	PREREQUISITES	ELIGIBILITY RESTRICTIONS	CLASS NOTES/COMMENTS INFORMATION ONLY - DOES NOT AFFEC
CICS 109 INTRO TO DATA ANALYSIS IN R Jasper McChesney		NON-COMPSCI MAJORS ONLY.	STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST O ON-LINE FORM: https://www.cics.umass.edu/academics/course-ove
<b>CICS 110</b> FOUNDATIONS OF PROGRAMMING Cole Reilly, Aadam Anish Lokhandwala, Jacob Urisman, Brett Mullins, Prit Pritam Shah	COMPLETION OF THE R1 GEN ED (OR A SCORE OF 15 OR HIGHER ON THE MATH PLACEMENT TEST PART A), OR ONE OF THE FOLLOWING COURSES: MATH 101&102 OR MATH 104 OR MATH 127 OR MATH 128 OR MATH 131 OR MATH 132.	OPEN TO FRESHMEN, SOPHMORES AND JUNIORS ONLY.	STUDENTS ARE NOT PERMITTED TO TAKE CICS 110 AFTER SU COMPLETING COMPSCI 121. AFTER ELIGIBLE CS, INFORM, MA CMPLING MAJORS HAVE ENROLLED, WILL OPEN TO FRESHME JUNIOR UNDERGRADUATES, IF AVAILABLE SEATS. FRESHME JUNIORS IN OTHER MAJORS SHOULD WAIT FOR THE ELIGIBILI BE REMOVED TO SELF-ENROLL AND SHOULD NOT REQUEST A STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST O ON-LINE FORM: https://www.cics.umass.edu/academics/course-ove
CICS 127 INTRO TO PUBLIC INTEREST TECH Francine Berman		UNDERGRADUATES ONLY.	THIS COURSE COUNTS TOWARDS THE IT MINOR AND IS REQU UNDERGRADUATE CERTIFICATE. STUDENTS NEEDING SPECI/ REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics edu/academics/course-overrides
CICS 160 OBJECT-ORIENTED PROGRAMMING Jaime Davila, Cole Reilly	CICS 110 (PREVIOUSLY INFO 190S) OR COMPSCI 121 WITH A GRADE OF C OR BETTER.	FRESHMEN, SOPHOMORE AND JUNIORS ONLY.	STUDENTS ARE NOT PERMITTED TO TAKE CICS 160 AFTER SU COMPLETING COMPSCI 186. USE OF PERSONAL LAPTOP IN CI AFTER ELIGIBLE CS, INFORM AND COMP LING MAJORS HAVE B OPEN TO OTHER MAJORS, IF AVAILABLE SEATS. ELIGIBLE NO WAIT FOR THE MAJOR ELIGIBILITY RESTRICTION TO BE REMO AND SHOULD NOT REQUEST AN OVERRIDE. STUDENTS NEED PERMISSION MUST REQUEST OVERRIDE VIA THE ON-LINE FOF umass.edu/academics/course-overrides
CICS 210 DATA STRUCTURES <i>Mordecai Golin, Timothy Richards</i>	CICS 160 (PREVIOUSLY INFO 190T) WITH A GRADE OF C OR BETTER.	FRESHMEN, SOPHOMORE AND JUNIORS ONLY.	STUDENTS ARE NOT PERMITTED TO TAKE CICS 210 AFTER SU COMPLETING COMPSCI 187. AFTER ELIGIBLE CS, INFORM AND HAVE ENROLLED, WILL OPEN TO OTHER FRESHMEN, SOPHOW IF AVAILABLE SEATS. ELIGIBLE NON-CS AND NON-INFORM MA FOR THE MAJOR ELIGIBILITY RESTRICTION TO BE REMOVED T SHOULD NOT REQUEST AN OVERRIDE. STUDENTS NEEDING S MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://w edu/academics/course-overrides
CICS 256 MAKE: PHYSICAL COMPUTING Stefan Krastanov	CICS 210 (OR COMPSCI 187) WITH A GRADE OF C OR BETTER AND BASIC MATH SKILLS (R1).	FRESHMAN, SOPHOMORE AND JUNIOR BS-CS MAJORS ONLY.	NO OPTION FOR PASS/FAIL. THIS COURSE HAS A REQUIRED L COUNTS TOWARD THE CS LAB SCIENCE REQUIREMENT FOR T OFFERING IS OPEN TO SOPHOMORE AND FRESHMEN BS-CS M SOPHOMORE AND FRESHMEN REGISTER, PROGRAM WILL CO JUNIOR BS-CS MAJORS, IF AVAILABLE SEATS. JUNIOR BS-CS I WAIT FOR ELIGIBILITY TO OPEN TO SELF-ENROLL OR ADD TO AVAILABLE) AND SHOULD NOT REQUEST AN OVERRIDE. STUE SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE OF //www.cics.umass.edu/academics/course-overrides
CICS 291C S-FIND STRENGTHS/DESIGN CAREER Casey Maloney		CS AND INFORM SOPHOMORES AND JUNIORS ONLY	MANDATORY PASS/FAIL. STUDENTS NEEDING SPECIAL PERM REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics edu/academics/course-overrides
CICS 291S S-CICS SECOND YEAR PATHWAYS Erfan Entezami	CICS 210 (OR COMPSCI 187) WITH A GRADE OF C OR BETTER.	SOPHOMORE, JUNIOR, AND SENIOR CS MAJORS ONLY.	CS MAJORS MUST BE TAKING AT LEAST ONE COMPSCI 200-LE CONCURRENTLY TO BE ELIGIBLE. NON-CS MAJORS WHO HAV TAKING) AT LEAST TWO COMPSCI 200-LEVEL CORE WILL BE CO AVAILABLE SEATS. INTERESTED STUDENTS SHOULD COMPLE FORM: https://forms.gle/3RsgkVzEtPKoqnUj6
CICS 291T S-CICS TRANSFER SUCCESS Emma Anderson			DEPARTMENT CONSENT REQUIRED: OPEN TO INCOMING CS / TRANSFER STUDENTS ONLY.

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R SUCCESSFULLY MATH, PHYSICS AND MEN, SOPHOMORE, AND BILITY RESTRICTION TO ST AN OVERRIDE. TOVERRIDES VIA THE overrides

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ED LAB SECTION AND DR THE BS-CS. THIS 25 MAJORS ONLY. AFTER CONSIDER OPENING TO CS MAJORS SHOULD TO THE WAITLIST (IF TUDENTS NEEDING E ON-LINE FORM: https:

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	PREREQUISITES	ELIGIBILITY RESTRICTIONS	CLASS NOTES/COMMENTS INFORMATION ONLY - DOES NOT AFFEC
CICS 298A P-LEADRSHP:COMMUNCTNG-EXPRTISE Emma Anderson	CICS 160 (PREVIOUSLY INFO 190T), COMPSCI 186, OR COMPSCI 187, OR CICS 210 WITH A GRADE OF C OR BETTER.	FRESHMEN, SOPHOMORE, AND JUNIOR CS AND INFORM MAJORS ONLY.	SENIORS AND STUDENTS IN OTHER MAJORS MAY BE CONSIDE SEATS. STUDENTS FROM OTHER MAJORS MAY BENEFIT FROM STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST O' ON-LINE FORM: https://www.cics.umass.edu/academics/course-ove
CICS 305 SOC ISS IN CMPTNG Erin Butler, Elizabeth Gunther, Siobhan Meï, Justin Obara, Matthew Ross, STAFF, Christina Sutcliffe	CS MAJORS: ENGLWRIT 112 WITH A GRADE OF C OR BETTER (OR ENGLISH WRITING WAIVER) AND COMPSCI 220, COMPSCI 230 AND EITHER COMPSCI 240 OR COMPSCI 250. INFORM MAJORS: ENGLWRIT 112 WITH A GRADE OF C OR BETTER (OR ENGLISH WRITING WAIVER) AND INFO 248.	ODD LECS: SENIOR AND JUNIOR CS MAJORS ONLY. RESTRICTED TO CS PRIMARY MAJORS. EVEN LECS: SENIOR AND JUNIOR INFORMATICS MAJORS ONLY. RESTRICTED TO INFORMATICS PRIMARY MAJORS.	SATISFIES JUNIOR YEAR WRITING REQUIREMENT. ODD LECTU MAJORS; EVEN LECTURES FOR INFORM MAJORS. ELIGIBILITY INFORM PRIMARY MAJORS ONLY. CS AND INFORM SECONDAF TAKE JUNIOR YEAR WRITING COURSE WITHIN PRIMARY MAJO LECT 01-02 MEET TOGETHER; LECT 03-04, ETC. SPIRE WILL THE ENGLWRIT112 PREREQUISITE WHEN TAKEN AT UMASS AM MAJORS WITH AP CREDIT, TRANSFER CREDIT, OR A WAIVER F WHO MEET THE OTHER STATED PREREQUISITES WILL NEED A ENROLL VIA THE OVERRIDE FORM: https://www.cics.umass.edu/a
CICS 396A IS-DIRECTED RESEARCH GROUP Neena Thota			overrides STUDENTS MUST BE ENROLLED IN THE ERSP PROGRAM AND S COMPLETED CICS 237 INTRODUCTION TO RESEARCH IN THE D FALL. THEY ARE THEN ENROLLED IN THIS COURSE IN THE SPR YEAR. CS AND INFORM MAJORS MAY PETITION TO COUNT AS UPD APPROVAL REQUIRED, SUBJECT TO PROGRAM RULES TH INDEPENDENT STUDY COURSES.
CICS 398T P-CPT		UNDERGRADUATE CS AND INFORM MAJORS ONLY.	INTERNATIONAL UNDERGRADUATE STUDENTS SHOULD REFER WEBSITE FOR DETAILS ABOUT CURRICULAR PRACTICAL TRAIN DETAILS ABOUT REGISTRATION AND THE CPT APPLICATION PF MAJORS: https://cicscareers.notion.site/CPT-Process-for-Internships c0f1d14ccfe5448ba786583a49993209
CICS 590P TECHNLGY POLICY AND INNOVATION Emily Nutwell, Carolina Rossini	UNDERGRADUATE PREREQUISITE: CICS 305 WITH A GRADE OF C OR BETTER.	LEC 01: JUNIOR AND SENIOR CS AND INFORM MAJORS ONLY. LEC 02: MS-CMPSCI GRADUATE STUDENTS ONLY.	CROSS-LISTED WITH SPP 590P. LEC 01 FOR UNDERGRADS; LE CS/INFORM MAJORS WHO HAVE COMPLETED AN ALTERNATE J C OR BETTER WILL BE CONSIDERED. STUDENTS NEEDING SPI MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://ww edu/academics/course-overrides
CICS 598T P-CPT		CMPSCI GRADUATE STUDENTS ONLY.	COMPUTER SCIENCE GRADUATE STUDENTS INTERESTED IN P SUBMIT AN EXPERIENTIAL LEARNING REQUEST IN SPIRE. STA GRADUATE STUDENTS FOR FALL AND SPRING IN THE UNIV SE WINTER AND SUMMER IN THE UWW SECTION. DETAILS ABOUT THE CPT APPLICATION PROCESS FOR CMPSCI GRADUATE STL //cicscareers.notion.site/CPT-Process-for-Internships-c0f1d14ccfe544
COMPSCI 119 INTRO PROGRAMMING Devdhar Patel		UNDERGRADUATE NON-CS MAJORS ONLY.	CS MAJORS ARE NOT ELIGIBLE FOR THIS COURSE. AFTER SO FRESHMEN REGISTER, WILL OPEN TO JUNIORS. NON-CS JUNI FOR THE ELIGIBILITY RESTRICTION TO BE REMOVED TO SELF- SHOULD NOT REQUEST AN OVERRIDE. STUDENTS NEEDING S MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://ww edu/academics/course-overrides
COMPSCI 198C P-INTRO-C PROGRAMMING LANGUAGE Meng-Chieh Chiu, Timothy Richards	CICS 160 (PREVIOUSLY INFO 190T OR COMPSCI 186 OR CICS 210) WITH A GRADE OF C OR BETTER OR COMPSCI 121 WITH A GRADE OF B OR BETTER.	FRESHMEN, SOPHOMORE, AND JUNIORS ONLY.	STARTING FALL 2023, PASSING COMPSCI 198C IS A REQUIRED COMPSCI 230. STUDENTS WITH AP OR TRANSFER CREDIT FOF NEED AN OVERRIDE FOR REGISTRATION. STUDENTS NEEDING PERMISSION MUST REQUEST OVERRIDE VIA THE ON-LINE FOR umass.edu/academics/course-overrides
COMPSCI 220 PGMG METHODOLOGY Marius Minea	CICS 210 (OR COMPSCI 187) WITH A GRADE OF C OR BETTER.	CS MAJORS ONLY.	SEATS ARE BEING SAVED FOR INCOMING TRANSFER STUDEN NEW STUDENT ORIENTATION AND TRANSFER (NSOT) ENROLLI REMAINING SEATS WILL BE RELEASED PRIOR TO CLASS STAF WILL BE RELEASED AT THAT TIME. STUDENTS NEEDING SPEC MUST REQUEST OVERRIDE VIA THE ON-LINE FORM: https://www edu/academics/course-overrides

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FER TO THE IPO AAINING (CPT). SEE N PROCESS FOR CS hips-

; LEC 02 FOR GRADS. TE JYW COURSE WITH A SPECIAL PERMISSION //www.cics.umass.

N PURSUING CPT MUST STAFF WILL ENROLL SECTION AND FOR OUT REGISTRATION AND STUDENTS: https: 45448ba786583a49993209

SOPHOMORE AND UNIORS SHOULD WAIT LF-ENROLL AND G SPECIAL PERMISSION //www.cics.umass.

ED PREREQUISITE FOR FOR COMPSCI 121 WILL DING SPECIAL FORM: https://www.cics.

ENTS UNTIL THE END OF DLLMENT PERIOD. TART. REMAINING SEATS PECIAL PERMISSION www.cics.umass.

	PREREQUISITES	ELIGIBILITY RESTRICTIONS	CLASS NOTES/COMMENTS INFORMATION ONLY - DOES NOT AFFECT SI
COMPSCI 230 CMPTR SYS PRINC Phuthipong Bovornkeeratiroj, Meng-Chieh Chiu	CICS 210 (OR COMPSCI 187) WITH A GRADE OF C OR BETTER AND COMPSCI 198C.	CS MAJORS ONLY.	STARTING FALL 2023, PASSING COMPSCI 198C IS A REQUIRED PREREQUISITE. SEATS ARE BEING SAVED FOR INCOMING TRANS UNTIL THE END OF NEW STUDENT ORIENTATION AND TRANSFER ENROLLMENT PERIOD. REMAINING SEATS WILL BE RELEASED PF START. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUE THE ON-LINE FORM: https://www.cics.umass.edu/academics/course-ov
COMPSCI 240 RSNG UNDER UNCERTAINTY Mark Wilson	CICS 160 (PREVIOUSLY INFO 190T OR COMPSCI 187 OR CICS 210) AND MATH 132, BOTH WITH A GRADE OF C OR BETTER.	Open to UNDERGRADUATES	SEATS ARE BEING SAVED FOR INCOMING TRANSFER STUDENTS NEW STUDENT ORIENTATION AND TRANSFER (NSOT) ENROLLME REMAINING SEATS WILL BE RELEASED PRIOR TO CLASS START. NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDE VIA T https://www.cics.umass.edu/academics/course-overrides
<b>COMPSCI 250</b> INTRO TO COMPUTATION David Barrington, Mordecai Golin	CICS 160 (PREVIOUSLY INFO 190T OR COMPSCI 187 OR ECE 241 OR CICS 210) AND MATH 132, BOTH WITH A GRADE OF C OR BETTER.	CS, CSENG, AND MATH MAJORS ONLY.	SEATS ARE BEING SAVED FOR INCOMING TRANSFER STUDENTS NEW STUDENT ORIENTATION AND TRANSFER (NSOT) ENROLLME REMAINING SEATS WILL BE RELEASED PRIOR TO CLASS START. NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDE VIA T https://www.cics.umass.edu/academics/course-overrides
COMPSCI 311 INTRO TO ALGORITHMS Marius Minea, Daniel Sheldon	CICS 210 (OR COMPSCI 187) AND COMPSCI 250 (OR MATH 455), BOTH WITH A GRADE OF C OR BETTER.	SOPHOMORE, JUNIOR AND SENIOR CS MAJORS ONLY.	SEATS ARE BEING SAVED FOR INCOMING TRANSFER STUDENTS NEW STUDENT ORIENTATION AND TRANSFER (NSOT) ENROLLME JUNIOR AND SENIOR CS MAJORS REGISTER, WILL OPEN TO SOPI SOPHOMORE CS MAJORS SHOULD WAIT FOR THE ELIGIBILITY RE REMOVED TO SELF-ENROLL AND SHOULD NOT REQUEST AN OVE REMAINING SEATS WILL BE RELEASED PRIOR TO CLASS START. NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDE VIA T https://www.cics.umass.edu/academics/course-overrides
<b>COMPSCI 320</b> INTRO TO SOFTWARE ENGINEERING Gordon Anderson, Jaime Davila, Matthew Rattigan	COMPSCI 220 WITH GRADE OF C OR BETTER.	SENIOR, JUNIOR AND SOPHOMORE CS MAJORS.	NO OPTION FOR PASS/FAIL. SATISFIES INTEGRATIVE EXPERIENC FOR CS MAJORS. MEETS WITH COMPSCI 429. GRADUATING SEN PRIORITIZED AND PRE-ENROLLED BY THE PROGRAM. SEATS AR FOR INCOMING TRANSFER STUDENTS UNTIL THE END OF NEW S ORIENTATION AND TRANSFER (NSOT) ENROLLMENT PERIOD. AFT SENIOR CS MAJORS REGISTER, WILL OPEN TO SOPHOMORES. S MAJORS SHOULD WAIT FOR THE ELIGIBILITY RESTRICTION TO BE SELF-ENROLL AND SHOULD NOT REQUEST AN OVERRIDE. REMAI BE RELEASED PRIOR TO CLASS START. STUDENTS NEEDING SPI PERMISSION MUST REQUEST OVERRIDE VIA THE ON-LINE FORM: umass.edu/academics/course-overrides
COMPSCI 326 WEB PROGRAMMING Meng-Chieh Chiu	COMPSCI 220 (OR COMPSCI 230) WITH A GRADE OF C OR BETTER.	JUNIOR AND SENIOR CS AND INFORM MAJORS ONLY.	U1 LEC 01 IS HYBRID. STUDENTS IN LEC 01 WILL ATTEND CLASS I TUESDAYS AND THURSDAYS. U01 LEC 01 IS FULLY ONLINE AND S REQUIRED TO WATCH LECTURES SYNCHRONOUSLY ON TUESDA THURSDAYS. REQUIRED LABORATORY ATTENDANCE IS ON-LINE SYNCHRONOUSLY FOR BOTH SECTIONS. NO OPTION FOR PASS/ INTEGRATIVE EXPERIENCE REQUIREMENT FOR CS AND INFORM STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVEI ON-LINE FORM: https://www.cics.umass.edu/academics/course-overric
COMPSCI 328 MOBILE HEALTH SENSING&ANALYTCS Phuc Nguyen	CS MAJORS: CICS 210 (OR COMPSCI 187) WITH A GRADE OF C OR BETTER. INFORM MAJORS: INFO 248 AND CICS 160 (PREVIOUSLY INFO 190T OR COMPSCI 186 OR COMPSCI 187), BOTH WITH A GRADE OF C OR BETTER.	JUNIOR AND SENIOR CS AND INFORM MAJORS ONLY.	SEATS ARE BEING SAVED FOR INCOMING TRANSFER STUDENTS NEW STUDENT ORIENTATION AND TRANSFER (NSOT) ENROLLME REMAINING SEATS WILL BE RELEASED PRIOR TO CLASS START. NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDE VIA T https://www.cics.umass.edu/academics/course-overrides
COMPSCI 345 PRACT & APPLICS OF DATA MGMT Gordon Anderson	CS MAJORS: CICS 210 (OR COMPSCI 187) WITH A GRADE OF C OR BETTER. INFORM MAJORS: INFO 248 AND CICS 160 (PREVIOUSLY INFO 190T OR COMPSCI 186 OR COMPSCI 187), BOTH WITH A GRADE OF C OR BETTER.	JUNIOR AND SENIOR CS AND INFORM MAJORS ONLY.	SEATS ARE BEING SAVED FOR INCOMING TRANSFER STUDENTS NEW STUDENT ORIENTATION AND TRANSFER (NSOT) ENROLLME REMAINING SEATS WILL BE RELEASED PRIOR TO CLASS START. EXPECTED TO HAVE BASIC PROGRAMMING SKILLS, AND BE ABLE IN CLASS. STUDENTS WHO HAVE TAKEN COMPSCI 445 ARE NOT SHOULD NOT ENROLL. STUDENTS NEEDING SPECIAL PERMISSIC OVERRIDE VIA THE ON-LINE FORM: https://www.cics.umass.edu/aca overrides
COMPSCI 348 PRINCIPLES OF DATA SCIENCE David Jensen	CICS 210 (OR COMPSCI 187), COMPSCI 240, AND COMPSCI 250 (OR MATH 455), ALL WITH A GRADE OF C OR BETTER.	JUNIOR AND SENIOR CS MAJORS ONLY.	STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVE ON-LINE FORM: https://www.cics.umass.edu/overrides.

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PREREQUISITES	ELIGIBILITY RESTRICTIONS	CLASS NOTES/COMMENTS INFORMATION ONLY - DOES NOT AFFE
COMPSCI 230 WITH GRADE OF C OR BETTER.	JUNIOR AND SENIOR CS MAJORS ONLY.	STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST C ON-LINE FORM: https://www.cics.umass.edu/academics/course-ov
COMPSCI 230 (OR E&C-ENG 322) WITH A GRADE OF C OR BETTER.	JUNIOR AND SENIOR CS, INFORM AND CSENG MAJORS ONLY.	PREVIOUSLY COMPSCI 390R. MEETS WITH COMPSCI 590AF B 2025. ALTHOUGH OPEN TO INFORM MAJORS, THIS COURSE D AN INFORM ELECTIVE. STUDENTS NEEDING SPECIAL PERMIS OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.ed overrides
COMPSCI 240 OR COMPSCI 383 WITH A GRADE OF C OR BETTER.	JUNIOR AND SENIOR CS MAJORS ONLY.	A BACKGROUND IN LINEAR ALGEBRA (MATH 235) IS RECOMMI NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES FORM: https://www.cics.umass.edu/academics/course-overrides
CICS 210 (OR COMPSCI 187) AND MATH 235 (OR INFO 150 OR COMPSCI 240), BOTH WITH A GRADE OF C OR BETTER.	JUNIOR AND SENIOR CS MAJORS ONLY.	STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST C ON-LINE FORM: https://www.cics.umass.edu/academics/course-ov
COMPSCI 230 WITH A GRADE OF C OR BETTER.	JUNIOR AND SENIOR CS MAJORS ONLY.	STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST C ON-LINE FORM: https://www.cics.umass.edu/academics/course-ove
CS MAJORS: CICS 210 AND COMPSCI 240 (OR STATISTC 315, PREVIOUSLY STATISTC 515), BOTH WITH A GRADE OF C OR BETTER. INFORM MAJORS: INFO 348 AND STATISTC 315 (PREVIOUSLY STATISTC 515), BOTH WITH A GRADE OF C OR BETTER.	JUNIOR AND SENIOR CS AND INFORM MAJORS ONLY.	SOME KNOWLEDGE OF PYTHON IS ASSUMED FOR ELIGIBLE S COMPSCI 187 IN PLACE OF THE CICS 210 PREREQUISITE VIA ( NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES FORM: https://www.cics.umass.edu/academics/course-overrides
COMPSCI 220 (OR COMPSCI 230), COMPSCI 240 (OR STATISTC 315, PREVIOUSLY STATISTC 515), AND MATH 233, ALL WITH A GRADE OF C OR BETTER.	JUNIOR AND SENIOR CS AND INFORM MAJORS ONLY.	STUDENTS WHO HAVE COMPLETED COMPSCI 589 ARE NOT E COURSE AND SHOULD NOT ENROLL. STUDENTS WITH PRIOR MACHINE LEARNING OR WHO ARE ALREADY PASSIONATE AB ARE ENCOURAGED TO TAKE COMPSCI 589 INSTEAD. STUDEN PERMISSION MUST REQUEST OVERRIDES VIA ON-LINE FORM umass.edu/academics/course-overrides
COMPSCI 230 AND COMPSCI 240 (OR STATISTC 315, PREVIOUSLY STATISTC 515), BOTH WITH A GRADE OF C OR BETTER.	JUNIOR AND SENIOR CS AND INFORM MAJORS ONLY.	NO PASS/FAIL OPTION. STUDENTS NEEDING SPECIAL PERMIS OVERRIDES VIA ON-LINE FORM: https://www.cics.umass.edu/aca
		CICS CAREERS AND INSTRUCTOR PERMISSION REQUIRED.
	COMPSCI 230 WITH GRADE OF C OR BETTER. COMPSCI 230 (OR E&C-ENG 322) WITH A GRADE OF C OR BETTER. COMPSCI 240 OR COMPSCI 383 WITH A GRADE OF C OR BETTER. CICS 210 (OR COMPSCI 187) AND MATH 235 (OR INFO 150 OR COMPSCI 240), BOTH WITH A GRADE OF C OR BETTER. COMPSCI 230 WITH A GRADE OF C OR BETTER. COMPSCI 230 (OR COMPSCI 240 (OR STATISTC 315, PREVIOUSLY STATISTC 515), BOTH WITH A GRADE OF C OR BETTER. COMPSCI 220 (OR COMPSCI 230), COMPSCI 240 (OR STATISTC 315, PREVIOUSLY STATISTC 515), AND MATH 233, ALL WITH A GRADE OF C OR BETTER. COMPSCI 230 AND COMPSCI 240 (OR STATISTC 315, PREVIOUSLY STATISTC 515), BOTH WITH A GRADE	COMPSCI 230 WITH GRADE OF C OR BETTER.       JUNIOR AND SENIOR CS MAJORS ONLY.         COMPSCI 230 (OR E&C-ENG 322) WITH A GRADE OF C       JUNIOR AND SENIOR CS, INFORM AND CSENG         OR BETTER.       JUNIOR AND SENIOR CS, INFORM AND CSENG         COMPSCI 240 OR COMPSCI 383 WITH A GRADE OF C       JUNIOR AND SENIOR CS MAJORS ONLY.         COMPSCI 240 OR COMPSCI 383 WITH A GRADE OF C       JUNIOR AND SENIOR CS MAJORS ONLY.         OR BETTER.       JUNIOR AND SENIOR CS MAJORS ONLY.         OCS 210 (OR COMPSCI 187) AND MATH 235 (OR INFO 150 OR COMPSCI 240), BOTH WITH A GRADE OF C OR       JUNIOR AND SENIOR CS MAJORS ONLY.         COMPSCI 230 WITH A GRADE OF C OR BETTER.       JUNIOR AND SENIOR CS MAJORS ONLY.         COMPSCI 230 WITH A GRADE OF C OR BETTER.       JUNIOR AND SENIOR CS MAJORS ONLY.         COMPSCI 230 WITH A GRADE OF C OR BETTER.       JUNIOR AND SENIOR CS MAJORS ONLY.         ORDER CICS 210 AND COMPSCI 240 (OR SINTIST CS 15, PREVIOUSLY STATIST CS 15), BOTH WITH A GRADE OF C OR BETTER.       JUNIOR AND SENIOR CS AND INFORM MAJORS ONLY.         COMPSCI 220 (OR COMPSCI 240, IOR STATIST CS 15, PREVIOUSLY STATIST CS 15), BOTH WITH A GRADE OF C OR BETTER.       JUNIOR AND SENIOR CS AND INFORM MAJORS ONLY.         COMPSCI 220 (OR COMPSCI 240, IOR STATIST CS 15), BOTH WITH A GRADE OF C OR BETTER.       JUNIOR AND SENIOR CS AND INFORM MAJORS ONLY.         COMPSCI 220 (OR COMPSCI 240 (OR STATIST CS 15), BOTH WITH A GRADE ONLY.       JUNIOR AND SENIOR CS AND INFORM MAJORS ONLY.

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	PREREQUISITES	ELIGIBILITY RESTRICTIONS	CLASS NOTES/COMMENTS INFORMATION ONLY - DOES NOT AFFE
COMPSCI 403 INTRO ROBTCS:PRCP,MECH,DYN,CTRL	MATH 235 AND COMPSCI 220 (OR COMPSCI 230) WITH GRADE OF C OR BETTER.	JUNIOR AND SENIOR CS MAJORS ONLY.	UNDERGRADUATE PROGRAMMING CLASS, MATLAB OR PYTHO EXPERIENCE IS PREFERRED. STUDENTS NEEDING SPECIAL P REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics edu/academics/course-overrides
Donghyun Kim			
COMPSCI 420 SOFTWARE ENTREPRENEURSHIP	COMPSCI 320 (OR COMPSCI 326) WITH A GRADE OF C OR BETTER.	JUNIOR AND SENIOR CS AND INFORM MAJORS ONLY.	THIS COURSE QUALIFIES AS A 'CAPSTONE COURSE' FOR THE CERTIFICATE IN PUBLIC INTEREST TECHNOLOGY, ASSUMING PRODUCED IS DEEMED SUITABLE BY THE INSTRUCTOR. MAK USING THIS COURSE FOR THIS PURPOSE WITH THE INSTRUC BEGINNING OF THE COURSE. FOR MORE INFORMATION ON T
Matthew Rattigan			BEGINNING OF THE COURSE. FOR MORE INFORMATION ON T https://groups.cs.umass.edu/pit/undergraduate-pit-certificate/. STUD THE UNDERGRADUATE CERTIFICATE IN PUBLIC INTEREST TEC ELIGIBLE VIA OVERRIDE. IF YOU HAVE QUESTIONS ABOUT THI EMAIL THE PIT CERTIFICATE PROGRAM DIRECTOR, PROFESSO AT cschweik@umass.edu. STUDENTS NEEDING SPECIAL PERMI REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics edu/academics/course-overrides
COMPSCI 426 SCALABLE WEB SYSTEMS	COMPSCI 320 OR COMPSCI 326 WITH A GRADE OF C OR BETTER.	U1 LEC 01: JUNIOR AND SENIOR CS AND INFORM MAJORS ONLY. UO1 LEC 01: SENIOR CS MAJORS ONLY.	IT IS RECOMMENDED TO HAVE COMPLETED COMPSCI 220 (PR METHODOLOGY) AND COMPSCI 230 (COMPUTER SYSTEMS PR COMPSCI 377 (OPERATING SYSTEMS), HOWEVER, THIS IS NOT
Timothy Richards			MAKE YOUR EXPERIENCE MORE RICH (E.G., BACKGROUND IN DEPLOYMENT, BASIC SECURITY, NETWORK PROTOCOLS, PRO SERVER ARCHITECTURE, AND GENERAL OPERATING SYSTEM LEC 01 FOR SENIOR CS MAJORS ONLY IS FULLY ONLINE WITH SYNCHRONOUS LIVE LEC. MW 2:30-3:45. STUDENTS NEEDING PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FO umass.edu/academics/course-overrides
COMPSCI 429 SOFTWARE ENGINEERING PROJ MGMT	COMPSCI 320 WITH A GRADE OF B OR BETTER.	UNDERGRADUATE CS MAJORS ONLY.	INSTRUCTOR CONSENT REQUIRED. MEETS WITH COMPSCI 32 STUDENTS MAY EMAIL INSTRUCTOR FOR PERMISSION TO EN APPROVED TO ENROLL, REFER TO INSTRUCTOR PERMISSION REQUEST AND SUBMIT VIA THE ON-LINE FORM: https://www.cic
Gordon Anderson, Jaime Davila, Matthew Rattigan			edu/academics/course-overrides
COMPSCI 445 INFORMATION SYSTEMS Trek Palmer	COMPSCI 220 (OR COMPSCI 230) AND COMPSCI 311 AND COMPSCI 345, ALL WITH GRADE OF C OR BETTER.	JUNIOR AND SENIOR CS MAJORS ONLY.	WITH INSTRUCTOR PERMISSION, STUDENTS WITH PRIOR EXP DATABASES MAY SUBSTITUTE ONE OF COMPSCI 320, 326, OR OF C OR BETTER FOR THE COMPSCI 345 PREREQUISITE. IF A STUDENTS WHO ARE NOT CS MAJORS BUT HAVE SUFFICIENT EXPERIENCE OR CS GRADUATE STUDENTS MAY SUBMIT AN INSTRUCTOR CONSIDERATION. STUDENTS NEEDING SPECIAL
			REQUEST OVERRIDE VIA THE ON-LINE FORM: https://www.cics. edu/academics/course-overrides
COMPSCI 446 SEARCH ENGINES	COMPSCI 240 OR COMPSCI 383 WITH A GRADE OF C OR BETTER.	JUNIOR AND SENIOR CS MAJORS ONLY.	INSTRUCTOR WILL CONSIDER STATISTC 315/515 AS AN ALTER IN PLACE OF COMPSCI 240 VIA OVERRIDE IF AVAILABLE SEAT NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDE VI https://www.cics.umass.edu/academics/course-overrides
Razieh Rahimi			
COMPSCI 453 COMPUTER NETWORKS	COMPSCI 230 (OR COMPSCI 377) WITH A GRADE OF C OR BETTER.	JUNIOR AND SENIOR CS MAJORS ONLY.	STUDENTS WILL BENEFIT SIGNIFICANTLY FROM A PRIOR OR C EXPOSURE TO PROBABILITY (COMPSCI 240), ALGORITHMS (CC MULTI-THREADED PROGRAMMING (COMPSCI 377 OPERATING ALTHOUGH THESE ARE NOT STRICT PREREQUISITES, STUDEN
Arun Venkataramani			PROGRAM IN A STRUCTURED HIGH-LEVEL PROGRAMMING LA JAVA, C OR C++, PYTHON, ETC. PROGRAMMING PROJECTS IN STUDENT CHOICE. STUDENTS NEEDING SPECIAL PERMISSIO OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu overrides
COMPSCI 466	COMPSCI 311 WITH A GRADE OF C OR BETTER.	JUNIOR AND SENIOR CS MAJORS ONLY.	STUDENTS WHO HAVE TAKEN HIGHER-LEVEL MATHEMATICS ( 411, MATH 455, MATH 471, OR MATH 513/COMPSCI 575) ARE PA
APPLIED CRYPTOGRAPHY Adam O'Neill			TO ENROLL. STUDENTS NEEDING SPECIAL PERMISSION MUS OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu overrides
COMPSCI 491G S-COMPUTER NETWORKING LAB	COMPSCI 453 WITH A GRADE OF C OR BETTER.	JUNIOR AND SENIOR CS MAJORS ONLY.	STUDENTS MAY WORK INDEPENDENTLY IN LGRT 224 TO COM ASSIGNMENTS. STUDENTS NEEDING SPECIAL PERMISSION M OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu overrides
Parviz Kermani			

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HON PROGRAMMING PERMISSION MUST cics.umass.

THE UNDERGRADUATE NG THE STUDENT WORK MAKE SURE TO DISCUSS RUCTOR AT THE IN THE CERTIFICATE: TUDENTS ENROLLED IN TECHNOLOGY ARE THE PIT CERTIFICATE, ESSOR CHARLIE SCHWEIK RMISSION MUST .cics.umass.

(PROGRAMMING S PRINCIPLES), OR NOT REQUIRED BUT WILL D IN WEB APP PROCESSES, CLIENT FEMS CONCEPTS). UO1 (ITH OPTIONAL ING SPECIAL E FORM: https://www.cics.

I 320. ELIGIBLE ENROLL. ONCE ON ON THE OVERRIDE .cics.umass.

EXPERIENCE IN OR 377 WITH A GRADE F AVAILABLE SEATS, ENT PROGRAMMING N OVERRIDE FOR CIAL PERMISSION MUST ics.umass.

ERNATE PREREQUISITE ATS. STUDENTS E VIA THE ON-LINE FORM:

DR CONCURRENT (COMPSCI 311), AND ING SYSTEMS) DENTS MUST BE ABLE TO LANGUAGE, SUCH AS S IN A LANGUAGE OF SION MUST REQUEST .edu/academics/course-

CS (IN PARTICULAR MATH PARTICULARLY INVITED UST REQUEST .edu/academics/course-

DMPLETE LAB MUST REQUEST edu/academics/course-

	PREREQUISITES	ELIGIBILITY RESTRICTIONS	CLASS NOTES/COMMENTS INFORMATION ONLY - DOES NOT AFFEC
COMPSCI 496C IS-SOC ENTRPRNRSHP LAUNCHPAD Matthew Rattigan	COMPSCI 420 WITH A GRADE OF C OR BETTER.	JUNIOR AND SENIOR CS AND INFORM MAJORS ONLY.	INSTRUCTOR CONSENT REQUIRED. OPEN TO CS AND INFORM SUCCESSFULLY COMPLETED COMPSCI 420.
COMPSCI 501 FORMAL LANGUAGE THEORY David Barrington	UNDERGRADUATES: COMPSCI 311 WITH A GRADE OF C OR BETTER.	LEC 01: JUNIOR AND SENIOR CS AND MATH MAJORS ONLY. LEC 02: MS-CMPSCI GRADUATE STUDENTS ONLY.	LEC 01 FOR UNDERGRADS; LEC 02 FOR GRADS. IT IS RECOMM UNDERGRADUATE STUDENTS HAVE A GRADE OF B- OR BETTE ORDER TO ATTEMPT 501. INSTRUCTOR WILL CONSIDER CONG ENROLLMENT WITH COMPSCI 311 FOR STUDENTS WHO HAVE COMPSCI 250 WITH A GRADE OF A, IF AVAILABLE SEATS. SEA FOR INCOMING GRAD STUDENT REGISTRATION. STUDENTS N PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FO umass.edu/academics/course-overrides
COMPSCI 508 ETHICAL CONSIDRTNS IN COMPUTNG Michelle Trim		CMPSCI GRADUATE STUDENTS ONLY.	UNDERGRADUATE CS AND INFORM MAJORS WHO HAVE SUCC COMPLETED CICS 305 WITH A C OR BETTER WILL BE CONSIDE THIS COURSE. THIS COURSE FULFILLS THE ETHICS REQUIRE COURSE COUNTS AS AN ELECTIVE FOR THE CS AND INFORM NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES FORM: https://www.cics.umass.edu/academics/course-overrides
COMPSCI 514 ALGORITHMS FOR DATA SCIENCE Andrew McGregor	UNDERGRADUATES: COMPSCI 240 (OR STATISTCS 515) AND COMPSCI 311, BOTH WITH A GRADE OF B+ OR BETTER (OR COMPSCI 240, STATISTCS 315/515, COMPSCI 311, MATH 233, AND MATH 235, ALL WITH A GRADE OF C OR BETTER).	UNIV LEC 01: JUNIOR AND SENIOR CS MAJORS ONLY. UNIV LEC 02: MS-CMPSCI GRADUATE STUDENTS ONLY.	LEC 01 FOR UNDERGRADS; LEC 02 FOR GRADS. SEATS HELD I INCOMING GRAD STUDENT REGISTRATION. STUDENTS NEEDI PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FO umass.edu/academics/course-overrides
COMPSCI 520 THEORY AND PRACTICE-SOFTENGIN Heather Conboy	UNDERGRADUATES: COMPSCI 320 (OR COMPSCI 220 AND COMPSCI 326) WITH C OR BETTER.	LEC 01: JUNIOR AND SENIOR CS MAJORS ONLY. LEC 02: MS-CMPSCI GRADUATE STUDENTS ONLY.	LEC 01 FOR UNDERGRADS; LEC 02 FOR GRADS. SEATS HELD INCOMING GRAD STUDENT REGISTRATION. STUDENTS NEEDI PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FO umass.edu/academics/course-overrides
COMPSCI 532 SYSTEMS FOR DATA SCIENCE Peter Klemperer	UNDERGRADUATES: COMPSCI 377 AND COMPSCI 445, BOTH WITH A GRADE OF C OR BETTER.	UNIV LEC 01: JUNIOR AND SENIOR CS MAJORS ONLY. UNIV LEC 02: MS-CMPSCI GRADUATE STUDENTS ONLY. U+ LEC 01: ONLINE MS-CMPSCI PROGRAM STUDENTS ONLY.	UNIV LEC 01 FOR UNDERGRADS; UNIV LEC 02 FOR ELIGIBLE G LEC 02 FOR INCOMING STUDENT REGISTRATION. U+ LEC 01 F CMPSCI PROGRAM STUDENTS ONLY. COURSE IS ONLINE WIT LIVE LECTURES ON MW 2:30-3:45 PM EDT. PHDS OR ANY STUD WAIVER CANNOT ENROLL IN A U+ SECTION. PHD OR OTHER G STUDENTS WHO NEED A UNIVERSITY COURSE SHOULD REGIS STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST O ON-LINE FORM: https://www.cics.umass.edu/academics/course-ove
COMPSCI 535 COMPUTER ARCHITECTURE Charles Weems	UNDERGRADUATES: COMPSCI 335 WITH A GRADE OF C OR BETTER.	LEC 01: JUNIOR AND SENIOR CS MAJORS ONLY. LEC 02: MS-CMPSCI GRADUATE STUDENTS ONLY.	LEC 01 FOR UNDERGRADS; LEC 02 FOR GRADS. SEATS HELD I INCOMING GRAD STUDENT REGISTRATION. STUDENTS NEEDI PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FO umass.edu/academics/course-overrides
COMPSCI 546 APPLIED INFORMATION RETRIEVAL Hamed Zamani	UNDERGRADUATES: COMPSCI 320 (OR COMPSCI 326) AND COMPSCI 383 (OR COMPSCI 389 OR COMPSCI 446 OR COMPSCI 485 OR COMPSCI 585) BOTH WITH C OR BETTER.	LEC 01: JUNIOR AND SENIOR CS MAJORS ONLY. LEC 02: MS-CMPSCI GRADUATE STUDENTS ONLY.	LEC 01 FOR UNDERGRADS; LEC 02 FOR GRADS. SEATS SAVED INCOMING STUDENT REGISTRATION. STUDENTS NEEDING SP MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://ww edu/academics/course-overrides
COMPSCI 561 SYSTEM DEFENSE AND TEST Parviz Kermani	UNDERGRADUATES: COMPSCI 360 (OR COMPSCI 460 OR COMPSCI 560 OR COMPSCI 660 OR E&C-ENG 371) AND COMPSCI 453 (OR E&C-ENG 325), BOTH WITH A GRADE OF C OR BETTER.	UNIV LEC 01: JUNIOR AND SENIOR CS MAJORS ONLY. UNIV LEC 02: GRADUATE CMPSCI AND ECE STUDENTS ONLY. U+ LEC 01: GRADUATE CMPSCI STUDENTS ONLY.	UNIV LEC 01 FOR UNDERGRADS; UNIV LEC 02 FOR GRADS. IF ELIGIBLE CSENG MAJORS WITH ECE 371 AND ECE 325 MUST W OPEN TO SELF-ENROLL (DO NOT REQUEST OVERRIDES). U+ L COURSE FOR GRADUATE CMPSCI STUDENTS ONLY. GRADUAT OTHER DEPARTMENTS WITH INSTRUCTOR PERMISSION, IF AV STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST O ON-LINE FORM: https://www.cics.umass.edu/academics/course-ove

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RM MAJORS WHO HAVE

DMMENDED THAT TTER IN COMPSCI 311 IN ONCURRENT VE COMPLETED EATS HELD IN LECT 02 'S NEEDING SPECIAL E FORM: https://www.cics.

ICCESSFULLY IDERED FOR A SEAT IN REMENT FOR HLS. THIS RM MAJORS. STUDENTS ES VIA THE ON-LINE

D IN LEC 02 FOR EDING SPECIAL FORM: https://www.cics.

LD IN LEC 02 FOR EDING SPECIAL FORM: https://www.cics.

E GRADS; SEATS HELD IN 01 FOR ONLINE MS-WITH SYNCHRONOUS TUDENT WITH A TUITION CR GRADUATE LEVEL EGISTER IN UNIV LEC 02. T OVERRIDES VIA THE -overrides

D IN LEC 02 FOR EDING SPECIAL FORM: https://www.cics.

ED IN LEC 02 FOR SPECIAL PERMISSION //www.cics.umass.

IF AVAILABLE SEATS, T WAIT FOR COURSE TO J+ LEC 01: ONLINE UATE STUDENTS FROM AVAILABLE SEATS. T OVERRIDES VIA THE overrides

	PREREQUISITES	ELIGIBILITY RESTRICTIONS	CLASS NOTES/COMMENTS INFORMATION ONLY - DOES NOT AFFECT
<b>COMPSCI 564</b> CYBER EFFECTS Jeffrey Hamalainen, Seth Landsman, Nick Merlino, Corre Steele, Edward Walters, Adam Woodbury	UNDERGRADUATES: COMPSCI 230 (OR E&C-ENG 322) AND COMPSCI 360 (PREVIOUSLY COMPSCI 460 OR COMPSCI 365 OR COMPSCI 390R OR COMPSCI 466 OR E&C-ENG 371), BOTH WITH A GRADE OF C OR BETTER.	UNIV LEC 01: JUNIORS AND SENIORS ONLY. UNIV LEC 02: GRADUATE CMPSCI AND ECE STUDENTS ONLY. U+ LEC 01: GRADUATE CMPSCI STUDENTS ONLY.	UNIV LEC 01 FOR UNDERGRADS; UNIV LEC 02 FOR GRADS. UNI SUBSTITUTE ANY INTRODUCTION TO COMPUTER/NETWORK SE THE 300-LEVEL OR HIGHER WITH A GRADE OF C OR BETTER FO WITH PERMISSION OF INSTRUCTOR. SEATS HELD IN LEC 02 FO STUDENT REGISTRATION. GRADUATE STUDENTS FROM OTHER WITH INSTRUCTOR PERMISSION, IF AVAILABLE SEATS. U+ LEC GRADUATE STUDENTS MAY BE CONSIDERED WITH INSTRUCTOC SYNCHRONOUSLY REMOTE ATTENDANCE VIA ZOOM REQUIRED SHOULD ATTEND ALL LECTURE SESSIONS. STUDENTS NEEDIN PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FOU umass.edu/academics/course-overrides
<b>COMPSCI 565</b> ADV DIGITAL FORENSIC SYSTEMS Peter Klemperer	UNDERGRADUATES: COMPSCI 365 OR COMPSCI 377 WITH A GRADE OF C OR BETTER.	UNIV LEC 01: JUNIOR AND SENIOR CS MAJORS ONLY. UNIV LEC 02: GRADUATE CMPSCI AND ECE STUDENTS ONLY. U+ LEC 01: GRADUATE CMPSCI STUDENTS ONLY.	STUDENTS WHO HAVE COMPLETED COMPSCI 590F ARE NOT E COURSE. UNIV LEC 01 FOR UNDERGRADS; UNIV LEC 02 FOR G ONLINE. CANVAS WILL BE USED AND ECHO360 FOR LECTURE DISTRIBUTION. SENIOR AND JUNIOR CSENG MAJORS WITH AP BACKGROUND WITH INSTRUCTOR PERMISSION, IF AVAILABLE FOR ONLINE MS-CMPSCI PROGRAM STUDENTS ONLY. STUDEN SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON //www.cics.umass.edu/academics/course-overrides
<b>COMPSCI 571</b> DATA VISUALIZATION&EXPLORATION Hamza Mohamed Elhamdadi	UNDERGRADUATES: COMPSCI 220 (OR COMPSCI 230 OR COMPSCI 326), WITH A GRADE OF C OR BETTER.	LEC 01: JUNIOR AND SENIOR CS MAJORS ONLY. LEC 02: MS-CMPSCI STUDENTS ONLY.	LEC 01 FOR UNDERGRADS; LEC 02 FOR GRADS. SEATS HELD IN AND SENIOR INFORM MAJORS AND IN LEC 02 FOR INCOMING G REGISTRATION. STUDENTS NEEDING SPECIAL PERMISSION MU OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/ overrides
<b>COMPSCI 589</b> MACHINE LEARNING Bruno Castro da Silva, STAFF	UNDERGRADUATES: [MATH 545 AND STATISTCS 315 (PREVIOUSLY STATISTCS 515) AND COMPSCI 240, ALL WITH A GRADE OF C OR BETTER.] OR [MATH 545 WITH A GRADE OF C OR BETTER AND COMPSCI 240 WITH A GRADE OF B+ OR BETTER.] OR [MATH 235 AND MATH 233, BOTH WITH A GRADE OF B+ OR BETTER, AND STATISTCS 315 (PREVIOUSLY STATISTCS 515) AND COMPSCI 240, BOTH WITH A GRADE OF C OR BETTER.] OR [MATH 235 AND MATH 233 AND COMPSCI 240, ALL WITH A GRADE OF B+ OR BETTER.]	UNIV LEC 01: JUNIOR AND SENIOR CS MAJORS ONLY. UNIV LEC 02: MS-CMPSCI GRADUATE STUDENTS ONLY.	LEC 01 FOR UNDERGRADS; LEC 02 FOR GRADS. SEATS HELD IN INCOMING GRAD STUDENT REGISTRATION. U+ LEC 01 FOR ON ONLY. STUDENTS NEEDING SPECIAL PERMISSION MUST REQU THE ON-LINE FORM: https://www.cics.umass.edu/academics/course
COMPSCI 590AB QUANTUM CRYPTOGRAPHY Filip Rozpedek	UNDERGRADUATES: MATH 132 AND MATH 235 AND COMPSCI 240 (OR STATISTC 315/515 OR PHYSICS 281 OR PHYSICS 287), ALL WITH A GRADE OF C OR BETTER.	LEC 01: SENIOR CS, MATH, PHYSICS, AND EE MAJORS ONLY. LEC 02: CMPSCI GRADUATE STUDENTS ONLY.	MEETS WITH COMPSCI 690BB. LEC 01 FOR UNDERGRADS; LEC STUDENTS WHO TAKE THIS COURSE CANNOT SIMULTANEOUSI ENROLL IN 690BB. SWAPPING BETWEEN 590AB AND 690BB IS O BEFORE THE END OF ADD/DROP. SEATS HELD FOR INCOMING STUDENT REGISTRATION. TITLE/DESCRIPTION CHANGE, EFFE THERE WILL BE CERTAIN OVERLAP WITH COMPSCI 490Q QUAN SCIENCE AND COMPSCI 690Q QUANTUM INFORMATION SYSTEM COURSE BUILDS ON SOME OF THE CONCEPTS INTRODUCED IN IT INTRODUCES ALL OF THEM INDEPENDENTLY SO NO KNOWLE INFORMATION IS NECESSARY, THOUGH IT WOULD BE HELPFUL COUNTS TOWARDS THE MS SECURITY CONCENTRATION AND T CERTIFICATE IN INFORMATION SECURITY. MATH, PHYSICS, AN STUDENTS SHOULD REQUEST AN OVERRIDE FOR CONSIDERAT NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES V FORM: https://www.cics.umass.edu/academics/course-overrides
COMPSCI 590AE MOBILE AND WIRELESS NETWORKS James Kurose	UNDERGRADUATE PREREQUISITE: COMPSCI 453 OR E&C-ENG 374 WITH A GRADE OF C OR BETTER.	U1 LEC 01: JUNIOR AND SENIOR CS MAJORS ONLY. U1 LEC 02: MS-CMPSCI STUDENTS ONLY. UO1 LEC 01: JUNIOR AND SENIOR CS MAJORS ONLY. UO1 LEC 02: MS-CMPSCI STUDENTS ONLY U+ LEC 01: MS-CMPSCI ONLINE PROGRAM STUDENTS ONLY.	U1 LEC 01 IS AN IN-PERSON SECTION FOR UNDERGRADS; U1 LI PERSON SECTION FOR GRADS; U01 LEC 01 IS A FULLY ONLINE UNDERGRADS AND U01 LEC 02 IS A FULLY ONLINE SECTION FO STUDENTS ARE REQUIRED TO PARTICIPATE AT THE SCHEDULE SYNCHRONOUS ATTENDANCE IS MANDATORY. AIMED MORE A RATHER THAN EE STUDENTS. ASSUMES STUDENTS HAVE ALR INTRODUCTORY NETWORKING COURSE (I.E., COMPSCI 453, E& EQUIVALENT). COURSE WILL OPEN TO EE MAJORS MEETING P AVAILABLE SEATS. EE MAJORS SHOULD WAIT FOR ELIGIBILITY ENROLL OR ADD TO THE WAITLIST AND SHOULD NOT REQUEST SEATS HELD FOR INCOMING GRADUATE STUDENT REGISTRATI MS-CMPSCI ONLINE PROGRAM STUDENTS ONLY. STUDENTS N PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FOU umass.edu/academics/course-overrides
COMPSCI 590AF REV ENGG&UNDRSTNDG EXPLOIT DEV Lurene Grenier	UNDERGRADUATE PREREQUISITE: COMPSCI 230 (OR E&C-ENG 322) WITH A GRADE OF C OR BETTER.	LEC 01: JUNIOR AND SENIOR CS, INFORM AND CSENG MAJORS ONLY. LEC 02: MS-CMPSCI STUDENTS ONLY.	MEETS WITH COMPSCI 367 (PREVIOUSLY 390R) BEGINNING SPH FOR UNDERGRADS; LEC 02 FOR GRADS. ALTHOUGH OPEN TO THIS COURSE IS NOT ON THE LIST OF PRE-APPROVED INFORM HELD FOR INCOMING GRADUATE STUDENT REGISTRATION. ST SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON //www.cics.umass.edu/academics/course-overrides

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UNDERGRADS MAY < SECURITY COURSE AT R FOR COMPSCI 360, 2 FOR INCOMING THER DEPARTMENTS EC 01: OTHER CTOR PERMISSION. IRED. STUDENTS EDING SPECIAL FORM: https://www.cics.

T ELIGIBLE FOR THIS R GRADS. CLASS IS RE VIDEO APPROPRIATE LE SEATS. U+ LEC 01 DENTS NEEDING ON-LINE FORM: https:

D IN LEC 01 FOR JUNIOR G GRAD STUDENT I MUST REQUEST edu/academics/course-

D IN LEC 02 FOR ONLINE MS-CMPSCI EQUEST OVERRIDES VIA urse-overrides

LEC 02 FOR GRADS. JUSLY, NOR LATER, S ONLY CONSIDERED NG GRADUATE FECTIVE SPRING 2025. JANTUM INFORMATION TEMS. WHILE THIS D IN THOSE COURSES, WLEDGE OF QUANTUM FUL. THIS COURSE ND THE GRADUATE AND EE GRADUATE RATION. STUDENTS S VIA THE ON-LINE

11 LEC 02 IS AN IN-INE SECTION FOR N FOR GRADS. ONLINE ULED MEETING TIME. RE AT CS STUDENTS ALREADY HAD AN E&C-ENG 374, OR G PREREQUISITE, IF ITY TO OPEN TO SELF-IEST AN OVERRIDE. ATION. U+ LEC 01 FOR S NEEDING SPECIAL FORM: https://www.cics.

SPRING 2025. LEC 01 TO INFORM MAJORS, PRM ELECTIVES. SEATS STUDENTS NEEDING ON-LINE FORM: https:

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	PREREQUISITES	ELIGIBILITY RESTRICTIONS	CLASS NOTES/COMMENTS INFORMATION ONLY - DOES NOT AFFE
COMPSCI 590QC QUANTUM COMMUNICATION Gayane Vardoyan	UNDERGRADUATE PREREQUISITE: MATH 235 AND COMPSCI 240 (OR STATISTC 315/515), BOTH WITH A GRADE OF C OR BETTER.	LEC 01: JUNIOR AND SENIOR CS MAJORS ONLY. LEC 02: MS-CMPSCI STUDENTS ONLY.	MEETS WITH COMPSCI 690QC. LEC 01 FOR UNDERGRADS; LE STUDENTS CAN ONLY RECEIVE CREDIT FOR EITHER 590QC O REGARDLESS OF SEMESTER. SWAPPING BETWEEN 590QC A CONSIDERED BEFORE THE END OF ADD/DROP. SEATS HELD STUDENT REGISTRATION. FAMILIARITY WITH PROBABILITY T ALGEBRA, AND COMPLEX NUMBERS. NO PRIOR FAMILIARITY CONCEPTS NEEDED. PHYSICS STUDENTS SHOULD WAIT UN ENROLL. ALTHOUGH NOT ON THE LIST OF PRE-APPROVED IN INTERESTED JUNIOR AND SENIOR INFORM MAJORS MEETING BE CONSIDERED VIA OVERRIDE. STUDENTS NEEDING SPECI REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cid edu/academics/course-overrides
COMPSCI 596E IS-ML APPLIED TO CHILD RESCUE Brian Levine		UNIV LEC 01: SENIOR CS MAJORS AND CS GRADUATE STUDENTS ONLY.	INSTRUCTOR PERMISSION REQUIRED. CS SENIOR OR CS GF WITH A MACHINE LEARNING BACKGROUND. WE EXPECT HIG COMPSCI 589 OR COMPSCI 682. PHDS OR ANY STUDENT WIT CANNOT ENROLL IN A UWW SECTION. ONLINE SYNCHRONOU REQUIRED. CONTACT INSTRUCTOR FOR CONSIDERATION A
COMPSCI 603 ROBOTICS Hao Zhang		CMPSCI AND ECE GRADUATE STUDENTS ONLY.	A BACKGROUND IN LINEAR ALGEBRA, DIFFERENTIAL EQUATI PROGRAMMING SKILLS ARE ASSUMED. INSTRUCTOR PERMI UNDERGRADUATE CS MAJORS CLEARED BY THE UPD, IF AVA HELD FOR INCOMING GRAD STUDENT REGISTRATION. STUD SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ( //www.cics.umass.edu/academics/course-overrides
<b>COMPSCI 611</b> ADVANCED ALGORITHMS Hedyeh Beyhaghi		CMPSCI GRADUATE STUDENTS ONLY.	MATHEMATICAL MATURITY WITH KNOWLEDGE OF ALGORITH COMPSCI 311 EXPECTED OF INCOMING CS GRADUATE STUD PERMISSION REQUIRED FOR UNDERGRADUATE CS MAJORS IF AVAILABLE SEATS. SEATS HELD FOR INCOMING GRAD STU STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST ON-LINE FORM: https://www.cics.umass.edu/academics/course-ov
COMPSCI 627 FIXING SOCIAL MEDIA Ethan Zuckerman		CMPSCI GRADUATE STUDENTS ONLY.	CROSS-LISTED WITH COMM 627 AND SPP 627.STUDENTS NEE PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE F umass.edu/academics/course-overrides
COMPSCI 645 DB DSGN & IMPLMNTN Marco Serafini		CMPSCI GRADUATE STUDENTS ONLY.	STUDENTS SHOULD HAVE TAKEN AN UNDERGRADUATE LEVI OPERATING SYSTEMS (COMPSCI 377) OR DATABASES (COMF FOR INCOMING GRAD STUDENT REGISTRATION. STUDENTS PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE F umass.edu/academics/course-overrides
<b>COMPSCI 651</b> OPTIMIZATION IN CS Madalina Fiterau Brostean		GRADUATE CMPSCI STUDENTS ONLY.	GRADUATE STUDENTS ENTERING THE COURSE ARE EXPECT STRONG WORKING KNOWLEDGE OF LINEAR ALGEBRA (MATH AND CALCULUS (EQUIVALENT TO A GRADE OF A IN MATH 233 KNOWLEDGE OF PROBABILITY AND STATISTICS. SOLID PROC HIGH-LEVEL LANGUAGE SUCH AS PYTHON, R OR MATLAB AR LEC 01 FOR GRADUATE CMPSCI STUDENTS ONLY; U+ LEC 01 PROGRAM STUDENTS ONLY. SEATS HELD FOR INCOMING GR REGISTRATION. STUDENTS NEEDING SPECIAL PERMISSION I OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.ec overrides
COMPSCI 677 DISTRIBUTED AND OPERATING SYS Prashant Shenoy		U1 LEC 01: GRADUATE CMPSCI AND ECE STUDENTS ONLY. U01 LEC 01: GRADUATE CMPSCI AND ECE STUDENTS ONLY. U+ LEC 01: ONLINE MS-CMPSCI PROGRAM STUDENTS ONLY.	LECTURES AVAILABLE BOTH SYCHRONOUSLY AND ASYNCHE RECORDINGS ARE AVAILABLE TO ALL STUDENTS IMMEDIATE CLASS. INSTRUCTOR PERMISSION REQUIRED FOR SENIOR ( BY THE UPD, IF AVAILABLE SEATS. BACKGROUND IN UNDER 377) IS HELPFUL. SEATS HELD FOR INCOMING GRAD STUDEN MS-ECE STUDENTS MAY ENROLL IN UNIVERSITY SECTION, BI U1 LEC 01: IN-PERSON, OPEN TO GRADUATE CMPSCI AND ECE LEC 01: ONLINE, OPEN TO GRADUATE CMPSCI AND ECE STU ONLINE MS-CMPSCI PROGRAM STUDENTS ONLY. STUDENTS PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE F umass.edu/academics/course-overrides

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S; LEC 02 FOR GRADS. C OR 690QC, NOT BOTH, C AND 690QC IS ONLY ELD FOR INCOMING GRAD Y THEORY, LINEAR ITY WITH QUANTUM UNTIL OPEN TO SELF-D INFORM ELECTIVES, ING PREREQUISITE WILL ECIAL PERMISSION MUST v.cics.umass.

GRADUATE STUDENT HIGH GRADES IN WITH A TUITION WAIVER NOUS MEETINGS ARE I AT brian@cs.umass.edu.

ATIONS, AND MISSION REQUIRED FOR VAILABLE SEATS. SEATS UDENTS NEEDING E ON-LINE FORM: https:

THMS AT THE LEVEL OF UDENTS. INSTRUCTOR RS CLEARED BY THE UPD, STUDENT REGISTRATION. ST OVERRIDES VIA THE -overrides

IEEDING SPECIAL E FORM: https://www.cics.

EVEL COURSE ON MPSCI 445). SEATS HELD TS NEEDING SPECIAL E FORM: https://www.cics.

ECTED TO HAVE A ATH 545 EQUIVALENT) 233), AS WELL AS BASIC ROGRAMMING SKILLS IN A ARE EXPECTED. UO1 01 FOR MS-CMPSCI GRAD STUDENT DN MUST REQUEST s.edu/academics/course-

CHRONOUSLY. LECTURE TELY AFTER EACH R CS MAJORS CLEARED ERGRAD OS (COMPSCI DENT REGISTRATION. , BUT NOT U+ SECTION. ECE STUDENTS. UO1 TUDENTS. U+ LEC 01: ITS NEEDING SPECIAL E FORM: https://www.cics.

	PREREQUISITES	ELIGIBILITY RESTRICTIONS	CLASS NOTES/COMMENTS INFORMATION ONLY - DOES NOT AFFE
OMPSCI 682 EURAL NETWORKS:MODERN INTRO huang Gan		UNIV LEC 01: CMPSCI GRADUATE STUDENTS ONLY. UWW LEC 01: ONLINE MS-CMPSCI GRADUATE PROGRAM STUDENTS ONLY.	U1 LEC 01 FOR ELIGIBLE GRADS; SEATS HELD FOR INCOMING REGISTRATION. U+ LEC 01 FOR ONLINE MS-CMPSCI PROGRA PHDS OR ANY STUDENT WITH A TUITION WAIVER CANNOT EN SECTION. BOTH SECTIONS FULLY ONLINE WITH OPTIONAL S' LECTURES TUE 10AM-NOON. REQUIRED BACKGROUND FOR T INCLUDES THE FOLLOWING. MULTIVARIATE CALCULUS, LINE PROBABILITY AND STATISTICS. PROGRAMMING IN PYTHON O LEVEL LANGUAGE. UNDERGRADUATES AND STUDENTS NEED PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FOU umass.edu/academics/course-overrides
COMPSCI 683 RTIFICIAL INTELLIGENCE air Zick		GRADUATE CMPSCI STUDENTS ONLY.	STUDENTS WHO HAVE TAKEN AN UNDERGRADUATE AI COUR SEATS HELD FOR INCOMING GRAD STUDENT REGISTRATION. SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE C //www.cics.umass.edu/academics/course-overrides
COMPSCI 685 ADV NATURAL LANG PROCESSING Haw-Shiuan Chang		GRADUATE CMPSCI STUDENTS ONLY.	PHD-LING STUDENTS WITH PERMISSION OF INSTRUCTOR. SE INCOMING GRAD STUDENT REGISTRATION. STUDENTS NEED PERMISSION MUST REQUEST OVERRIDES VIA ON-LINE FORM edu/academics/course-overrides
COMPSCI 690BB QUANTUM CRYPTOGRAPHY Filip Rozpedek		CMPSCI GRADUATE STUDENTS ONLY.	MEETS WITH COMPSCI 590AB. SEATS HELD FOR INCOMING G REGISTRATION. STUDENTS WHO TAKE THIS COURSE CANNO NOR LATER, ENROLL IN 590AB. SWAPPING BETWEEN 590AB A CONSIDERED BEFORE THE END OF ADD/DROP. THERE WILL WITH COMPSCI 490Q QUANTUM INFORMATION SCIENCE AND QUANTUM INFORMATION SYSTEMS. WHILE THIS COURSE BU THE CONCEPTS INTRODUCED IN THOSE COURSES, IT INTROD INDEPENDENTLY SO NO KNOWLEDGE OF QUANTUM INFORMA THOUGH IT WOULD BE HELPFUL. MATH, PHYSICS, AND EE GF SHOULD REQUEST AN OVERRIDE FOR CONSIDERATION. STU SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE C //www.cics.umass.edu/academics/course-overrides
COMPSCI 690G SECURTY FOR LARGE-SCALE SYSTMS Pubali Datta		GRADUATE CMPSCI STUDENTS ONLY.	SEATS SAVED FOR INCOMING GRADUATE STUDENT REGISTR UNDERGRADUATE BACKGROUND IN COMPUTER SCIENCE IS OPERATING SYSTEMS (COMPSCI 377 OR EQUIVALENT). PROC KNOWLEDGE AND PRINCIPLES OF COMPUTER SYSTEMS DES EXPECTED. STUDENTS NEEDING SPECIAL PERMISSION MUS VIA THE ON-LINE FORM: https://www.cics.umass.edu/academics/c
COMPSCI 690QC QUANTUM COMMUNICATION Gayane Vardoyan		CMPSCI GRADUATE STUDENTS ONLY.	MEETS WITH COMPSCI 590QC. STUDENTS CAN ONLY RECEIV EITHER 590QC OR 690QC, NOT BOTH. SWAPPING BETWEEN 5 ONLY CONSIDERED BEFORE THE END OF ADD/DROP. SEATS GRAD STUDENT REGISTRATION. FAMILIARITY WITH PROBABI ALGEBRA, AND COMPLEX NUMBERS. NO PRIOR FAMILIARITY CONCEPTS NEEDED. PHYSICS STUDENTS SHOULD WAIT UNT ENROLL. STUDENTS NEEDING SPECIAL PERMISSION MUST R VIA THE ON-LINE FORM: https://www.cics.umass.edu/academics/0
COMPSCI 690R CMPTNG-DIGI BIOMRKRS IN HLTHCR Sunghoon Lee		CMPSCI GRADUATE STUDENTS ONLY.	THERE ARE NO FORMAL PREREQUISITES FOR GRADUATE ST INFORMALLY, STUDENTS SHOULD BE FAMILIAR WITH STATIST LEARNING. KNOWLEDGE OF HEALTH DATA OR MEDICINE IS N THIS COURSE IS DESIGNED TO INTRODUCE THE CONCEPTS O MEDICAL DATA. SEATS SAVED FOR INCOMING GRADUATE ST REGISTRATION. STUDENTS NEEDING SPECIAL PERMISSION N OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.ed overrides
COMPSCI 690U COMPUTNL BIOL AND BIOINFORMTCS Anna Green		GRADUATE CMPSCI STUDENTS ONLY.	PROFICIENCY IN PYTHON PROGRAMMING AS WELL AS UNDER UNDERSTANDING OF STATISTICS, MACHINE LEARNING, AND L ASSUMED. THE COURSE ASSUMES NO PRIOR KNOWLEDGE C ALSO BE SUITABLE FOR GRADUATE STUDENTS IN BIOLOGY-R WHO HAVE STRONG COMPUTATIONAL SKILLS. INTERESTED C IN OTHER DISCIPLINES, ESPECIALLY BIOLOGY, SHOULD DESC BACKGROUND TO HANDLE COMPUTATIONAL REQUIREMENTS FORM FOR INSTRUCTOR REVIEW. SEATS HELD FOR INCOMIN STUDENT REGISTRATION. STUDENTS NEEDING INSTRUCTOR REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cic edu/academics/course-overrides

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NG GRAD STUDENT RAM STUDENTS ONLY. ENROLL IN A U+ . SYNCHRONOUS LIVE R THE COURSE NEAR ALGEBRA, AND N OR EQUIVALENT HIGH EEDING SPECIAL E FORM: https://www.cics.

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GRADUATE STUDENT NOT SIMULTANEOUSLY, B AND 690BB IS ONLY L BE CERTAIN OVERLAP ID COMPSCI 690Q BUILDS ON SOME OF ODUCES ALL OF THEM MATION IS NECESSARY, GRADUATE STUDENTS TUDENTS NEEDING E ON-LINE FORM: https:

TRATION. IS ASSUMED TO INCLUDE OGRAMMING ESIGN KNOWLEDGE IS JST REQUEST OVERRIDE cs/course-overrides

EIVE CREDIT FOR N 590QC AND 690QC IS TS HELD FOR INCOMING ABILITY THEORY, LINEAR TY WITH QUANTUM INTIL OPEN TO SELF-T REQUEST OVERRIDES cs/course-overrides

STUDENTS, BUT ISTICS AND MACHINE S NOT A PREREQUISITE; S OF HEALTH AND STUDENT N MUST REQUEST edu/academics/course-

DERGRADUATE-LEVEL D LINEAR ALGEBRA IS E OF BIOLOGY. MAY '-RELATED DISCIPLINES D GRADUATE STUDENTS SCRIBE THEIR TS ON THE OVERRIDE MING GRADUATE OR PERMISSION MUST cics.umass.

	PREREQUISITES	ELIGIBILITY RESTRICTIONS	CLASS NOTES/COMMENTS INFORMATION ONLY - DOES NOT AFFE
COMPSCI 6910 S-TOOLS-EXPLANATORY/TUTRNG SYS Beverly Woolf		GRADUATE STUDENTS ONLY.	STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST ON ON-LINE FORM: https://www.cics.umass.edu/academics/course-on
COMPSCI 692DQ S-TOPICS-DISTRB QUANTUM CMPTNG Donald Towsley, Gayane Vardoyan		CMPSCI AND ECE GRADUATE STUDENTS ONLY.	SEC 01=3 CREDITS; SEC 02=1 CREDIT. STUDENTS TAKING FO EXPECTED TO PROPOSE AND COMPLETE A PROJECT. GRAD EXPECTED TO HAVE COMPLETED COMPSCI 590AB, COMPSCI OR EQUIVALENT. IF UNSURE, CONTACT INSTRUCTOR TO DIS UNDERGRADUATE STUDENTS COMPLETING COMPSCI 490Q V OR BETTER, OR ONE OF THE OTHER COURSES LISTED, AS W INSTRUCTOR PERMISSION. STUDENTS NEEDING SPECIAL PE REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cic edu/academics/course-overrides
<b>COMPSCI 692EF</b> S-EMBEDDED MODELS FOR IOT Deepak Ganesan, Phuc Nguyen		CMPSCI GRADUATE STUDENTS ONLY.	SECT 01=3 CREDITS; SECT 02=1 CREDIT. EXAMPLE TOPICS V INCLUDE: APPLICATION DOMAINS IN HEALTH AND WEARABLI OPTIMIZATIONS AND ARCHITECTURE, IOT APPLICATIONS AND THE COURSE WILL PRIMARILY CONSIST OF PAPER READINGS AND DISCUSSIONS. STUDENTS WILL CRITICALLY EXAMINE R. THE FIELD THROUGH BOTH ACADEMIC PAPERS AND INDUSTI FOR 3-CREDIT OPTION, A SEMESTER-LONG RESEARCH PROJ INVOLVING EITHER THE DEVELOPMENT OF A NOVEL APPLICA FOUNDATION MODELS ON WEARABLE PLATFORMS OR THE II OPTIMIZATION TECHNIQUES FOR EMBEDDED DEPLOYMENT. SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE O //www.cics.umass.edu/academics/course-overrides
COMPSCI 692L S-NATURAL LANGUAGE PROCESSING Brendan O'Connor		GRAD STUDENTS ONLY.	MAY BE REPEATED FOR CREDIT UP TO 3 TIMES. COURSE IS GRAD STUDENTS WITH NLP BACKGROUND. SYNCHRONOUS REQUIRED.
<b>COMPSCI 692PA</b> S-PRIV&SECURTY-GENERATV MODELS Eugene Bagdasarian		CMPSCI GRADUATE STUDENTS ONLY.	STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST ( ON-LINE FORM: https://www.cics.umass.edu/academics/course-ov
COMPSCI 696DS IS-DATA SCIENCE Andrew McCallum		GRADUATE MS-CMPSCI STUDENTS ONLY.	BY THE END OF THE CURRENT FALL SEMESTER, STUDENTS I COMPLETED AT LEAST TWO OF THE DATA SCIENCE CORE RE HAVE AN OVERALL GPA OF 3.0 OR HIGHER. PERMISSION OF REQUIRED. MS-CMPSCI STUDENTS ARE EMAILED INSTRUCTI APPLY FOR CONSIDERATION.
COMPSCI 701 ADV TOPICS IN CMPSCI		DOCTORAL, MASTERS GRADUATE CMPSCI STUDENTS ONLY.	THE 3 CREDIT OPTION IS FOR THE SECOND SEMESTER OF A SEQUENCE, 701Y FOLLOWED BY 701. THE 6 CREDIT OPTION THAT WILL BE COMPLETED OVER TWO SEMESTERS WITH EN ONE SEMESTER. REQUEST OVERRIDE VIA THE SPECIAL ON- //www.cics.umass.edu/content/registration
COMPSCI 701Y ADV TOPICS IN CMPSCI (1ST SEM)		DOCTORAL, MASTERS CMPSCI GRADUATE STUDENTS ONLY.	INDICATES THE FIRST SEMESTER OF A TWO-SEMESTER SEQ CREDITS) FOLLOWED BY 701 (3 CREDITS), WITH GRADE FOR THE END. REQUEST OVERRIDE VIA THE SPECIAL ON-LINE FC umass.edu/content/registration
COMPSCI 879 TEACH ASSTS-TOMORROW'S FACULTY Ivon Arroyo			COURSE IS ASSOCIATED WITH CICS TA EMPLOYMENT. REQU TA CONTRACT. REGISTRATION WILL BE PROCESSED BY THE DIRECTOR GRADUATE PROGRAMS AFTER SIGNED AND APPR OPEN TO CICS TEACHING ASSISTANTS ONLY.

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ST OVERRIDES VIA THE e-overrides

G FOR 3 CREDITS ARE RADUATE STUDENTS SCI 642, OR ECE 550/660, DISCUSS BACKGROUND. DQ WITH A GRADE OF C S WELL AS UPD AND L PERMISSION MUST V.cics.umass.

CS WE WILL COVER ABLES, SYSTEMS AND ENVIRONMENTS. NGS, PRESENTATIONS, IE RECENT ADVANCES IN JSTRY DEVELOPMENTS. ROJECT IS REQUIRED, LICATION USING HE IMPLEMENTATION OF NT. STUDENTS NEEDING HE ON-LINE FORM: https:

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TS MUST HAVE E REQUIREMENTS AND OF INSTRUCTOR IS ICTIONS ON HOW TO

F A TWO-SEMESTER DN IS FOR A PROJECT ENROLLMENT IN ONLY DN-LINE FORM: https:

EQUENCE, 701Y (3 DR BOTH ASSIGNED AT FORM: https://www.cics.

EQUIRED COMPONENT OF THE ASSOCIATE PPROVED CONTRACT.

	PREREQUISITES	ELIGIBILITY RESTRICTIONS	CLASS NOTES/COMMENTS INFORMATION ONLY - DOES NOT AFFEC
COMPSCI 891M S-THEORY OF COMPUTATION Yair Zick		DOCTORAL, MASTERS GRADUATE STUDENTS ONLY.	MAY BE REPEATED FOR CREDIT UP TO 6 TIMES. UNDERGRAD STUDENTS NOT MEETING ELIGIBILITY MUST REQUEST OVERR LINE FORM: https://www.cics.umass.edu/academics/course-override
COMPSCI 899 PHD DISSERTATION			COURSE OPEN ONLY TO CS GRADUATE STUDENTS WHO HAVE CANDIDACY. REQUEST ENROLLMENT VIA THE SPECIAL ON-LIN cics.umass.edu/academics/academic-policies/graduate-programs-pol forms
COMPSCI H311 HNRS COLLOQ: INTRO ALGORITHMS Marius Minea	CICS 210 (OR COMPSCI 187) AND COMPSCI 250 (OR MATH 455) WITH A GRADE OF C OR BETTER [OR COMPSCI 311 WITH A GRADE OF B OR BETTER].	COMMONWEALTH HONORS COLLEGE JUNIOR AND SENIOR CS MAJORS ONLY.	DEPARTMENT CONSENT REQUIRED. NO OPTION FOR PASS/FA BE ENROLLED IN COMPSCI 311 (OR HAVE COMPLETED COMPS OF B OR BETTER). INTERESTED STUDENTS MUST REQUEST O LINE FORM: https://www.cics.umass.edu/academics/course-override
COMPSCI H345 HNRS COLLOQ: PRAC&APP-DATA MGT Gordon Anderson	CS MAJORS: CICS 210 (OR COMPSCI 187) WITH A GRADE OF C OR BETTER [OR COMPSCI 345 WITH A GRADE OF B OR BETTER]. INFORM MAJORS: INFO 248 AND CICS 160 (PREVIOUSLY INFO 190T OR COMPSCI 186 OR	COMMONWEALTH HONORS COLLEGE JUNIOR AND SENIOR CS AND INFORMATICS MAJORS ONLY.	NO OPTION FOR PASS/FAIL. DEPARTMENT CONSENT REQUIR BE ENROLLED IN COMPSCI 345 (OR HAVE COMPLETED COMPS OF B OR BETTER). REQUEST OVERRIDE VIA THE ON-LINE FOR umass.edu/academics/course-overrides
INFO 150 MATH FOUND-INFORMATICS	COMPSCI 187), BOTH WITH A GRADE OF C OR BETTER [OR COMPSCI 345 WITH A GRADE OF B OR BETTER].	Open to undergraduates in majors OTHER THAN Computer Science and Math + Statistics.	CS AND MATH (STATISTICS) MAJORS ARE NOT ELIGIBLE FOR T INFORM MAJORS REGISTER, INFO 150 WILL OPEN TO ALL NON MATH/STATS UNDERGRADUATES WHO SHOULD WAIT FOR THE RESTRICTION TO BE REMOVED TO SELF-ENROLL OR ADD TO T AVIA ARI ED AND SHOULD NOT REQUEST AN OVERPIDE - AND
Chloe Becquey			AVAILABLE) AND SHOULD NOT REQUEST AN OVERRIDE. ANTIC DURING THE FIRST WEEK OF CLASSES. R1 MATH USEFUL; NO REQUIRED. STUDENTS NEEDING SPECIAL PERMISSION MUST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/ overrides
INFO 203 A NETWORKED WORLD Mohammadhassan Hajiesmaili		UNDERGRADS NOT MAJORING IN COMPSCI	CS MAJORS ARE NOT ELIGIBLE FOR THIS COURSE. AFTER INF REGISTER, INFO 203 WILL OPEN TO ALL NON-CS UNDERGRADI WAIT FOR THE MAJOR ELIGIBILITY RESTRICTION TO BE REMOV OR ADD TO THE WAITLIST (IF AVAILABLE) AND SHOULD NOT RI OVERRIDE. ANTICIPATED OPENING DURING THE FIRST WEEK STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST O' ON-LINE FORM: https://www.cics.umass.edu/academics/course-ove
INFO 248 INTRO TO DATA SCIENCE Gordon Anderson	CICS 110 (OR CICS 160 OR COMPSCI 119 OR COMPSCI 121) WITH A GRADE OF C OR BETTER, AND EITHER PSYCH 240, OIM 240, STATISTC 240, RES- ECON 212, SOCIOL 212, OR STATISTC 315/515, OR COMPSCI 240, WITH A GRADE OF C OR BETTER.	INFORM MAJORS ONLY.	PREVIOUS EXPERIENCE WITH A PROGRAMMING LANGUAGE (C COMPSCI 121) MAY BE CONSIDERED FOR OVERRIDE. BASIC M MATURITY (COLLEGE ALGEBRA) IS ASSUMED. BASIC PROBABI SUCH AS ONE OF THE COURSES REQUIRED FOR REGISTRATIC REQUIRED. THIS COURSE CONSISTS OF TWO LECTURES AND PER WEEK. EACH LECTURE MEETING INCLUDES A PRESENTAT CONCEPTUAL MATERIAL AS WELL AS SOME TIME TO WORK ON OF THE MATERIAL PRESENTED. IN LAB TIME, STUDENTS RECE INSTRUCTION ON THE USE OF SOFTWARE TOOLS TO ANALYZE READINGS WILL BE ASSIGNED AS PREPARATION FOR EACH CL PROJECT. THE PROJECT PROVIDES STUDENTS WITH AN WORK COLLABORATIVELY TO EXPLORE A TOPIC IN MORE DEP NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES V FORM: https://www.cics.umass.edu/academics/course-overrides
INFO 348 DATA ANALYTICS WITH PYTHON Jayant Taneja	INFO 248 AND CICS 160 (OR INFO 190T OR COMPSCI 186 OR COMPSCI 187), BOTH WITH A GRADE OF C OR BETTER.	INFORM MAJORS ONLY.	PREVIOUSLY CICS 397A. LINEAR ALGEBRA (MATH 235) IS HELF REQUIRED. STUDENTS WITH ALTERNATE PROGRAMMING OR BACKGROUND MAY REQUEST OVERRIDE FOR CONSIDERATION CHANGE HAS BEEN APPROVED BY THE FACULTY SENATE TO F WITH CICS 160. AFTER INFORM MAJORS REGISTER, INFO 348 UNDERGRADUATES, IF AVAILABLE SEATS. STUDENTS MEETIN SHOULD WAIT FOR THE MAJOR ELIGIBILITY RESTRICTION TO E SELF-ENROLL OR ADD TO THE WAITLIST (IF AVAILABLE) AND S REQUEST AN OVERRIDE. STUDENTS NEEDING SPECIAL PERM REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics. edu/academics/course-overrides

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JIRED. STUDENTS MUST IPSCI 345 WITH A GRADE ORM: https://www.cics.

R THIS COURSE. AFTER ON-CS AND NON-THE MAJOR ELIGIBILITY O THE WAITLIST (IF NTICIPATED OPENING NOT ABSOLUTELY IST REQUEST edu/academics/course-

INFORM MAJORS ADUATES WHO SHOULD MOVED TO SELF-ENROLL T REQUEST AN EK OF CLASSES. T OVERRIDES VIA THE overrides

E (OTHER THAN IC MATHEMATICAL ABILITY AND STATISTICS, ATION ON SPIRE IS AND ONE LAB SECTION ITATION OF K ON IMPLEMENTATION ECEIVE DETAILED YZE ACTUAL DATA SETS. H CLASS MEETING. A DENTS WORK IN PAIRS ON AN OPPORTUNITY TO DEPTH. STUDENTS ES VIA THE ON-LINE

ELPFUL BUT NOT OR STATISTICS TION. A PREREQUISITE TO REPLACE CICS 210 48 WILL OPEN TO ALL TING PREREQUISITE TO BE REMOVED TO D SHOULD NOT RMISSION MUST cics.umass.

	PREREQUISITES	ELIGIBILITY RESTRICTIONS	CLASS NOTES/COMMENTS INFORMATION ONLY - DOES NOT AFFE
INFO 490PI PERSONAL HEALTH INFORMATICS Ravi Karkar	INFO 248 (OR COMPSCI 240) WITH A C OR BETTER AND CICS 210 (OR COMPSCI 186 OR COMPSCI 187) WITH A C OR BETTER.	JUNIOR AND SENIOR INFORM MAJORS ONLY.	NO PASS/FAIL OPTION. SATISFIES INTEGRATIVE EXPERIENCI CS AND INFORM MAJORS. ALSO SATISFIES A CS400 ELECTIV BEGINNING SPRING 2024, GRADES OF C OR BETTER ARE REC PREREQUISITES. WILL OPEN TO JUNIOR AND SENIOR CS MA. AND SENIOR INFORM MAJORS ARE GIVEN OPPORTUNITY TO MAJORS SHOULD NOT REQUEST AN OVERRIDE, BUT WAIT FC OPEN TO SELF-ENROLL. STUDENTS NEEDING SPECIAL PERM REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cic edu/academics/course-overrides

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INCE REQUIREMENT FOR TIVE FOR CS MAJORS. REQUIRED IN MAJORS AFTER JUNIOR TO ENROLL. ELIGIBLE CS I FOR ELIGIBILITY TO ERMISSION MUST v.cics.umass.