(s)
CSCI 603	Computational Problem Solving	♦	♦	--	Previous Programming Experience
CSCI 605	Advanced Object Oriented Programming Concepts	♦	♦	--	Previous Programming Experience
CSCI 610	Foundations of Computer Graphics	♦	♦	--	(CSCI 603 and CSCI 605, with B or better in both courses) or equivalent, or Permission of Instructor (Students who complete CSCI 510 may not take CSCI 610 for credit)
CSCI 620	Introduction to Big Data	♦	♦	♦	CSCI 603 or CSCI 605, with a B or better, or equivalent and Stat 145 or equivalent, or Permission of Instructor
CSCI 621	Database System Implementation	♦	--	--	CSCI 620, or CSCI 320 And CSCI 420, or Permission of Instructor
CSCI 622	Data Security and Privacy	--	♦	--	CSCI 620, or CSCI 320 and CSCI 420, or Permission Of Instructor
CSCI 630	Foundations of Intelligent Systems	♦	♦	♦	(CSCI 603, CSCI 605, and CSCI 661, with B or better in all courses) or equivalent or Permission of Instructor (Students who complete CSCI 331 may not take CSCI 630 for credit)
CSCI 631	Foundations of Computer Vision	♦	♦	--	(CSCI 603, CSCI 605, and CSCI 661, with B or better in all courses) or equivalent or Permission of Instructor (Students who complete CSCI 431 may not take CSCI 631 for credit)
CSCI 632	Mobile Robot Programming	--	♦	--	CSCI 331 or CSCI 630 or Permission of Instructor
CSCI 633	Biologically Inspired Intelligent Systems	--	♦	--	(CSCI 603, CSCI 605, and CSCI 661, with B or better in all courses) or equivalent or Permission of Instructor
CSCI 641	Advanced Programming Skills	♦	♦	--	(CSCI 603 and CSCI 605, with B or better in both courses) or (CSCI 141, CSCI 142, and CSCI 243) or equivalent or Permission of Instructor (co-listed with CSCI 541; Students who take CSCI 541 may not take CSCI 641 for credit)
CSCI 642	Secure Coding	♦	--	--	(CSCI 603 and CSCI 605, with B or better in both courses) or (CSCI 141, CSCI 142, and CSCI 243) or equivalent or Permission of Instructor
CSCI 651	Foundations of Computer Networks	♦	--	--	MATH 251 or equivalent and (CSCI 605, with B or better) or equivalent or Permission of Instructor
CSCI 652	Distributed Systems	♦	♦	--	CSCI 352 or equivalent and CSCI 603 or equivalent
CSCI 654	Foundations of Parallel Computing	♦	--	--	(CSCI 603, CSCI 605, and CSCI 661, with B or better in all courses) or equivalent or Permission of Instructor (Students who take CSCI 454 may not take CSCI 654 for credit)
CSCI 661	Foundations of Computer Science Theory	♦	♦	--	MATH 190 or equivalent and some programming experience (Students who complete CSCI 262 or CSCI 263 may not take CSCI 661 for credit)
CSCI 662	Foundations of Cryptography	♦	♦	--	(CSCI 661 and (CSCI 603 or CSCI 605), with B or better in all courses) or equivalent or Permission of Instructor (Students who complete CSCI 462 may not take CSCI 662 for credit)
CSCI 664	Computational Complexity	--	♦	--	(CSCI 661 or CSCI 262 or CSCI 263) and (CSCI 665 or CSCI 261 or CSCI 264)
CSCI 665	Foundations of Algorithms	♦	♦	--	(CSCI 603, CSCI 605, and CSCI 661, with B or better In all courses) or equivalent or Permission of Instructor (Students who complete CSCI 261 or CSCI 264 may not take CSCI 665 for credit)
CSCI 687	Graduate Research Seminar	♦	♦	♦	None
CSCI 699	Computer Science Graduate Semester Co-Op (2171-2175)	♦	♦	--	Students must complete the assigned Bridge Course(s) and at least 12 semester hours of their M.S. Program of Study with a GPA ≥ 3.0

Course #	Course Name	Fall 2171	Spring 2175	Summer 2158	Prerequisite(s)
CSCI 709	Topics in Computer Science	--	--	--	Per Specific Offerings
CSCI 711	Global Illumination	--	◆	--	CSCI 510 or CSCI 610 or Permission of Instructor
CSCI 712	Computer Animation: Algorithms	◆	--	--	CSCI 510 or CSCI 610 or Permission of Instructor
CSCI 713	Applied Perception in Graphics	◆	--	--	CSCI 510 or CSCI 610 or Permission of Instructor
CSCI 714	Scientific Visualization	--	--	--	CSCI 510 or CSCI 610 or Permission of Instructor
CSCI 715	Apps in Virtual Reality	--	--	--	CSCI 510 or CSCI 610 or Permission of Instructor
CSCI 716	Computational Geometry	--	◆	--	CSCI 261 or CSCI 264 or CSCI 665 or equivalent course
CSCI 719	Topics in Computer Graphics	--	◆	--	Per Specific Offerings
CSCI 720	Big Data Analytics	◆	◆	--	CSCI 620, or CSCI 320 and CSCI 420, or Permission of Instructor
CSCI 721	Data Cleaning and Preparation	--	◆	--	CSCI 620, or CSCI 320 and CSCI 420, or Permission of Instructor
CSCI 729	Topics in Data Management	◆	◆	--	Per Specific Offerings
CSCI 731	Advanced Computer Vision	--	◆	--	CSCI 631 or CSCI 431 or Permission of Instructor
CSCI 732	Image Understanding	--	--	--	CSCI 631 or CSCI 431 or Permission of Instructor
CSCI 734	Foundations of Secure Measure and Evaluation	--	--	--	CSCI 651 or Permission of Instructor
CSCI 735	Foundations of Intelligent Security Systems	◆	--	--	CSCI 630 or CSCI 331 or CSCI 651 or Permission of Instructor
CSCI 736	Neural Networks & Machine Learning	--	◆	--	CSCI 630 or CSCI 331 or Permission of Instructor
CSCI 737	Pattern Recognition	--	◆	--	CSCI 630 or CSCI 331 or Permission of Instructor
CSCI 739	Topics in Intelligent Systems	--	--	--	Per Specific Offerings
CSCI 740	Programming Language Theory	◆	--	--	(((CSCI 603 and CSCI 605, with B or better in both courses) or (CSCI 141, CSCI 142, and CSCI 243)) and CSCI 661) or equivalent or Permission of Instructor
CSCI 742	Compiler Construction	--	◆	--	(((CSCI 603 and CSCI 605, with B or better in both courses) or (CSCI 141, CSCI 142, and CSCI 243)) and CSCI 661) or equivalent or Permission of Instructor (Students who take CSCI 442 may not take CSCI 742 for credit)
CSCI 746	Software Development Tools	--	--	--	(((CSCI 603 and CSCI 605, with B or better in both courses) or (CSCI 141, CSCI 142, and CSCI 243)) and CSCI 661) or equivalent or Permission of Instructor
CSCI 749	Topics in Languages And Tools	--	--	--	Per Specific Offerings
CSCI 759	Topics in Systems	◆	◆	--	Per Specific Offerings
CSCI 761	Topics in Advanced Algorithms	--	--	--	CSCI 665 or CSCI 261 or CSCI 264
CSCI 762	Advanced Cryptography	--	◆	--	CSCI 662 or (CSCI 462 or equivalent and Permission of Instructor)
CSCI 769	Topics in Theory	--	--	--	Per Specific Offerings
CSCI 788	Computer Science MS Project/Colloquium (3SH)	◆	◆	◆	Permission of Project Committee and Graduate Coordinator
CSCI 790	Computer Science MS Thesis (6SH)	◆	◆	◆	Permission of Thesis Committee and Graduate Coordinator
CSCI 799	Computer Science Graduate Independent Study (1-3SH)	◆	◆	◆	Permission of Instructor and Department
CSCI 888	Computer Science Graduate Summer Co-Op (2178)	--	--	◆	Students must complete the assigned Bridge Course(s) and at least 12 semester hours of their M.S. Program of Study with a GPA \geq 3.0