	PREREQUISITES	ELIGIBILITY RESTRICTIONS	CLASS NOTES/COMMENTS INFORMATION ONLY - DOES NOT AFFE
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-ov
CICS 110 FOUNDATIONS OF PROGRAMMING Cole Reilly, Aadam Anish Lokhandwala, Jacob Urisman, Brett Mullins, Prit Pritam Shah, Maximillian Kuechen	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, M CMPLING MAJORS HAVE ENROLLED, WILL OPEN TO FRESHME JUNIOR UNDERGRADUATES, IF AVAILABLE SEATS. FRESHME JUNIORS IN OTHER MAJORS SHOULD WAIT FOR THE ELIGIBIL BE REMOVED TO SELF-ENROLL AND SHOULD NOT REQUEST. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST O ON-LINE FORM: https://www.cics.umass.edu/academics/course-over
CICS 127 INTRO TO PUBLIC INTEREST TECH Francine Berman		UNDERGRADUATES ONLY.	THIS COURSE COUNTS TOWARDS THE IT MINOR AND IS REQUUNDERGRADUATE CERTIFICATE. STUDENTS NEEDING SPECI REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cic 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 C AFTER ELIGIBLE CS, INFORM AND COMP LING MAJORS HAVE 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 FO 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 SI COMPLETING COMPSCI 187. AFTER ELIGIBLE CS, INFORM AN HAVE ENROLLED, WILL OPEN TO OTHER FRESHMEN, SOPHOI IF AVAILABLE SEATS. ELIGIBLE NON-CS AND NON-INFORM M/ FOR THE MAJOR ELIGIBILITY RESTRICTION TO BE REMOVED SHOULD NOT REQUEST AN OVERRIDE. STUDENTS NEEDING 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 COUNTS TOWARD THE CS LAB SCIENCE REQUIREMENT FOR OFFERING IS OPEN TO SOPHOMORE AND FRESHMEN BS-CS SOPHOMORE AND FRESHMEN REGISTER, PROGRAM WILL CO JUNIOR BS-CS MAJORS, IF AVAILABLE SEATS. JUNIOR BS-CS WAIT FOR ELIGIBILITY TO OPEN TO SELF-ENROLL OR ADD TO AVAILABLE) AND SHOULD NOT REQUEST AN OVERRIDE. STU SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE O //www.cics.umass.edu/academics/course-overrides
CICS 291C S-FIND STRENGTHS/DESIGN CAREER Casey Maloney		Start: CS AND INFORM SOPHOMORES ONLY. Open: CS AND INFORM SOPHOMORES AND JUNIORS ONLY	MANDATORY PASS/FAIL. STUDENTS NEEDING SPECIAL PERN REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics edu/academics/course-overrides
CICS 291S S-CICS SECOND YEAR PATHWAYS	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 HA' TAKING) AT LEAST TWO COMPSCI 200-LEVEL CORE WILL BE O AVAILABLE SEATS. INTERESTED STUDENTS SHOULD COMPL FORM: https://forms.gle/3RsgkVzEtPKoqnUj6
CICS 291T S-CICS TRANSFER SUCCESS Emma Anderson			DEPARTMENT CONSENT REQUIRED: OPEN TO INCOMING CS TRANSFER STUDENTS ONLY.

FECT SPIRE ENROLLMENT.

T OVERRIDES VIA THE -overrides

R SUCCESSFULLY 1, MATH, PHYSICS AND HMEN, SOPHOMORE, AND IMEN, SOPHOMORE, AND IBILITY RESTRICTION TO ST AN OVERRIDE. ST OVERRIDES VIA THE e-overrides

EQUIRED FOR THE PIT ECIAL PERMISSION MUST .cics.umass.

R SUCCESSFULLY N CLASS IS REQUIRED. VE ENROLLED, WILL NON-MAJORS SHOULD MOVED TO SELF-ENROLL EEDING SPECIAL FORM: https://www.cics.

R SUCCESSFULLY AND COMP LING MAJORS HOMORE, AND JUNIORS, I MAJORS SHOULD WAIT ED TO SELF-ENROLL AND NG SPECIAL PERMISSION 5://www.cics.umass.

ED LAB SECTION AND OR THE BS-CS. THIS CS MAJORS ONLY. AFTER CONSIDER OPENING TO -CS MAJORS SHOULD TO THE WAITLIST (IF STUDENTS NEEDING IE ON-LINE FORM: https:

RMISSION MUST cics.umass.

D-LEVEL CORE HAVE TAKEN (OR ARE DE CONSIDERED IF IPLETE THE ONLINE

CS AND INFORM

	PREREQUISITES	ELIGIBILITY RESTRICTIONS	CLASS NOTES/COMMENTS INFORMATION ONLY - DOES NOT AFFEC
CICS 298A P-LEADRSHP:COMMUNCTNG-EXPRTISE	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
Emma Anderson			
CICS 305 SOC ISS IN CMPTNG Erin Butler, Elizabeth Gunther, Siobhan Meï,	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	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 SECONDAR TAKE JUNIOR YEAR WRITING COURSE WITHIN PRIMARY MAJOI LECT 01-02 MEET TOGETHER; LECT 03-04, ETC. SPIRE WILL (
Justin Obara, Matthew Ross, STAFF, Christina Sutcliffe	C OR BETTER (OR ENGLISH WRITING WAIVER) AND INFO 248.		THE ENGLWRIT112 PREREQUISITE WHEN TAKEN AT UMASS AN 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/ac overrides
CICS 396A			STUDENTS MUST BE ENROLLED IN THE ERSP PROGRAM AND S COMPLETED CICS 237 INTRODUCTION TO RESEARCH IN THE D
IS-DIRECTED RESEARCH GROUP			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	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
Emily Nutwell, Carolina Rossini			MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://ww edu/academics/course-overrides
CICS 598T		CMPSCI GRADUATE STUDENTS ONLY.	COMPUTER SCIENCE GRADUATE STUDENTS INTERESTED IN P SUBMIT AN EXPERIENTIAL LEARNING REQUEST IN SPIRE. STA
P-CPT			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 STU //cicscareers.notion.site/CPT-Process-for-Internships-c0f1d14ccfe544
COMPSCI 119		UNDERGRADUATE NON-CS MAJORS ONLY.	CS MAJORS ARE NOT ELIGIBLE FOR THIS COURSE. AFTER SO FRESHMEN REGISTER, WILL OPEN TO JUNIORS. NON-CS JUNI
INTRO PROGRAMMING Devdhar Patel			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	CICS 160 (PREVIOUSLY INFO 190T OR COMPSCI 186 OR CICS 210) WITH A GRADE OF C OR BETTER OR	FRESHMEN, SOPHOMORE, AND JUNIORS ONLY.	STARTING FALL 2023, PASSING COMPSCI 198C IS A REQUIRED COMPSCI 230. STUDENTS WITH AP OR TRANSFER CREDIT FOR
P-INTRO-C PROGRAMMING LANGUAGE Meng-Chieh Chiu, Timothy Richards	COMPSCI 121 WITH A GRADE OF B OR BETTER.		NEED AN OVERRIDE FOR REGISTRATION. STUDENTS NEEDING PERMISSION MUST REQUEST OVERRIDE VIA THE ON-LINE FOR umass.edu/academics/course-overrides
COMPSCI 220	CICS 210 (OR COMPSCI 187) WITH A GRADE OF C OR	CS MAJORS ONLY.	SEATS ARE BEING SAVED FOR INCOMING TRANSFER STUDEN NEW STUDENT ORIENTATION AND TRANSFER (NSOT) ENROLLI
PGMG METHODOLOGY Marius Minea			REMAINING SEATS WILL BE RELEASED PRIOR TO CLASS STAR WILL BE RELEASED AT THAT TIME. STUDENTS NEEDING SPEC MUST REQUEST OVERRIDE VIA THE ON-LINE FORM: https://www
	J		edu/academics/course-overrides

FECT SPIRE ENROLLMENT.

IDERED IF AVAILABLE ROM THIS COURSE. I OVERRIDES VIA THE overrides

CTURES FOR CS ITY LIMITED TO CS AND DARY MAJORS MUST AJOR DEPARTMENT. ILL ONLY RECOGNIZE S AMHERST. ELIGIBLE FR FOR ENGLWRIT112 ED ASSISTANCE TO du/academics/course-

ND SUCCESSFULLY E DISCIPLINE IN THE SPRING OF THE SECOND AS A MAJOR ELECTIVE. THAT APPLY TO

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 SPIRE EI
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 TRANSFER S UNTIL THE END OF NEW STUDENT ORIENTATION AND TRANSFER (NSC ENROLLMENT PERIOD. REMAINING SEATS WILL BE RELEASED PRIOR START. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OF THE ON-LINE FORM: https://www.cics.umass.edu/academics/course-override
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.	Start: CS AND COMP LING MAJORS ONLY. Open: Open to UNDERGRADUATES	SEATS ARE BEING SAVED FOR INCOMING TRANSFER STUDENTS UNTIL NEW STUDENT ORIENTATION AND TRANSFER (NSOT) ENROLLMENT PE REMAINING SEATS WILL BE RELEASED PRIOR TO CLASS START. STUD NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDE VIA THE O https://www.cics.umass.edu/academics/course-overrides
COMPSCI 250 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 UNTIL NEW STUDENT ORIENTATION AND TRANSFER (NSOT) ENROLLMENT PE REMAINING SEATS WILL BE RELEASED PRIOR TO CLASS START. STUE NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDE VIA THE O 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.	JUNIOR AND SENIOR CS MAJORS ONLY.	SEATS ARE BEING SAVED FOR INCOMING TRANSFER STUDENTS UNTIL NEW STUDENT ORIENTATION AND TRANSFER (NSOT) ENROLLMENT PE REMAINING SEATS WILL BE RELEASED PRIOR TO CLASS START. STUE NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDE VIA THE O https://www.cics.umass.edu/academics/course-overrides
COMPSCI 320 INTRO TO SOFTWARE ENGINEERING Gordon Anderson, Jaime Davila, Matthew Rattigan	COMPSCI 220 WITH GRADE OF C OR BETTER.	JUNIOR AND SENIOR CS MAJORS ONLY.	NO OPTION FOR PASS/FAIL. SATISFIES INTEGRATIVE EXPERIENCE RE FOR CS MAJORS. MEETS WITH COMPSCI 429. GRADUATING SENIORS PRIORITIZED AND PRE-ENROLLED BY THE PROGRAM. SEATS ARE BEI FOR INCOMING TRANSFER STUDENTS UNTIL THE END OF NEW STUDE ORIENTATION AND TRANSFER (NSOT) ENROLLMENT PERIOD. REMAINI WILL BE RELEASED PRIOR TO CLASS START. STUDENTS NEEDING SP PERMISSION MUST REQUEST OVERRIDE VIA THE ON-LINE FORM: https 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 IN PEI TUESDAYS AND THURSDAYS. U01 LEC 01 IS FULLY ONLINE AND STUD REQUIRED TO WATCH LECTURES SYNCHRONOUSLY ON TUESDAYS AN THURSDAYS. REQUIRED LABORATORY ATTENDANCE IS ON-LINE SYNCHRONOUSLY FOR BOTH SECTIONS. NO OPTION FOR PASS/FAIL. INTEGRATIVE EXPERIENCE REQUIREMENT FOR CS AND INFORM MAJO STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDI ON-LINE FORM: https://www.cics.umass.edu/academics/course-overrides
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 UNTIL NEW STUDENT ORIENTATION AND TRANSFER (NSOT) ENROLLMENT PE REMAINING SEATS WILL BE RELEASED PRIOR TO CLASS START. STUD NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDE VIA THE O 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 UNTIL NEW STUDENT ORIENTATION AND TRANSFER (NSOT) ENROLLMENT PE REMAINING SEATS WILL BE RELEASED PRIOR TO CLASS START. STUD EXPECTED TO HAVE BASIC PROGRAMMING SKILLS, AND BE ABLE TO L IN CLASS. STUDENTS WHO HAVE TAKEN COMPSCI 445 ARE NOT ELIGI SHOULD NOT ENROLL. STUDENTS NEEDING SPECIAL PERMISSION ML OVERRIDE VIA THE ON-LINE FORM: https://www.cics.umass.edu/academic 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 OVERRIDI ON-LINE FORM: https://www.cics.umass.edu/overrides.

FECT SPIRE ENROLLMENT.

ED IRANSFER STUDENTS ISFER (NSOT) ED PRIOR TO CLASS REQUEST OVERRIDE VIA urse-overrides ENTS UNTIL THE END OF DLLMENT PERIOD. ART. STUDENTS VIA THE ON-LINE FORM: ENTS UNTIL THE END OF DLLMENT PERIOD. ART. STUDENTS VIA THE ON-LINE FORM: ENTS UNTIL THE END OF DLLMENT PERIOD. FART. STUDENTS E VIA THE ON-LINE FORM: RIENCE REQUIREMENT G SENIORS ARE TS ARE BEING SAVED EW STUDENT D. REMAINING SEATS EEDING SPECIAL ORM: https://www.cics. ASS IN PERSON ON AND STUDENTS ARE IESDAYS AND V-LINE PASS/FAIL. SATISFIES FORM MAJORS. T OVERRIDES VIA THE

ENTS UNTIL THE END OF DLLMENT PERIOD. 'ART. STUDENTS E VIA THE ON-LINE FORM:

ENTS UNTIL THE END OF DLLMENT PERIOD. ART. STUDENTS ARE ABLE TO USE LAPTOPS NOT ELIGIBLE AND MISSION MUST REQUEST du/academics/course-

OVERRIDES VIA THE

	PREREQUISITES	ELIGIBILITY RESTRICTIONS	CLASS NOTES/COMMENTS INFORMATION ONLY - DOES NOT AFFE
COMPSCI 360 INTRO COMPUTER/NETWRK SECURITY <i>Eugene Bagdasarian</i>	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 367 REV ENGG&UNDRSTNDG EXPLOIT DEV Lurene Grenier	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 370 INTRO TO COMPUTER VISION Subhransu Maji	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 RECOMM NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES FORM: https://www.cics.umass.edu/academics/course-overrides
COMPSCI 373 INTRO TO COMPUTER GRAPHICS Rui Wang	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 377 OPERATING SYSTEMS Phuthipong Bovornkeeratiroj	COMPSCI 230 WITH A GRADE OF C OR BETTER.	JUNIOR AND SENIOR CS MAJORS ONLY.	STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST O ON-LINE FORM: https://www.cics.umass.edu/academics/course-ove
COMPSCI 383 ARTIFICIAL INTELLIGENCE William McNichols	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 O NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES FORM: https://www.cics.umass.edu/academics/course-overrides
COMPSCI 389 INTRO TO MACHINE LEARNING Philip Thomas	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 390B HARNESS DATA SCI-SOCIETAL GOOD Abhidip Bhattacharyya	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. A CHANGE IN PREREQUISITE IS BEING FACULTY SENATE. FOR SPRING 2025, THE FOLLOWING PRER ALLOWED VIA OVERRIDE: COMPSCI 230 (OR INFO 248) AND C 240, OR PSYCH 240, OR RES-ECON 212, OR SOCIOL 212, OR S STATISTC 315), BOTH WITH A GRADE OF C OR BETTER. STUD SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA ON-LIN cics.umass.edu/academics/course-overrides
COMPSCI 398A P-CREDITED INTERNSHIP			CICS CAREERS AND INSTRUCTOR PERMISSION REQUIRED.

FFECT SPIRE ENROLLMENT.

T OVERRIDES VIA THE -overrides

F BEGINNING SPRING SE DOES NOT COUNT AS MISSION MUST REQUEST s.edu/academics/course-

MMENDED. STUDENTS ES VIA THE ON-LINE

T OVERRIDES VIA THE

T OVERRIDES VIA THE overrides

E STUDENTS TO USE IA OVERRIDE. STUDENTS IES VIA THE ON-LINE

T ELIGIBLE FOR THIS IOR EXPERIENCE IN ABOUT THE SUBJECT DENTS NEEDING SPECIAL RM: https://www.cics.

EING REVIEWED BY THE REREQUISITES WILL BE D COMPSCI 240 (OR OIM R STATISTC 240, OR FUDENTS NEEDING I-LINE FORM: https://www.

	PREREQUISITES	ELIGIBILITY RESTRICTIONS	CLASS NOTES/COMMENTS INFORMATION ONLY - DOES NOT AFFE
COMPSCI 403 INTRO ROBTCS:PRCP,MECH,DYN,CTRL Donghyun Kim	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
COMPSCI 420 SOFTWARE ENTREPRENEURSHIP Matthew Rattigan	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 https://groups.cs.umass.edu/pit/undergraduate-pit-certificate/. STUD THE UNDERGRADUATE CERTIFICATE IN PUBLIC INTEREST TE ELIGIBLE VIA OVERRIDE. IF YOU HAVE QUESTIONS ABOUT TH EMAIL THE PIT CERTIFICATE PROGRAM DIRECTOR, PROFESS AT cschweik@umass.edu. STUDENTS NEEDING SPECIAL PERM REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics edu/academics/course-overrides
COMPSCI 426 SCALABLE WEB SYSTEMS <i>Timothy Richards</i>	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 (PF METHODOLOGY) AND COMPSCI 230 (COMPUTER SYSTEMS PF COMPSCI 377 (OPERATING SYSTEMS), HOWEVER, THIS IS NO MAKE YOUR EXPERIENCE MORE RICH (E.G., BACKGROUND IN DEPLOYMENT, BASIC SECURITY, NETWORK PROTOCOLS, PR 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 FU umass.edu/academics/course-overrides
COMPSCI 429 SOFTWARE ENGINEERING PROJ MGMT <i>Gordon Anderson, Jaime Davila, Matthew</i> <i>Rattigan</i>	COMPSCI 320 WITH A GRADE OF B OR BETTER.	UNDERGRADUATE CS MAJORS ONLY.	INSTRUCTOR CONSENT REQUIRED. MEETS WITH COMPSCI 3 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.cid 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 EXF 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 O INSTRUCTOR CONSIDERATION. STUDENTS NEEDING SPECIA REQUEST OVERRIDE VIA THE ON-LINE FORM: https://www.cics. edu/academics/course-overrides
COMPSCI 446 SEARCH ENGINES Razieh Rahimi	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 v https://www.cics.umass.edu/academics/course-overrides
COMPSCI 453 COMPUTER NETWORKS Arun Venkataramani	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 (EXPOSURE TO PROBABILITY (COMPSCI 240), ALGORITHMS (C MULTI-THREADED PROGRAMMING (COMPSCI 377 OPERATING ALTHOUGH THESE ARE NOT STRICT PREREQUISITES, STUDE 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 APPLIED CRYPTOGRAPHY Adam O'Neill	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 P/ TO ENROLL. STUDENTS NEEDING SPECIAL PERMISSION MUS OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.ed overrides
COMPSCI 491G S-COMPUTER NETWORKING LAB Parviz Kermani	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 N OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.ed overrides

FECT SPIRE ENROLLMENT.

THON PROGRAMMING L PERMISSION MUST cics.umass.

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

(PROGRAMMING S PRINCIPLES), OR NOT REQUIRED BUT WILL D IN WEB APP PROCESSES, CLIENT TEMS CONCEPTS). UO1 VITH OPTIONAL DING SPECIAL IE FORM: https://www.cics.

CI 320. ELIGIBLE ENROLL. ONCE ION ON THE OVERRIDE J.cics.umass.

EXPERIENCE IN OR 377 WITH A GRADE IF AVAILABLE SEATS, ENT PROGRAMMING NO OVERRIDE FOR CIAL PERMISSION MUST cics.umass.

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

DR CONCURRENT 6 (COMPSCI 311), AND ING SYSTEMS) IDENTS MUST BE ABLE TO 6 LANGUAGE, SUCH AS S IN A LANGUAGE OF SION MUST REQUEST .edu/academics/course-

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

OMPLETE LAB N 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 RECOMIN UNDERGRADUATE STUDENTS HAVE A GRADE OF B- OR BETTE ORDER TO ATTEMPT 501. INSTRUCTOR WILL CONSIDER CONC 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	UNDERGRADUATE PREREQUISITE: CICS 305 WITH A GRADE OF C OR BETTER.	LEC 01: JUNIOR AND SENIOR CS AND INFORM MAJORS ONLY. LEC 02: CMPSCI GRADUATE STUDENTS ONLY.	LEC 01 FOR UNDERGRADS; LEC 02 FOR GRADS. THIS COURSE ETHICS REQUIREMENT FOR HLS. THIS COURSE COUNTS AS A CS AND INFORM MAJORS. STUDENTS NEEDING SPECIAL PERI REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics 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 NEED 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 NEED 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 O 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 NEED 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://w 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 V OPEN TO SELF-ENROLL (DO NOT REQUEST OVERRIDES). U+ L COURSE FOR GRADUATE CMPSCI STUDENTS ONLY. GRADUA 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

FECT SPIRE ENROLLMENT.

RM MAJORS WHO HAVE

OMMENDED THAT TTER IN COMPSCI 311 IN ONCURRENT VE COMPLETED SEATS HELD IN LECT 02 TS NEEDING SPECIAL E FORM: https://www.cics.

SE FULFILLS THE S AN ELECTIVE FOR THE ERMISSION MUST cics.umass.

LD IN LEC 02 FOR EDING SPECIAL E 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 ER GRADUATE LEVEL EGISTER IN UNIV LEC 02. TOVERRIDES VIA THE -overrides

LD IN LEC 02 FOR EDING SPECIAL E 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 DUATE STUDENTS FROM AVAILABLE SEATS. T OVERRIDES VIA THE -overrides

	PREREQUISITES	ELIGIBILITY RESTRICTIONS	CLASS NOTES/COMMENTS INFORMATION ONLY - DOES NOT AFFEC
COMPSCI 564 CYBER EFFECTS Jeffrey Hamalainen, Nick Merlino, 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 OTHE WITH INSTRUCTOR PERMISSION, IF AVAILABLE SEATS. U+ LEC GRADUATE STUDENTS MAY BE CONSIDERED WITH INSTRUCTO SYNCHRONOUSLY REMOTE ATTENDANCE VIA ZOOM REQUIRE SHOULD ATTEND ALL LECTURE SESSIONS. STUDENTS NEEDIN PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FO umass.edu/academics/course-overrides
COMPSCI 565 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 OM //www.cics.umass.edu/academics/course-overrides
COMPSCI 571 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 IF AND SENIOR INFORM MAJORS AND IN LEC 02 FOR INCOMING G REGISTRATION. STUDENTS NEEDING SPECIAL PERMISSION M OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu overrides
COMPSCI 589 MACHINE LEARNING <i>Bruno Castro da Silva, STAFF</i>	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 IF 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 SIMULTANEOUS ENROLL IN 690BB. SWAPPING BETWEEN 590AB AND 690BB IS C 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 SYSTE COURSE BUILDS ON SOME OF THE CONCEPTS INTRODUCED IN IT INTRODUCES ALL OF THEM INDEPENDENTLY SO NO KNOWL INFORMATION IS NECESSARY, THOUGH IT WOULD BE HELPFUL COUNTS TOWARDS THE MS SECURITY CONCENTRATION AND CERTIFICATE IN INFORMATION SECURITY. MATH, PHYSICS, AN STUDENTS SHOULD REQUEST AN OVERRIDE FOR CONSIDERA' 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. U01 LEC 01: JUNIOR AND SENIOR CS MAJORS ONLY. <i>U01 LEC 02: MS-CMPSCI STUDENTS ONLY</i> U+ LEC 01: MS-CMPSCI ONLINE PROGRAM STUDENTS ONLY.	U1 LEC 01 IS AN IN-PERSON SECTION FOR UNDERGRADS; U1 L 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 SCHEDUL SYNCHRONOUS ATTENDANCE IS MANDATORY. AIMED MORE A RATHER THAN EE STUDENTS. ASSUMES STUDENTS HAVE ALF INTRODUCTORY NETWORKING COURSE (I.E., COMPSCI 453, E8 EQUIVALENT). COURSE WILL OPEN TO EE MAJORS MEETING F AVAILABLE SEATS. EE MAJORS SHOULD WAIT FOR ELIGIBILITY ENROLL OR ADD TO THE WAITLIST AND SHOULD NOT REQUES SEATS HELD FOR INCOMING GRADUATE STUDENT REGISTRAT MS-CMPSCI ONLINE PROGRAM STUDENTS ONLY. STUDENTS N PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FO 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 SP. 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. S SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON //www.cics.umass.edu/academics/course-overrides

ECT SPIRE ENROLLMENT.

UNDERGRADS MAY K 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 I APPROPRIATE BLE SEATS. U+ LEC 01 DENTS NEEDING E 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. DUSLY, NOR LATER, IS ONLY CONSIDERED ING GRADUATE FFECTIVE SPRING 2025. JANTUM INFORMATION STEMS. WHILE THIS D IN THOSE COURSES, WLEDGE OF QUANTUM FUL. THIS COURSE ND THE GRADUATE , AND EE GRADUATE ERATION. STUDENTS ES VIA THE ON-LINE

J1 LEC 02 IS AN IN-INE SECTION FOR N FOR GRADS. ONLINE DULED MEETING TIME. RE AT CS STUDENTS ALREADY HAD AN , E&C-ENG 374, OR IG PREREQUISITE, IF LITY TO OPEN TO SELF-JEST AN OVERRIDE. RATION. U+ LEC 01 FOR TS NEEDING SPECIAL FORM: https://www.cics.

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

7

	PREREQUISITES	ELIGIBILITY RESTRICTIONS	CLASS NOTES/COMMENTS INFORMATION ONLY - DOES NOT AFFE
COMPSCI 590QC QUANTUM COMMUNICATION <i>Gayane Vardoyan</i>	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; LI 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 C //www.cics.umass.edu/academics/course-overrides
COMPSCI 611 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
COMPSCI 651 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 PROG 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 GF REGISTRATION. STUDENTS NEEDING SPECIAL PERMISSION 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. <i>U01 LEC 01: GRADUATE CMPSCI AND ECE</i> <i>STUDENTS ONLY.</i> U+ LEC 01: ONLINE MS-CMPSCI PROGRAM STUDENTS ONLY.	LECTURES AVAILABLE BOTH SYCHRONOUSLY AND ASYNCHF 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 STUDE! 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

FFECT SPIRE ENROLLMENT.

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. U01 TUDENTS. U+ LEC 01: ITS NEEDING SPECIAL E FORM: https://www.cics.

	PREREQUISITES	ELIGIBILITY RESTRICTIONS	CLASS NOTES/COMMENTS INFORMATION ONLY - DOES NOT AFFE
COMPSCI 682 EURAL NETWORKS:MODERN INTRO		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 F umass.edu/academics/course-overrides
COMPSCI 683 RTIFICIAL INTELLIGENCE		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 DV 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 O 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 INTROL INDEPENDENTLY SO NO KNOWLEDGE OF QUANTUM INFORMA THOUGH IT WOULD BE HELPFUL. MATH, PHYSICS, AND EE GI SHOULD REQUEST AN OVERRIDE FOR CONSIDERATION. STU SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE C //www.cics.umass.edu/academics/course-overrides
COMPSCI 690G BECURTY 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). PRO KNOWLEDGE AND PRINCIPLES OF COMPUTER SYSTEMS DES EXPECTED. STUDENTS NEEDING SPECIAL PERMISSION MUS VIA THE ON-LINE FORM: https://www.cics.umass.edu/academics/d
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 UN ENROLL. STUDENTS NEEDING SPECIAL PERMISSION MUST R VIA THE ON-LINE FORM: https://www.cics.umass.edu/academics/v
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 STATIS' LEARNING. KNOWLEDGE OF HEALTH DATA OR MEDICINE IS N THIS COURSE IS DESIGNED TO INTRODUCE THE CONCEPTS (MEDICAL DATA. SEATS SAVED FOR INCOMING GRADUATE ST REGISTRATION. STUDENTS NEEDING SPECIAL PERMISSION I 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 I ASSUMED. THE COURSE ASSUMES NO PRIOR KNOWLEDGE C ALSO BE SUITABLE FOR GRADUATE STUDENTS IN BIOLOGY-F WHO HAVE STRONG COMPUTATIONAL SKILLS. INTERESTED I IN OTHER DISCIPLINES, ESPECIALLY BIOLOGY, SHOULD DESC BACKGROUND TO HANDLE COMPUTATIONAL REQUIREMENTS FORM FOR INSTRUCTOR REVIEW. SEATS HELD FOR INCOMIN STUDENT REGISTRATION. STUDENTS NEEDING INSTRUCTOF REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cic edu/academics/course-overrides

FECT SPIRE ENROLLMENT.

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

JRSE PREFERRED. N. STUDENTS NEEDING ON-LINE FORM: https:

SEATS HELD FOR EDING SPECIAL M: https://www.cics.umass.

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 AFFI
COMPSCI 6910 S-TOOLS-EXPLANATORY/TUTRNG SYS Beverly Woolf		GRADUATE STUDENTS ONLY.	STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST ON-LINE FORM: https://www.cics.umass.edu/academics/course-o
COMPSCI 692EF S-EMBEDDED MODELS FOR IOT Deepak Ganesan, Phuc Nguyen		CMPSCI GRADUATE STUDENTS ONLY.	SECT 01=3 CREDITS; SECT 02=1 CREDIT. EXAMPLE TOPICS INCLUDE: APPLICATION DOMAINS IN HEALTH AND WEARABL OPTIMIZATIONS AND ARCHITECTURE, IOT APPLICATIONS AN THE COURSE WILL PRIMARILY CONSIST OF PAPER READING AND DISCUSSIONS. STUDENTS WILL CRITICALLY EXAMINE F THE FIELD THROUGH BOTH ACADEMIC PAPERS AND INDUST FOR 3-CREDIT OPTION, A SEMESTER-LONG RESEARCH PRO. INVOLVING EITHER THE DEVELOPMENT OF A NOVEL APPLIC FOUNDATION MODELS ON WEARABLE PLATFORMS OR THE OPTIMIZATION TECHNIQUES FOR EMBEDDED DEPLOYMENT. SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE //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.
COMPSCI 696DS IS-DATA SCIENCE Andrew McCallum		GRADUATE MS-CMPSCI STUDENTS ONLY.	BY THE END OF THE CURRENT FALL SEMESTER, STUDENTS COMPLETED AT LEAST TWO OF THE DATA SCIENCE CORE R HAVE AN OVERALL GPA OF 3.0 OR HIGHER. PERMISSION OF REQUIRED. MS-CMPSCI STUDENTS ARE EMAILED INSTRUCT 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 SEC CREDITS) FOLLOWED BY 701 (3 CREDITS), WITH GRADE FOR THE END. REQUEST OVERRIDE VIA THE SPECIAL ON-LINE FO umass.edu/content/registration
COMPSCI 879 TEACH ASSTS-TOMORROW'S FACULTY Ivon Arroyo			COURSE IS ASSOCIATED WITH CICS TA EMPLOYMENT. REQ TA CONTRACT. REGISTRATION WILL BE PROCESSED BY THE DIRECTOR GRADUATE PROGRAMS AFTER SIGNED AND APPE OPEN TO CICS TEACHING ASSISTANTS ONLY.
COMPSCI 891M S-THEORY OF COMPUTATION Yair Zick		DOCTORAL, MASTERS GRADUATE STUDENTS ONLY.	MAY BE REPEATED FOR CREDIT UP TO 6 TIMES. UNDERGRA STUDENTS NOT MEETING ELIGIBILITY MUST REQUEST OVER LINE FORM: https://www.cics.umass.edu/academics/course-overri
COMPSCI 899 PHD DISSERTATION			COURSE OPEN ONLY TO CS GRADUATE STUDENTS WHO HA CANDIDACY. REQUEST ENROLLMENT VIA THE SPECIAL ON-L cics.umass.edu/academics/academic-policies/graduate-programs-p forms

AFFECT SPIRE ENROLLMENT.

ST OVERRIDES VIA THE e-overrides

CS WE WILL COVER ABLES, SYSTEMS S AND ENVIRONMENTS. DINGS, PRESENTATIONS, NE RECENT ADVANCES IN USTRY DEVELOPMENTS. PROJECT IS REQUIRED, PLICATION USING HE IMPLEMENTATION OF ENT. STUDENTS NEEDING THE ON-LINE FORM: https:

E IS RECOMMENDED FOR DUS MEETINGS ARE

ITS MUST HAVE E REQUIREMENTS AND OF INSTRUCTOR IS JCTIONS ON HOW TO

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

SEQUENCE, 701Y (3 OR BOTH ASSIGNED AT E FORM: https://www.cics.

EQUIRED COMPONENT OF THE ASSOCIATE PPROVED CONTRACT.

GRADUATES AND OTHER /ERRIDES VIA THE ON-/errides

HAVE ACHIEVED N-LINE FORM: https://www. ns-policies/graduate-student-

	PREREQUISITES	ELIGIBILITY RESTRICTIONS	CLASS NOTES/COMMENTS INFORMATION ONLY - DOES NOT AFFEC
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/F/ 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 COMPSCI 187), BOTH WITH A GRADE OF C OR BETTER [OR COMPSCI 345 WITH A GRADE OF B OR BETTER].	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 Chloe Becquey		INFORM MAJORS ONLY.	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 THI RESTRICTION TO BE REMOVED TO SELF-ENROLL OR ADD TO AVAILABLE) AND SHOULD NOT REQUEST AN OVERRIDE. ANTH 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		UNDERSGADS NOT MAJORING IN COMPSCI	CS MAJORS ARE NOT ELIGIBLE FOR THIS COURSE. AFTER INF REGISTER, INFO 203 WILL OPEN TO ALL NON-CS UNDERGRAD WAIT FOR THE MAJOR ELIGIBILITY RESTRICTION TO BE REMO OR ADD TO THE WAITLIST (IF AVAILABLE) AND SHOULD NOT R 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 (COMPSCI 121) MAY BE CONSIDERED FOR OVERRIDE. BASIC M MATURITY (COLLEGE ALGEBRA) IS ASSUMED. BASIC PROBABI SUCH AS ONE OF THE COURSES REQUIRED FOR REGISTRATION REQUIRED. THIS COURSE CONSISTS OF TWO LECTURES AND PER WEEK. EACH LECTURE MEETING INCLUDES A PRESENTA CONCEPTUAL MATERIAL AS WELL AS SOME TIME TO WORK OF OF THE MATERIAL PRESENTED. IN LAB TIME, STUDENTS RECH INSTRUCTION ON THE USE OF SOFTWARE TOOLS TO ANALYZI READINGS WILL BE ASSIGNED DURING THE COURSE. STUDENT THE PROJECT. THE PROJECT PROVIDES STUDENTS WITH AN WORK COLLABORATIVELY TO EXPLORE A TOPIC IN MORE DEF NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES 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.	<i>Start: INFORM MAJORS ONLY.</i> Open: UNDERGRADUATE STUDENTS ONLY.	PREVIOUSLY CICS 397A. LINEAR ALGEBRA (MATH 235) IS HELI REQUIRED. STUDENTS WITH ALTERNATE PROGRAMMING OR BACKGROUND MAY REQUEST OVERRIDE FOR CONSIDERATIO CHANGE HAS BEEN APPROVED BY THE FACULTY SENATE TO WITH CICS 160. AFTER INFORM MAJORS REGISTER, INFO 348 UNDERGRADUATES, IF AVAILABLE SEATS. STUDENTS MEETIN SHOULD WAIT FOR THE MAJOR ELIGIBILITY RESTRICTION TO 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
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 EXPERIENCE CS AND INFORM MAJORS. ALSO SATISFIES A CS400 ELECTIVE BEGINNING SPRING 2024, GRADES OF C OR BETTER ARE REQ PREREQUISITES. WILL OPEN TO JUNIOR AND SENIOR CS MAJ AND SENIOR INFORM MAJORS ARE GIVEN OPPORTUNITY TO E MAJORS SHOULD NOT REQUEST AN OVERRIDE, BUT WAIT FOI OPEN TO SELF-ENROLL. STUDENTS NEEDING SPECIAL PERMI REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics edu/academics/course-overrides

FECT SPIRE ENROLLMENT.

S/FAIL. STUDENTS MUST /PSCI 311 WITH A GRADE T OVERRIDE VIA ONrrides

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

OR THIS COURSE. AFTER NON-CS AND NON-THE MAJOR ELIGIBILITY TO THE WAITLIST (IF NTICIPATED OPENING NOT ABSOLUTELY JST 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 IND ONE LAB SECTION ITATION OF CON IMPLEMENTATION ECEIVE DETAILED YZE ACTUAL DATA SETS. H CLASS MEETING. A ENTS WORK IN PAIRS ON AN OPPORTUNITY TO DEPTH. STUDENTS ES VIA THE ON-LINE

IELPFUL BUT NOT OR STATISTICS TION. A PREREQUISITE TO REPLACE CICS 210 348 WILL OPEN TO ALL ETING PREREQUISITE TO BE REMOVED TO ID SHOULD NOT ERMISSION MUST cics.umass.

ICE REQUIREMENT FOR IVE FOR CS MAJORS. EQUIRED IN IAJORS AFTER JUNIOR O ENROLL. ELIGIBLE CS FOR ELIGIBILITY TO RMISSION MUST cics.umass.