

CS Course to ITM Translation**CS Courses acceptable as substitute prerequisites for ITM Graduate Programs or applicable to a CS-ITM dual major.**

CS 115 & 116	Object-Oriented Programming	ITM 311	Introduction to Software Development
CS 201	Accelerated Introduction to Computer Science	ITM 311	Introduction to Software Development
CS 331	Data Structures and Algorithms	ITM 313	Introduction to Open Source Application Development
CS 425	Database Organization	ITMD 421	Data Modeling and Applications
CS 445	Object Oriented Design and Programming	ITMD 411	Advanced Structured and Systems Programming
CD 455	Data Communications	ITMO 440	Introduction to Data Networks and the Internet

CS Courses transferable to ITM when changing majors.

CS 115 & 116	Object-Oriented Programming	ITM 311	Introduction to Software Development
CS 201	Accelerated Introduction to Computer Science	ITM 311	Introduction to Software Development
CS 330	Discrete Structures	MATH 230	Introduction to Discrete Mathematics
CS 331	Data Structures and Algorithms	ITM 313	Introduction to Open Source Application Development
CS 340	Programming Paradigms and Patterns	ITMD Undergraduate Elective	
CS 422	Data Mining	ITMD Undergraduate Elective	
CS 425	Database Organization	ITMD Undergraduate Elective	
CS 429	Information Retrieval	ITMD Undergraduate Elective	
CS 440	Programming Languages and Translators	ITMD Undergraduate Elective	
CS 442	Mobile Applications Development	ITMD 454 (Mac) or ITMD 455 (Android)	
CS 445	Object Oriented Design and Programming	ITMD Undergraduate Elective	
CS 450	Operating Systems	ITMO Undergraduate Elective	
CD 455	Data Communications	ITMO Undergraduate Elective	
CS 456	Introduction to Wireless Networks and Performance	ITMO Undergraduate Elective	
CS 482	Information and Knowledge Management Systems	ITMD Undergraduate Elective	
CS 487	Software Engineering I	ITMD Undergraduate Elective	

CS Courses that are acceptable substitutes for ITM graduate courses, transferable into an ITM graduate degree, or may be double-counted into ITM co-terminal graduate degree (up to 3)

CS 520	Data Integration, Warehousing, and Provenance	ITMD / Data Management Elective	
CS 521	Object-Oriented Analysis and Design	ITMT 531	Object-Oriented System Analysis, Modeling, and Design
CS 522	Advanced Data Mining	ITMD / Data Management Elective	
CS 525	Advanced Database Organization	ITMD 523	Advanced Database Management
CS 528	Data Privacy and Security	ITMS Elective	
CS 542	Computer Networks I: Fundamentals	ITMO 540	Introduction to Data Networks and the Internet
CS 544	Computer Networks II: Network Services	ITMO / I.T. Infrastructure Elective	
CS 547	Wireless Networking	ITMO 542	Wireless Technologies and Applications
CS 548	High-Speed Networks	ITMO / I.T. Infrastructure Elective	
CS 549	Cryptography	ITMS Elective	
CS 551	Operating System Design and Implementation	ITMT 533	Operating System Design Implementation
CS 553	Cloud Computing	ITMO 544	Cloud Computing Technologies
CS 556	Cyber-Physical Systems: Languages and Systems	ITMT 593	Embedded Systems
CS 558	Advanced Computer Security	ITMS Elective	
CS 562	Virtual Machines	ITMO 554	Operating Systems Virtualization
CS 565	Computer Assisted Instruction	ITMT 537	Instructional Technologies
CS 578	Interactive and Transparent Machine Learning	ITMD / Data Management Elective	
CS 579	Online Social Network Analysis	ITMT Elective	
CS 582	Computational Robotics	ITMT Elective	
CS 584	Machine Learning	ITMT Elective	
CS 587	Software Project Management	ITMM Elective	
CS 588	Advanced Software Engineering Development	ITMD 511	Application Development Methodologies
CS 589	Software Testing and Analysis	ITMD 536	Software Testing and Maintenance

ITM graduate students may not substitute a CS course for an ITM course in those courses where an ITM course number is indicated.