|  | PREREQUISITES  | ELIGIBILITY RESTRICTIONS  | CLASS NOTES/COMMENTS INFORMATION ONLY - DOES NOT AFFECT SPIRE ENROLLMENT.  |
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| CICS 110 FOUNDATIONS OF PROGRAMMING Meng-Chieh Chiu, Cole Reilly, Ella Tuson | 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 FRESHMAN, SOPHMORE AND JUNIOR COMPSCI, INFORM, MATH, PHYSICS, AND COMP LINGUISTICS MAJORS.  | STUDENTS ARE NOT PERMITTED TO TAKE CICS 110 AFTER SUCCESSFULLY COMPLETING COMPSCI 121. AFTER ELIGIBLE CS, INFORM, MATH, PHYSICS AND CMPLING MAJORS HAVE ENROLLED, WILL OPEN TO ALL UNDERGRADUATE FRESHMEN, SOPHOMORE, AND JUNIORS, IF AVAILABLE SEATS. FRESHMEN, SOPHOMORE, AND JUNIORS IN OTHER MAJORS SHOULD WAIT FOR THE ELIGIBILITY RESTRICTION TO BE REMOVED TO SELF-ENROLL AND SHOULD NOT REQUEST AN OVERRIDE. LEC 01 IS RESERVED FOR STUDENTS IN FIERCE RAP ONLY. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/academics/course-overrides. |
| CICS 127 INTRO TO PUBLIC INTEREST TECH Emily Nutwell                         |  | STUDENTS REGISTERED FOR THE PUBLIC INTEREST TECHNOLOGY RAP IN LEACH HALL.                           | THIS COURSE COUNTS TOWARDS THE IT MINOR AND IS REQUIRED FOR THE PIT UNDERGRADUATE CERTIFICATE.   |
| CICS 160 OBJECT-ORIENTED PROGRAMMING Cole Reilly, Ella Tuson                 | CICS 110 (PREVIOUSLY INFO 190S) OR COMPSCI 121 WITH A GRADE OF C OR BETTER.  | FRESHMEN, SOPHOMORE AND JUNIOR CS, INFORM, COMP LING OR MATH MAJORS IN THE MATHCMPTNG SUBPLAN ONLY. | STUDENTS ARE NOT PERMITTED TO TAKE CICS 160 AFTER SUCCESSFULLY COMPLETING COMPSCI 186. USE OF PERSONAL LAPTOP IN CLASS IS REQUIRED. AFTER ELIGIBLE CS, INFORM AND COMP LING MAJORS HAVE ENROLLED, WILL OPEN TO OTHER MAJORS, IF AVAILABLE SEATS. ELIGIBLE NON-MAJORS SHOULD WAIT FOR THE MAJOR ELIGIBILITY RESTRICTION TO BE REMOVED TO SELF-ENROLL AND SHOULD NOT REQUEST AN OVERRIDE. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDE VIA THE ON-LINE FORM: https://www.cics.umass.edu/academics/course-overrides  |
| CICS 208 DEFEND DEMOCRACY-DIGITAL WORLD Ethan Zuckerman                      |  |   | PREVIOUSLY CICS 297DP. CROSS-LISTED WITH SPP 208 AND COMM 208. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/academics/course-overrides  |
| CICS 210 DATA STRUCTURES  Mordecai Golin, Marc Liberatore                    | CICS 160 (PREVIOUSLY INFO 190T) WITH A GRADE OF C OR BETTER.   | FRESHMEN, SOPHOMORE AND JUNIOR CS, INFORM, COMP LING OR MATH MAJORS IN THE MATHCMPTNG SUBPLAN ONLY. | STUDENTS ARE NOT PERMITTED TO TAKE CICS 210 AFTER SUCCESSFULLY COMPLETING COMPSCI 187. AFTER ELIGIBLE CS, INFORM AND COMP LING MAJORS HAVE ENROLLED, WILL OPEN TO OTHER FRESHMEN, SOPHOMORE, AND JUNIORS, IF AVAILABLE SEATS. ELIGIBLE NON-CS, NON-INFORM AND NON-COMP LING MAJORS SHOULD WAIT FOR THE MAJOR ELIGIBILITY RESTRICTION TO BE REMOVED TO SELF-ENROLL AND SHOULD NOT REQUEST AN OVERRIDE. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/academics/course-overrides   |
| CICS 237 INTRO RESRCH IN THE DISCIPLINE Neena Thota                          |  |   | ERSP PROGRAM PARTICIPANTS ONLY. STUDENTS CAN APPLY DURING THE APPLICATION PERIOD AND BE ACCEPTED TO THE PROGRAM AT THE END OF THEIR FIRST YEAR (SPRING TERM). THEY ARE THEN ENROLLED IN THIS COURSE IN THE FALL OF THE SECOND YEAR. STUDENTS DO NOT SELF ENROLL IN THIS COURSE. PROGRAM PARTICIPANTS INTERESTED IN ENROLLING SHOULD CONTACT INSTRUCTOR WHO WILL PROVIDE CICS ACADEMIC PROGRAMS WITH A LIST FOR REGISTRATION.   |
| CICS 256 MAKE: PHYSICAL COMPUTING STAFF                                      | CICS 210 (OR COMPSCI 187) WITH A GRADE OF C OR BETTER AND BASIC MATH SKILLS (R1).  | FRESHMAN, SOPHOMORE AND JUNIOR BS-CS<br>MAJORS ONLY.  | NO OPTION FOR PASS/FAIL. THIS COURSE HAS A REQUIRED LAB SECTION AND COUNTS TOWARD THE CS LAB SCIENCE REQUIREMENT FOR THE BS-CS. THIS OFFERING IS OPEN TO JUNIOR, SOPHOMORE AND FRESHMEN BS-CS MAJORS ONLY. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://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 PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/academics/course-overrides  |
| CICS 291T S-CICS TRANSFER SUCCESS Emma Anderson                              |  |   | DEPARTMENT CONSENT REQUIRED: OPEN TO INCOMING CS AND INFORM TRANSFER STUDENTS ONLY.  |

|   | PREREQUISITES   | ELIGIBILITY RESTRICTIONS   | CLASS NOTES/COMMENTS INFORMATION ONLY - DOES NOT AFFECT SPIRE ENROLLMENT.   |
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| CICS 298A P-LEADRSHP:COMMUNCTNG-EXPRTISE Emma Anderson  | CICS 160, COMPSCI 186, OR COMPSCI 187, OR CICS<br>210 WITH A GRADE OF C OR BETTER.  | CS AND INFORM MAJORS ONLY.   | STUDENTS IN OTHER MAJORS MAY BE CONSIDERED IF AVAILABLE SEATS. STUDENTS FROM OTHER MAJORS MAY BENEFIT FROM THIS COURSE. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/academics/course-overrides  |
| CICS 305 SOC ISS IN CMPTNG Erin Butler, Michelle Ciccone, Elizabeth Gunther, Siobhan Mei, Justin Obara, 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 LECTURES FOR CS MAJORS; EVEN LECTURES FOR INFORM MAJORS. ELIGIBILITY LIMITED TO CS AND INFORM PRIMARY MAJORS ONLY. CS AND INFORM SECONDARY MAJORS MUST TAKE JUNIOR YEAR WRITING COURSE WITHIN PRIMARY MAJOR DEPARTMENT. LECT 01-02 MEET TOGETHER; LECT 03-04, ETC. SPIRE WILL ONLY RECOGNIZE THE ENGLWRIT112 PREREQUISITE WHEN TAKEN AT UMASS AMHERST. ELIGIBLE MAJORS WITH AP CREDIT, TRANSFER CREDIT, OR A WAIVER FOR ENGLWRIT112 WHO MEET THE OTHER STATED PREREQUISITES WILL NEED ASSISTANCE TO ENROLL VIA THE OVERRIDE FORM: https://www.cics.umass.edu/academics/courseoverrides |
| CICS 398T<br>P-CPT  |   | UNDERGRADUATE CS AND INFORM MAJORS ONLY.   | INTERNATIONAL UNDERGRADUATE STUDENTS SHOULD REFER TO THE IPO WEBSITE FOR DETAILS ABOUT CURRICULAR PRACTICAL TRAINING (CPT). SEE DETAILS ABOUT REGISTRATION AND THE CPT APPLICATION PROCESS FOR CS MAJORS: https://cicscareers.notion.site/CPT-Process-for-Internships-c0f1d14ccfe5448ba786583a49993209  |
| CICS 580 INTRO NUMRICL CMPTNG W/PYTHON Purity Mugambi   |   | GRADUATE STUDENTS ONLY.  | ONLINE OFFERING. COURSE RUNS TWO SECTIONS, 6 WEEKS EACH; LEC 01 (9/2/25 -10/14/25) & LEC 02 (10/15/25-12/3/25). FAMILIARITY WITH UNDERGRADUATE-LEVEL PROBABILITY, STATISTICS, AND LINEAR ALGEBRA WILL BE ASSUMED. UNDERGRADUATES WHO HAVE COMPLETED COMPSCI 240 AND MATH 235 WITH PERMISSION OF INSTRUCTOR. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/academics/course-override.  |
| CICS 598T<br>P-CPT  |   | CMPSCI GRADUATE STUDENTS ONLY.   | COMPUTER SCIENCE GRADUATE STUDENTS INTERESTED IN PURSUING CPT MUST SUBMIT AN EXPERIENTIAL LEARNING REQUEST IN SPIRE. STAFF WILL ENROLL GRADUATE STUDENTS FOR FALL AND SPRING IN THE UNIV SECTION AND FOR WINTER AND SUMMER IN THE UWW SECTION. DETAILS ABOUT REGISTRATION AND THE CPT APPLICATION PROCESS FOR CMPSCI GRADUATE STUDENTS: https://cicscareers.notion.site/CPT-Process-for-Internships-c0f1d14ccfe5448ba786583a49993209  |
| COMPSCI 119 INTRO PROGRAMMING STAFF   |   | FRESHMEN AND SOPHOMORE NON-CS MAJORS<br>ONLY.  | CS MAJORS ARE NOT ELIGIBLE FOR THIS COURSE. AFTER SOPHOMORE AND FRESHMEN REGISTER, WILL OPEN TO JUNIORS. NON-CS JUNIORS SHOULD WAIT FOR THE ELIGIBILITY RESTRICTION TO BE REMOVED TO SELF-ENROLL AND SHOULD NOT REQUEST AN OVERRIDE. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/academics/course-overrides   |
| COMPSCI 198C P-INTRO-C PROGRAMMING LANGUAGE Meng-Chieh Chiu, Timothy Richards   | CICS 160 (PREVIOUSLY INFO 190T OR COMPSCI 186<br>OR CICS 210) WITH A GRADE OF C OR BETTER OR<br>COMPSCI 121 WITH A GRADE OF B OR BETTER.  | FRESHMEN, SOPHOMORE, AND JUNIORS ONLY.   | STARTING FALL 2023, PASSING COMPSCI 198C IS A REQUIRED PREREQUISITE FOR COMPSCI 230. STUDENTS WITH AP OR TRANSFER CREDIT FOR COMPSCI 121 WILL NEED AN OVERRIDE FOR REGISTRATION. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDE VIA THE ON-LINE FORM: https://www.cics.umass.edu/academics/course-overrides  |
| COMPSCI 220 PGMG METHODOLOGY  Jaime Davila, STAFF   | CICS 210 (OR COMPSCI 187) WITH A GRADE OF C OR BETTER.  | CS MAJORS ONLY.  | SEATS ARE BEING SAVED FOR INCOMING TRANSFER STUDENTS UNTIL THE END OF NEW STUDENT ORIENTATION AND TRANSFER (NSOT) ENROLLMENT PERIOD. REMAINING SEATS WILL BE RELEASED PRIOR TO CLASS STATE. REMAINING SEATS WILL BE RELEASED AT THAT TIME. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDE VIA THE ON-LINE FORM: https://www.cics.umass.edu/academics/course-overrides  |
| 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 STUDENTS UNTIL THE END OF NEW STUDENT ORIENTATION AND TRANSFER (NSOT) ENROLLMENT PERIOD. REMAINING SEATS WILL BE RELEASED PRIOR TO CLASS START. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDE VIA THE ON-LINE FORM: https://www.cics.umass.edu/academics/course-overrides  |

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| COMPSCI 240 RSNG UNDER UNCERTAINTY Shiting Lan, Ghazaleh Parvini, Gayane Vardoyan | CICS 160 (PREVIOUSLY INFO 190T OR COMPSCI 187<br>OR CICS 210) AND MATH 132, BOTH WITH A GRADE<br>OF C OR BETTER.   | CS AND COMP LING MAJORS ONLY.                | SEATS ARE BEING SAVED FOR INCOMING TRANSFER STUDENTS UNTIL THE END OF NEW STUDENT ORIENTATION AND TRANSFER (NSOT) ENROLLMENT PERIOD. REMAINING SEATS WILL BE RELEASED PRIOR TO CLASS START. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDE VIA THE ON-LINE FORM: 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<br>OR ECE 241 OR CICS 210) AND MATH 132, BOTH WITH<br>A GRADE OF C OR BETTER.  | CS AND MATH MAJORS ONLY.                     | SEATS ARE BEING SAVED FOR INCOMING TRANSFER STUDENTS UNTIL THE END OF NEW STUDENT ORIENTATION AND TRANSFER (NSOT) ENROLLMENT PERIOD. REMAINING SEATS WILL BE RELEASED PRIOR TO CLASS START. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDE VIA THE ON-LINE FORM: https://www.cics.umass.edu/academics/course-overrides  |
| COMPSCI 311 INTRO TO ALGORITHMS Ghazaleh Parvini, Hava Siegelmann                 | 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 THE END OF NEW STUDENT ORIENTATION AND TRANSFER (NSOT) ENROLLMENT PERIOD. AFTER JUNIOR AND SENIOR CS MAJORS REGISTER, WILL OPEN TO SOPHOMORES. SOPHOMORE CS MAJORS SHOULD WAIT FOR THE ELIGIBILITY RESTRICTION TO BE REMOVED TO SELF-ENROLL AND SHOULD NOT REQUEST AN OVERRIDE. REMAINING SEATS WILL BE RELEASED PRIOR TO CLASS START. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDE VIA THE ON-LINE FORM: https://www.cics.umass.edu/academics/course-overrides.   |
| COMPSCI 320 INTRO TO SOFTWARE ENGINEERING Gordon Anderson, Madeline Endres, STAFF | COMPSCI 220 WITH GRADE OF C OR BETTER.   | JUNIOR AND SENIOR CS MAJORS ONLY.            | NO OPTION FOR PASS/FAIL. SATISFIES INTEGRATIVE EXPERIENCE REQUIREMENT FOR CS MAJORS. MEETS WITH COMPSCI 429. GRADUATING SENIORS ARE PRIORITIZED AND PRE-ENROLLED BY THE PROGRAM. SEATS ARE BEING SAVED FOR INCOMING TRANSFER STUDENTS UNTIL THE END OF NEW STUDENT ORIENTATION AND TRANSFER (NSOT) ENROLLMENT PERIOD. AFTER JUNIOR AND SENIOR CS MAJORS REGISTER, WILL OPEN TO SOPHOMORES. SOPHOMORE CS MAJORS SHOULD WAIT FOR THE ELIGIBILITY RESTRICTION TO BE REMOVED TO SELF-ENROLL AND SHOULD NOT REQUEST AN OVERRIDE. REMAINING SEATS WILL BE RELEASED PRIOR TO CLASS START. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDE VIA THE ON-LINE FORM: https://www.cics.umass.edu/academics/course-overrides |
| COMPSCI 325 INTRO TO HUMAN CMPTR INTERACTN Narges Mahyar                          | 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 SAVED FOR INFORM MAJORS AND INCOMING TRANSFER STUDENTS UNTIL THE END OF NEW STUDENT ORIENTATION AND TRANSFER (NSOT) ENROLLMENT PERIOD AT THE END OF JULY. REMAINING SEATS WILL BE RELEASED AT THAT TIME. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDE VIA THE ON-LINE FORM: https://www.cics.umass.edu/academics/course-overrides   |
| COMPSCI 326 WEB PROGRAMMING Timothy Richards                                      | 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 PERSON ON TUESDAYS AND THURSDAYS. U01 LEC 01 IS FULLY ONLINE AND STUDENTS ARE REQUIRED TO WATCH LECTURES SYNCHRONOUSLY ON TUESDAYS AND THURSDAYS. REQUIRED LABORATORY ATTENDANCE IS ON-LINE SYNCHRONOUSLY FOR BOTH SECTIONS. NO OPTION FOR PASS/FAIL. SATISFIES INTEGRATIVE EXPERIENCE REQUIREMENT FOR CS AND INFORM MAJORS. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/academics/course-overrides   |
| COMPSCI 328  MOBILE HEALTH SENSING&ANALYTCS  Deepak Ganesan                       | 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 THE END OF NEW STUDENT ORIENTATION AND TRANSFER (NSOT) ENROLLMENT PERIOD. REMAINING SEATS WILL BE RELEASED PRIOR TO CLASS START. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDE VIA THE ON-LINE FORM: https://www.cics.umass.edu/academics/course-overrides  |
| COMPSCI 335 INSIDE BOX:HOW CMPTRS WORK Charles Weems                              | COMPSCI 220 (OR COMPSCI 230) WITH A GRADE OF C OR BETTER.  | JUNIOR AND SENIOR CS MAJORS ONLY.            | MAY OPEN TO SOPHOMORE CS MAJORS MEETING PREREQUISITE IF AVAILABLE SEATS. STUDENTS WILL NEED TO SIGN A LOAN AGREEMENT FOR A PROVIDED HARDWARE KIT. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/academics/course-overrides   |
| COMPSCI 345 PRACT & APPLICS OF DATA MGMT Gordon Anderson, Jaime Davila            | 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 THE END OF NEW STUDENT ORIENTATION AND TRANSFER (NSOT) ENROLLMENT PERIOD. REMAINING SEATS WILL BE RELEASED PRIOR TO CLASS START. STUDENTS ARE EXPECTED TO HAVE BASIC PROGRAMMING SKILLS, AND BE ABLE TO USE LAPTOPS IN CLASS. STUDENTS WHO HAVE TAKEN COMPSCI 445 ARE NOT ELIGIBLE AND SHOULD NOT ENROLL. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDE VIA THE ON-LINE FORM: https://www.cics.umass.edu/academics/course-overrides   |

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| COMPSCI 360 INTRO COMPUTER/NETWRK SECURITY Pubali Datta | COMPSCI 230 WITH GRADE OF C OR BETTER.   | JUNIOR AND SENIOR CS MAJORS ONLY.                   | STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/academics/course-overrides  |
|   |  |   |   |
| COMPSCI 363<br>COMPUTER CRIME LAW                       | COMPSCI 230 AND (ENGLWRIT 112 WITH A GRADE OF C OR BETTER, OR CW G.ED. REQUIREMENT).   | JUNIOR AND SENIOR CS MAJORS ONLY.                   | PREVIOUSLY COMPSCI 391L. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/academics/course-overrides   |
| Marvin Cable  |  |   |   |
|   |  |   |   |
| COMPSCI 365 DIGITAL FORENSICS Brian Levine              | COMPSCI 230 WITH A GRADE OF C OR BETTER.   | JUNIOR AND SENIOR CS AND INFORM MAJORS ONLY.        | AFTER SENIORS AND JUNIORS REGISTER, PROGRAM WILL CONSIDER OPENING TO SOPHOMORES MEETING PREREQUISITE, IF AVAILABLE SEATS. SOPHOMORE CS AND INFORM MAJORS SHOULD WAIT FOR ELIGIBILITY TO OPEN TO SELF-ENROLL OR ADD TO THE WAITLIST AND SHOULD NOT REQUEST AN OVERRIDE. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE   |
| Dilan Levine  |  |   | FORM: https://www.cics.umass.edu/academics/course-overrides   |
| COMPSCI 367 REV ENGG&UNDRSTNDG EXPLOIT DEV              | 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 BEGINNING SPRING 2025. ALTHOUGH OPEN TO INFORM MAJORS, THIS COURSE DOES NOT COUNT AS AN INFORM ELECTIVE. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/academics/course-overrides   |
| Lurene Grenier  |  |   | overnues  |
| COMPSCI 377 OPERATING SYSTEMS                           | COMPSCI 230 WITH A GRADE OF C OR BETTER.   | JUNIOR AND SENIOR CS MAJORS ONLY.                   | STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/academics/course-overrides  |
| Phuthipong Bovornkeeratiroj                             |  |   |   |
|   |  |   |   |
| COMPSCI 383 ARTIFICIAL INTELLIGENCE                     | CS MAJORS: (CICS 210 OR COMPSCI 187) AND COMPSCI 240 (OR STATISTC 315), BOTH WITH A GRADE OF C OR BETTER.  INFORM MAJORS: INFO 348 AND STATISTC 315,                             | JUNIOR AND SENIOR CS AND INFORM MAJORS ONLY.        | SOME KNOWLEDGE OF PYTHON IS ASSUMED FOR ELIGIBLE STUDENTS TO USE COMPSCI 187 IN PLACE OF THE CICS 210 PREREQUISITE. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/academics/course-overrides  |
| Scott Niekum  | BOTH WITH A GRADE OF C OR BETTER.  |   |   |
| COMPSCI 389 INTRO TO MACHINE LEARNING                   | CICS 210 (OR COMPSCI 187) AND (COMPSCI 240 OR STATISTC 315 OR STATISTC 240 OR PSYCH 240 OR OIM 240 OR RES-ECON 212 OR SOCIOL 212) AND MATH 132, ALL WITH A GRADE OF C OR BETTER. | JUNIOR AND SENIOR CS AND INFORM MAJORS ONLY.        | STUDENTS WHO HAVE COMPLETED COMPSCI 589 ARE NOT ELIGIBLE FOR THIS COURSE AND SHOULD NOT ENROLL. STUDENTS WITH PRIOR EXPERIENCE IN MACHINE LEARNING OR WHO ARE ALREADY PASSIONATE ABOUT THE SUBJECT ARE ENCOURAGED TO TAKE COMPSCI 589 INSTEAD. ELIGIBLE STUDENTS WHO  |
| Philip Thomas   |  |   | HAVE COMPLETED COMPSCI 187 WITH A C OR BETTER MAY USE IT IN PLACE OF CICS 210; DO NOT REQUEST AN OVERRIDE, BUT WAIT FOR THE CHANGE TO SHOW ON SPIRE TO SELF-ENROLL. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA ON-LINE FORM: https://www.cics.umass.edu/academics/course-overrides  |
| COMPSCI 403 INTRO ROBTCS:PRCP,MECH,DYN,CTRL             | MATH 235 AND COMPSCI 220 (OR COMPSCI 230)<br>WITH GRADE OF C OR BETTER.  | JUNIOR AND SENIOR CS MAJORS ONLY.                   | UNDERGRADUATE PROGRAMMING CLASS, MATLAB OR PYTHON PROGRAMMING EXPERIENCE IS PREFERRED. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/academics/course-overrides   |
| Donghyun Kim  |  |   |   |
|   |  |   | THE COURSE OUALIEIES AS A ISABSTONE SOURSE! FOR THE UNISESSE AS A ISABSTONE   |
| 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 UNDERGRADUATE CERTIFICATE IN PUBLIC INTEREST TECHNOLOGY, ASSUMING THE STUDENT WORK PRODUCED IS DEEMED SUITABLE BY THE INSTRUCTOR. MAKE SURE TO DISCUSS   |
| Matthew Rattigan  |  |   | USING THIS COURSE FOR THIS PURPOSE WITH THE INSTRUCTOR AT THE BEGINNING OF THE COURSE. FOR MORE INFORMATION ON THE CERTIFICATE: https://groups.cs.umass.edu/pit/undergraduate-pit-certificate/. STUDENTS ENROLLED IN THE UNDERGRADUATE CERTIFICATE IN PUBLIC INTEREST TECHNOLOGY ARE ELIGIBLE VIA OVERRIDE. IF YOU HAVE QUESTIONS ABOUT THE PIT CERTIFICATE, EMAIL THE PIT CERTIFICATE PROGRAM DIRECTOR, PROFESSOR CHARLIE SCHWEIK AT cschweik@umass.edu. STUDENTS NEEDING SPECIAL PERMISSION |
|   |  |   | MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.<br>edu/academics/course-overrides  |

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| COMPSCI 426 SCALABLE WEB SYSTEMS Timothy Richards                                  | COMPSCI 320 OR COMPSCI 326 WITH A GRADE OF C OR BETTER.  | U1 LEC 01: JUNIOR AND SENIOR CS AND INFORM MAJORS ONLY.   | IT IS RECOMMENDED TO HAVE COMPLETED COMPSCI 220 (PROGRAMMING METHODOLOGY) AND COMPSCI 230 (COMPUTER SYSTEMS PRINCIPLES), OR COMPSCI 377 (OPERATING SYSTEMS), HOWEVER, THIS IS NOT REQUIRED BUT WILL MAKE YOUR EXPERIENCE MORE RICH (E.G., BACKGROUND IN WEB APP DEPLOYMENT, BASIC SECURITY, NETWORK PROTOCOLS, PROCESSES, CLIENT SERVER ARCHITECTURE, AND GENERAL OPERATING SYSTEMS CONCEPTS). STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/academics/course-overrides  |
| COMPSCI 429 SOFTWARE ENGINEERING PROJ MGMT Gordon Anderson, Madeline Endres, STAFF | COMPSCI 320 WITH A GRADE OF B OR BETTER.   | UNDERGRADUATE CS MAJORS ONLY.   | INSTRUCTOR CONSENT REQUIRED. MEETS WITH COMPSCI 320. ELIGIBLE STUDENTS MAY EMAIL INSTRUCTOR FOR PERMISSION TO ENROLL. ONCE APPROVED TO ENROLL, REFER TO INSTRUCTOR PERMISSION ON THE OVERRIDE REQUEST AND SUBMIT VIA THE ON-LINE FORM: https://www.cics.umass.edu/academics/course-overrides   |
| COMPSCI 445 INFORMATION SYSTEMS Marco Serafini                                     | 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 EXPERIENCE IN DATABASES MAY SUBSTITUTE ONE OF COMPSCI 320, 326, OR 377 WITH A GRADE OF C OR BETTER FOR THE COMPSCI 345 PREREQUISITE. IF AVAILABLE SEATS, STUDENTS WHO ARE NOT CS MAJORS BUT HAVE SUFFICIENT PROGRAMMING EXPERIENCE OR CS GRADUATE STUDENTS MAY SUBMIT AN OVERRIDE FOR INSTRUCTOR CONSIDERATION. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDE VIA THE ON-LINE FORM: https://www.cics.umass.edu/academics/course-overrides  |
| COMPSCI 446 SEARCH ENGINES James Allan   | COMPSCI 240 OR COMPSCI 383 WITH A GRADE OF COR BETTER.   | JUNIOR AND SENIOR CS MAJORS ONLY.   | INSTRUCTOR WILL CONSIDER STATISTC 315/515 AS AN ALTERNATE PREREQUISITE IN PLACE OF COMPSCI 240 VIA OVERRIDE IF AVAILABLE SEATS. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDE VIA THE ON-LINE FORM: https://www.cics.umass.edu/academics/course-overrides  |
| COMPSCI 453 COMPUTER NETWORKS Parviz Kermani                                       | 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 CONCURRENT EXPOSURE TO PROBABILITY (COMPSCI 240), ALGORITHMS (COMPSCI 311), AND MULTI-THREADED PROGRAMMING (COMPSCI 377 OPERATING SYSTEMS) ALTHOUGH THESE ARE NOT STRICT PREREQUISITES, STUDENTS MUST BE ABLE TO PROGRAM IN A STRUCTURED HIGH-LEVEL PROGRAMMING LANGUAGE, SUCH AS JAVA, C OR C++, PYTHON, ETC. PROGRAMMING PROJECTS IN A LANGUAGE OF STUDENT CHOICE. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/academics/course-overrides  |
| COMPSCI 461 SECURE DISTRIBUTED SYSTEMS Gregory Stone                               | COMPSCI 326, COMPSCI 345, COMPSCI 377,<br>COMPSCI 453, OR COMPSCI 497P WITH A GRADE OF<br>C OR BETTER.   | JUNIOR AND SENIOR CS MAJORS ONLY.   | THE COURSE IS BASED ON A FLIPPED CLASSROOM AND USES A HYBRID INSTRUCTION MODEL. SOME OF THE COURSE CONTENT IS DELIVERED ONLINE, HOWEVER STUDENTS ARE REQUIRED TO ATTEND WEEKLY CLASS MEETINGS. SENIOR AND JUNIOR CSENG MAJORS WITH APPROPRIATE BACKGROUND, IF AVAILABLE SEATS. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/academics/course-overrides  |
| COMPSCI 490Q QUANTUM INFORMATION SCIENCE Filip Rozpedek                            | MATH 132 AND MATH 235 AND COMPSCI 240 (OR STATISTC 315, PREVIOUSLY STATISTC 515), ALL WITH A GRADE OF C OR BETTER.   | JUNIOR AND SENIOR CS AND INFORM MAJORS ONLY.  | NOT ON THE LIST OF PRE-APPROVED INFORM ELECTIVES. AFTER JUNIOR AND SENIOR CS AND INFORM MAJORS HAVE ENROLLED, THIS COURSE WILL OPEN TO JUNIOR AND SENIOR PHYSICS, MATH, AND CSENG MAJORS, WHO SHOULD WAIT FOR THE COURSE TO OPEN TO SELF-ENROLL. MATH 233, COMPSCI 250 AND 311 ARE HELPFUL BUT NOT NECESSARY. PHYSICS MAJORS WITH A C OR BETTER IN PHYSICS 281 OR PHYSICS 287 MAY REQUEST AN OVERRIDE TO USE EITHER AS AN ALTERNATE FOR THE COMPSCI 240 PREREQUISITE. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/academics/course-overrides |
| COMPSCI 514 ALGORITHMS FOR DATA SCIENCE Andrew McGregor, Mingda Qiao               | 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. UO1 LEC 01: JUNIOR AND SENIOR CS MAJORS ONLY. UO1 LEC 02: MS-CMPSCI GRADUATE STUDENTS ONLY. U+ LEC 01: MS-CMPSCI ONLINE GRADUATE STUDENTS ONLY. | U1 LEC 01 FOR UNDERGRADS; U1 LEC 02 FOR GRADS. U01 LEC 01 FOR JUNIOR AND SENIOR CS MAJORS ONLY; U01 LEC 02 FOR MS-CMPSCI GRADUATE STUDENTS ONLY; C1 LEC 01 FOR MS-CMPSCI ONLINE GRAD STUDENTS ONLY. SEATS HELD IN LEC 02 FOR INCOMING GRAD STUDENT REGISTRATION. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/academics/course-overrides  |
| COMPSCI 515 ALGRTHMS,GAME THEORY, FAIRNESS Yair Zick                               | UNDERGRADUATES: COMPSCI 240 AND COMPSCI 250, BOTH WITH A GRADE OF C OR BETTER.   | LEC 01: JUNIOR AND SENIOR CS MAJORS ONLY.<br>LEC 02: MS-CMPSCI GRADUATE STUDENTS ONLY.  | PREVIOUSLY COMPSCI 590T. LECT 01 FOR UNDERGRADS; LECT 02 FOR GRADS. STUDENTS SHOULD BE FAMILIAR WITH BASIC CONCEPTS OF PROBABILITY THEORY (EXPECTATION, THE LAW OF TOTAL PROBABILITY), LINEAR OPTIMIZATION (SYNTAX, WHAT IS A PRIMAL AND A DUAL), AND BASIC ALGEBRA (WHAT IS A VECTOR SPACE). SEATS HELD IN LECT 02 FOR INCOMING GRAD STUDENT REGISTRATION. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/academics/course-overrides   |

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| COMPSCI 520 THEORY AND PRACTICE-SOFTENGIN Heather Conboy, Juan Zhai | UNDERGRADUATES: COMPSCI 320 (OR COMPSCI 220 AND COMPSCI 326) WITH C OR BETTER.  | LEC 01 AND 03: JUNIOR AND SENIOR CS MAJORS ONLY. LEC 02 AND 04: MS-CMPSCI GRADUATE STUDENTS ONLY.  | LEC 01 AND 03 FOR UNDERGRADS; LEC 02 AND 04 FOR GRADS. SEATS HELD IN LEC 02 AND 04 FOR INCOMING GRAD STUDENT REGISTRATION. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.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 GRADS; SEATS HELD IN LEC 02 FOR INCOMING STUDENT REGISTRATION. U+ LEC 01 FOR ONLINE MS-CMPSCI PROGRAM STUDENTS ONLY. COURSE IS ONLINE WITH OPTIONAL SYNCHRONOUS LIVE LECTURES ON MW 4:00-5:15 PM EDT. PHDS OR ANY STUDENT WITH A TUITION WAIVER CANNOT ENROLL IN A U+ SECTION. PHD OR OTHER GRADUATE LEVEL STUDENTS WHO NEED A UNIVERSITY COURSE SHOULD REGISTER IN UNIV LEC 02. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/academics/course-overrides   |
| COMPSCI 550 INTRODUCTION TO SIMULATION Peter Haas                   | UNDERGRADUATES: CICS 210 (OR COMPSCI 187)<br>AND STATISTC 315 (PREVIOUSLY STATISTC 515),<br>BOTH WITH A GRADE OF C OR BETTER. | LECT 01: JUNIOR AND SENIOR CS MAJORS ONLY.<br>LECT 02: MS-CMPSCI GRADUATE STUDENTS ONLY.   | LECT 01 FOR UNDERGRADS; LECT 02 FOR GRADS. SEATS HELD IN LECT 02 FOR INCOMING GRAD STUDENTS. SOME BACKGROUND IN STOCHASTIC PROCESSES IS HELPFUL, BUT NOT REQUIRED, AS THE MATERIAL WILL BE DEVELOPED IN CLASS. INSTRUCTOR PERMISSION REQUIRED FOR UNDERGRADUATE IE MAJORS MEETING PREREQUISITES AND GRADUATE IE STUDENTS. STUDENTS NEEDING INSTRUCTOR PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/academics/course-overrides  |
| COMPSCI 560 INTRO COMPUTER&NETWRK SECURITY Parviz Kermani           | UNDERGRADUATES: COMPSCI 453 OR E&C-ENG 374 WITH A GRADE OF C OR BETTER.   | UNIV LEC 01: UNDERGRADUATE CS AND CSENG STUDENTS. UNIV LEC 02: CMPSCI AND ECE GRADUATE STUDENTS ONLY. U+ LEC 01: MS-CMPSCI GRADUATE STUDENTS ONLY.       | UNIV LEC 01 FOR UNDERGRADS; UNIV LEC 02 FOR ELIGIBLE GRADS; SEATS HELD IN LEC 02 FOR INCOMING STUDENT REGISTRATION. U+ LEC 01 IS FULLY REMOTE WITH REQUIRED ONLINE SYNCHRONOUS MEETINGS ACCORDING TO SCHEDULE, AND IS FOR MS-CS STUDENTS AND OTHER GRADUATE STUDENTS (EXCEPT MS-ECE) WITH INSTRUCTOR PERMISSION. PHDS OR ANY STUDENT WITH A TUITION WAIVER CANNOT ENROLL IN A U+ SECTION. NO PREREQUISITES FOR CS OR ECE GRADUATE STUDENTS; HOWEVER, ANY EDUCATION IN SECURITY REQUIRES A GOOD KNOWLEDGE OF NETWORKING. AS SUCH, KNOWLEDGE OF COMPSCI 453, COMPUTER NETWORKING, IS ESSENTIAL TO COMPLETELY BENEFIT FROM THIS COURSE. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ONLINE FORM: https://www.cics.umass.edu/academics/course-overrides |
| COMPSCI 563 INTERNET LAW AND POLICY Marvin Cable                    | UNDERGRADUATES: COMPSCI 311 OR COMPSCI 383 OR COMPSCI 360 (PREVIOUSLY 460) WITH C OR BETTER.                                  | UNIV LEC 01: JUNIOR AND SENIOR CS MAJORS ONLY. UNIV LEC 02: CMPSCI AND ECE GRADUATE STUDENTS ONLY. U+ LEC 01: MS-CMPSCI GRADUATE STUDENTS ONLY.          | UNIV LEC 01 FOR UNDERGRADS; UNIV LEC 02 FOR ELIGIBLE GRADS; SEATS HELD IN LEC 02 FOR INCOMING STUDENT REGISTRATION. U+ LEC 01 SYNCHRONOUS REMOTE ATTENDANCE AT SPECIFIED MEETING TIMES IS REQUIRED; FOR MSCMPSCI STUDENTS AND OTHER GRADUATE STUDENTS (EXCEPT MS-ECE) WITH INSTRUCTOR PERMISSION. PHDS OR ANY STUDENT WITH A TUITION WAIVER CANNOT ENROLL IN A U+ SECTION. STUDENTS NEEDING SPECIAL PERMISSION FOR EITHER UNIVERSITY SECTION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.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<br>ONLY.<br>UNIV LEC 02: GRADUATE CMPSCI AND ECE<br>STUDENTS ONLY.<br>U+ LEC 01: GRADUATE CMPSCI STUDENTS ONLY. | STUDENTS WHO HAVE COMPLETED COMPSCI 590F ARE NOT ELIGIBLE FOR THIS COURSE. UNIV LEC 01 FOR UNDERGRADS; UNIV LEC 02 FOR GRADS. CLASS IS ONLINE WITH OPTIONAL SYNCHRONOUS LIVE LECTURES MW AT 2:30-3:45. CANVAS WILL BE USED AND ECHO360 FOR LECTURE VIDEO DISTRIBUTION. SENIOR AND JUNIOR CSENG MAJORS WITH APPROPRIATE BACKGROUND WITH INSTRUCTOR PERMISSION, IF AVAILABLE SEATS. U+ LEC 01 FOR ONLINE MS-CMPSCI PROGRAM STUDENTS ONLY. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/academics/courseoverrides  |
| COMPSCI 575 COMBINATORICS AND GRAPH THEORY                          | UNDERGRADUATES WITH COMPSCI 250 (OR MATH 455) WITH A GRADE OF B OR BETTER.  | LEC 01: JUNIOR AND SENIOR UNDERGRADUATES ONLY. LEC 02: MS-CMPSCI STUDENTS ONLY.  | CROSS-LISTED WITH MATH 513. LECT 01 FOR UNDERGRADS; LECT 02 FOR GRADS. IF NOT MEETING PREREQUISITES, STUDENTS MUST SEEK INSTRUCTOR PERMISSION VIA THE OVERRIDE PROCESS. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/academics/course-overrides.  |
| COMPSCI 578 DISTRIBUTED COMPTNG AND SYSTMS Arun Venkataramani       | UNDERGRADUATES: COMPSCI 377 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 LECT 01 FOR UNDERGRADS; UNIV LECT 02 FOR ELIGIBLE GRADS; SEATS HELD IN LECT 02 FOR INCOMING STUDENT REGISTRATION. U+ LEC 01 FOR MS-CMPSCI STUDENTS ONLY. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/academics/course-overrides   |

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| COMPSCI 589  MACHINE LEARNING  Benjamin Marlin              | 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<br>ONLY.<br>UNIV LEC 02: MS-CMPSCI GRADUATE STUDENTS<br>ONLY.                   | LEC 01 FOR UNDERGRADS; LEC 02 FOR GRADS. SEATS HELD IN LEC 02 FOR INCOMING GRAD STUDENT REGISTRATION. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/academics/course-overrides   |
| COMPSCI 590AF REV ENGG&UNDRSTNDG EXPLOIT DEV Lurene Grenier | UNDERGRADUATE PREREQUISITE: COMPSCI 230<br>(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). LEC 01 FOR UNDERGRADS; LEC 02 FOR GRADS. ALTHOUGH OPEN TO INFORM MAJORS, THIS COURSE IS NOT ON THE LIST OF PRE-APPROVED INFORM ELECTIVES. SEATS HELD FOR INCOMING GRADUATE STUDENT REGISTRATION. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/academics/course-overrides  |
| COMPSCI 590Q QUANTUM INFORMATION SYSTEMS Stefan Krastanov   | UNDERGRADUATES: MATH 235 WITH A GRADE OF C OR BETTER.  | LEC 01: JUNIOR AND SENIOR CS MAJORS ONLY.<br>LEC 02: MS-CMPSCI STUDENTS ONLY.  | MEETS WITH COMPSCI 648. LEC 01 FOR UNDERGRADS; LEC 02 FOR GRADS. KNOWLEDGE OF QUANTUM MECHANICS IS NOT A PREREQUISITE; QUANTUM CONCEPTS WILL BE INTRODUCED AS NEEDED. BACKGROUND SHOULD INCLUDE FAMILIARITY WITH CALCULUS (MATH 131, 132), KNOWLEDGE OF SOME PROBABILITY AND DISCRETE MATH. KNOWLEDGE OF ALGORITHMS AND COMPLEXITY ARE NOT PREREQUISITES; WILL BE INTRODUCED AS NEEDED. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/academics/course-overrides |
| COMPSCI 596E IS-ML APPLIED TO CHILD RESCUE Brian Levine     |  | UNIV LEC 01: SENIOR CS MAJORS AND CS<br>GRADUATE STUDENTS ONLY.<br>U+ LEC 01: ONLINE MS-CMPSCI PROGRAM<br>STUDENTS ONLY. | INSTRUCTOR PERMISSION REQUIRED. CS SENIOR OR CS GRADUATE STUDENT WITH A MACHINE LEARNING BACKGROUND. WE EXPECT HIGH GRADES IN COMPSCI 589 OR COMPSCI 682. PHDS OR ANY STUDENT WITH A TUITION WAIVER CANNOT ENROLL IN A U+ SECTION. FOR INSTRUCTIONS ON HOW TO CONTACT THE INSTRUCTOR FOR ENROLLMENT, PLEASE SEE: https://infosec.cs.umass.edu/compsci596e.   |
| COMPSCI 601 COMPUTATION THEORY Hung Le                      |  | CMPSCI GRADUATE STUDENTS ONLY.   | PREREQUISITES: AN UNDERGRADUATE COURSE IN AUTOMATA THEORY AND FORMAL LANGUAGES SUCH AS COMPSCI 501 OR PERMISSION OF INSTRUCTOR. INSTRUCTOR PERMISSION REQUIRED FOR UNDERGRADUATE CS MAJORS CLEARED BY THE UPD, IF AVAILABLE SEATS. SEATS HELD FOR INCOMING GRAD STUDENT REGISTRATION. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/academics/course-overrides   |
| COMPSCI 602 RESEARCH METHODS-EMPIRICAL CS David Jensen      |  | CMPSCI GRADUATE STUDENTS ONLY.   | SEATS HELD FOR INCOMING GRADUATE REGISTRATION. UNDERGRADUATE CHC CS MAJORS WITH INSTRUCTOR, HPD, AND UPD PERMISSION. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/academics/course-overrides  |
| COMPSCI 611 ADVANCED ALGORITHMS Hedyeh Beyhaghi             |  | CMPSCI GRADUATE STUDENTS ONLY.   | MATHEMATICAL MATURITY WITH KNOWLEDGE OF ALGORITHMS AT THE LEVEL OF COMPSCI 311 EXPECTED OF INCOMING CS GRADUATE STUDENTS. INSTRUCTOR PERMISSION REQUIRED FOR UNDERGRADUATE CS MAJORS CLEARED BY THE UPD, IF AVAILABLE SEATS. SEATS HELD FOR INCOMING GRAD STUDENT REGISTRATION. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/academics/course-overrides.  |
| COMPSCI 635 MODERN COMPUTER ARCHITECTURE Charles Weems      |  | CMPSCI GRADUATE STUDENTS ONLY.   | SEATS SAVED FOR INCOMING GRADUATE STUDENT REGISTRATION. COMPSCI 535 OR EQUIVALENT INTRODUCTORY COMPUTER ARCHITECTURE COURSE IS ASSUMED AS PRIOR KNOWLEDGE. CONTACT INSTRUCTOR IF UNCERTAIN. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/academics/course-overrides.  |
| COMPSCI 646 INFORMATION RETRIEVAL Razieh Rahimi             |  | CMPSCI GRADUATE STUDENTS ONLY.   | INSTRUCTOR PERMISSION REQUIRED FOR SENIOR CS MAJORS WHO MEET THE PREREQUISITE OF COMPSCI 445 OR 446 WITH A GRADE OF C OR BETTER AND CLEARED BY THE UPD, IF SEATS ARE AVAILABLE. SEATS HELD FOR INCOMING STUDENT REGISTRATION. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/academics/course-overrides.  |

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| COMPSCI 648 QUANTUM INFORMATION SYSTEMS Stefan Krastanov       |               | CMPSCI GRADUATE STUDENTS ONLY.   | MEETS WITH COMPSCI 590Q. PREVIOUSLY COMPSCI 690Q. FAMILIARITY WITH LINEAR ALGEBRA (MATH 235) AND CALCULUS (MATH 131/132). KNOWLEDGE OF SOME PROBABILITY AND DISCRETE MATH. KNOWLEDGE OF QUANTUM MECHANICS IS NOT A PREREQUISITE; QUANTUM CONCEPTS INTRODUCED AS NEEDED. KNOWLEDGE OF ALGORITHMS AND COMPLEXITY ARE NOT PREREQUISITES; ALSO INTRODUCED AS NEEDED. SEATS HELD FOR INCOMING GRAD STUDENT REGISTRATION. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/academics/course-overrides.   |
| COMPSCI 660 ADV INFORMATION ASSURANCE Amir Houmansadr          |               | CMPSCI GRADUATE STUDENTS ONLY.   | INSTRUCTOR PERMISSION REQUIRED FOR UNDERGRADUATE CS MAJORS WHO MEET THE PREREQUISITE OF COMPSCI 460 OR COMPSCI 466, OR EQUIVALENT AND CLEARED BY THE UPD, IF AVAILABLE SEATS. NON-CS STUDENTS BY PERMISSION OF INSTRUCTOR. SEATS HELD FOR INCOMING GRAD STUDENT REGISTRATION. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/academics/course-overrides.   |
| COMPSCI 661 SECURE DISTRIBUTED SYSTEMS Gregory Stone           |               | UNIV LEC 01: CMPSCI AND ECE GRADUATE<br>STUDENTS ONLY.<br>U+ LEC 01: MS-CMPSCI GRADUATE STUDENTS ONLY. | UNIV LEC 01 FOR ELIGIBLE GRADS; SEATS HELD FOR INCOMING STUDENT REGISTRATION. U+ LEC 01 FULLY REMOTE WITH REQUIRED ONLINE SYNCHRONOUS MEETINGS AT THE SCHEDULED TIME; FOR MS-CS STUDENTS AND OTHER GRADUATE STUDENTS (EXCEPT MS-ECE) WITH INSTRUCTOR PERMISSION. PHDS OR ANY STUDENT WITH A TUITION WAIVER CANNOT ENROLL IN A U+ SECTION. THE COURSE IS BASED ON A FLIPPED CLASSROOM. MUCH OF THE COURSE CONTENT IS DELIVERED ONLINE AND STUDENTS ARE EXPECTED TO VIEW OR READ THESE MATERIALS AHEAD OF CLASS MEETINGS IN PREPARATION FOR DISCUSSION. PHYSICAL ATTENDANCE IS REQUIRED FOR IN-PERSON SECTIONS. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/academics/course-overrides  |
| COMPSCI 666 THEORY/PRACTICE-CRYPTOGRAPHY Adam O'Neill          |               | CMPSCI GRADUATE STUDENTS ONLY.   | PREVIOUSLY COMPSCI 690C. MATHEMATICAL MATURITY, BEING COMFORTABLE READING AND WRITING MATHEMATICAL PROOFS. SEATS SAVED FOR INCOMING GRAD STUDENT REGISTRATION. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/academics/course-overrides.  |
| COMPSCI 685 ADV NATURAL LANG PROCESSING Brendan O'Connor       |               | GRADUATE CMPSCI STUDENTS ONLY.   | PHD-LING STUDENTS WITH PERMISSION OF INSTRUCTOR. SEATS HELD FOR INCOMING GRAD STUDENT REGISTRATION. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA ON-LINE FORM: https://www.cics.umass.edu/academics/course-overrides  |
| COMPSCI 687 REINFORCEMENT LEARNING Bruno Castro da Silva       |               | CMPSCI GRADUATE STUDENTS ONLY.   | A STRONG MATHEMATICAL BACKGROUND IN CALCULUS, LINEAR ALGEBRA, STRATEGIES FOR PROVING THEOREMS, AND PROGRAMMING IS ASSUMED AND REQUIRED. IN ADDITION, A BACKGROUND IN MACHINE LEARNING (COMPSCI 589 AND COMPSCI 689) AND ARTIFICIAL INTELLIGENCE (COMPSCI 683) IS ASSUMED. SEATS ARE RESERVED FOR INCOMING GRAD STUDENT REGISTRATION. STUDENTS REQUIRING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ONLINE FORM: https://www.cics.umass.edu/academics/course-overrides.   |
| COMPSCI 689  MACHINE LEARNING  Justin Domke                    |               | CMPSCI GRADUATE STUDENTS ONLY.   | PERMISSION OF INSTRUCTOR FOR UNDERGRADUATES WHO HAVE COMPLETED COMPSCI 589, IF CLEARED BY THE UPD AND AVAILABLE SEATS. SEATS HELD FOR INCOMING GRAD STUDENT REGISTRATION. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/academics/course-overrides  |
| COMPSCI 690F TRUSTWORTHY AND RESPONSIBLE AI Eugene Bagdasarian |               | CMPSCI GRADUATE STUDENTS ONLY.   | AS THE COURSE HAS INTERDISCIPLINARY PARTS, TOWARD STATISTICS AND BEHAVIORAL SCIENCES, GRADUATE STUDENTS FROM OTHER DEPARTMENTS MAY ENROLL, IF SEATS ARE AVAILABLE. FOLLOWING BACKGROUND IS ASSUMED: INTRODUCTORY MACHINE LEARNING OR DATA SCIENCE (COMPSCI 348 OR 383 OR 389 OR 589 OR EQUIVALENT), BASIC STATISTICS (COMPSCI 240 OR STAT 240 OR PSYCH 240 OR OIM 240 OR STAT 515 OR EQUIVALENT), GOOD PROGRAMMING SKILLS IN PYTHON (LIBRARIES: NUMPY, PANDAS, MATPLOTLIB, SKLEARN). STUDENTS OUTSIDE OF CS MUST REQUEST AN OVERRIDE AND DESCRIBE HOW THEY MEET PREREQUISITES UNDER ADDITIONAL INFORMATION. STUDENTS WHO ARE UNCERTAIN WHETHER THEIR BACKGROUND IS SUFFICIENT SHOULD EMAIL THE INSTRUCTOR ATTACHING THEIR ACADEMIC TRANSCRIPTS TO DETERMINE WHETHER THEY HAVE THE APPROPRIATE BACKGROUND TO BE SUCCESSFUL IN THE COURSE. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDE VIA THE ON-LINE FORM: https://www.cics.umass.edu/academics/course-overrides. |

|  | PREREQUISITES   | ELIGIBILITY RESTRICTIONS                             | CLASS NOTES/COMMENTS INFORMATION ONLY - DOES NOT AFFECT SPIRE ENROLLMENT.  |
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| COMPSCI 692PA S-PRIV&SECURTY-GENERATV MODELS Eugene Bagdasarian, Amir Houmansadr, Brian Levine |   | CMPSCI GRADUATE STUDENTS ONLY.                       | STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/academics/course-overrides   |
| COMPSCI 692RP S-ROBOTICS:PERC,MOTN PLAN,CNTL Donghyun Kim                                      |   | CMPSCI GRADUATE STUDENTS ONLY.                       | IT IS RECOMMENDED TO HAVE A BASIC BACKGROUND IN ROBOTICS, SUCH AS WHAT IS COVERED IN COMPSCI 403 OR 603. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/academics/course-overrides  |
| COMPSCI 698W P-CS RESRCH WRITNG PRACTICUM  Justin Obara  |   | CMPSCI PHD STUDENTS ONLY.                            | MAY BE REPEATED FOR CREDIT ONCE. SECT 01 (9/2-10/14/25); SECT 02 (10/15-12/9/25). STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/academics/course-overrides.  |
| COMPSCI 701 ADV TOPICS IN CMPSCI   |   | DOCTORAL, MASTERS GRADUATE CMPSCI<br>STUDENTS ONLY.  | THE 3 CREDIT OPTION IS FOR THE SECOND SEMESTER OF A TWO-SEMESTER SEQUENCE, 701Y FOLLOWED BY 701. THE 6 CREDIT OPTION IS FOR A PROJECT THAT WILL BE COMPLETED OVER TWO SEMESTERS WITH ENROLLMENT IN ONLY ONE SEMESTER. REQUEST OVERRIDE VIA THE SPECIAL ON-LINE FORM: https://www.cics.umass.edu/content/registration                   |
| COMPSCI 701Y ADV TOPICS IN CMPSCI (1ST SEM)  |   | DOCTORAL, MASTERS CMPSCI GRADUATE<br>STUDENTS ONLY.  | INDICATES THE FIRST SEMESTER OF A TWO-SEMESTER SEQUENCE, 701Y (3 CREDITS) FOLLOWED BY 701 (3 CREDITS), WITH GRADE FOR BOTH ASSIGNED AT THE END. REQUEST OVERRIDE VIA THE SPECIAL ON-LINE FORM: https://www.cics.umass.edu/content/registration   |
| COMPSCI 879 TEACH ASSTS-TOMORROW'S FACULTY Neena Thota   |   |  | COURSE IS ASSOCIATED WITH CICS TA EMPLOYMENT. REQUIRED COMPONENT OF TA CONTRACT. REGISTRATION WILL BE PROCESSED BY THE ASSOCIATE DIRECTOR GRADUATE PROGRAMS AFTER SIGNED AND APPROVED CONTRACT. OPEN TO CICS TEACHING ASSISTANTS ONLY.   |
| COMPSCI 891M S-THEORY OF COMPUTATION STAFF   |   | DOCTORAL, MASTERS GRADUATE STUDENTS ONLY.            | MAY BE REPEATED FOR CREDIT UP TO 6 TIMES. UNDERGRADUATES AND OTHER STUDENTS NOT MEETING ELIGIBILITY MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/academics/course-overrides   |
| COMPSCI 899 PHD DISSERTATION   |   |  | COURSE OPEN ONLY TO CS GRADUATE STUDENTS WHO HAVE ACHIEVED CANDIDACY. REQUEST ENROLLMENT VIA THE SPECIAL ON-LINE FORM: https://www.cics.umass.edu/academics/academic-policies/graduate-programs-policies/graduate-student-forms  |
| COMPSCI H250  HNRS COLLOQ: INTRO COMPUTATION  David Barrington                                 | CICS 160 (PREVIOUSLY INFO 190T OR COMPSCI 187<br>OR E&C-ENG 241) AND MATH 132, BOTH WITH A<br>GRADE OF C OR BETTER [OR COMPSCI 250 WITH A<br>GRADE OF B OR BETTER]. | COMMONWEALTH HONORS COLLEGE CS AND MATH MAJORS ONLY. | DEPARTMENT CONSENT REQUIRED. NO OPTION FOR PASS/FAIL. STUDENTS MUST BE ENROLLED IN COMPSCI 250 (OR HAVE COMPLETED COMPSCI 250 WITH A GRADE OF B OR BETTER). OTHER CHC MAJORS CONSIDERED IF AVAILABLE SEATS. INTERESTED STUDENTS MUST COMPLETE OVERRIDE REQUEST VIA ONLINE FORM: https://www.cics.umass.edu/academics/course-overrides. |

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| COMPSCI H335 HNRS COLLOQ: INSIDE THE BOX Charles Weems       | COMPSCI 220 (OR COMPSCI 230) WITH A GRADE OF C OR BETTER.  | COMMONWEALTH HONORS COLLEGE JUNIOR AND SENIOR CS MAJORS ONLY. | DEPARTMENT CONSENT REQUIRED. NO OPTION FOR PASS/FAIL. STUDENTS MUST<br>BE ENROLLED IN COMPSCI 335. INTERESTED STUDENTS MUST REQUEST<br>OVERRIDE VIA ON-LINE FORM: https://www.cics.umass.edu/academics/course-overrides.  |
| COMPSCI H446 HNRS COLLOQ: SEARCH ENGINES James Allan         | COMPSCI 240 OR COMPSCI 383 WITH A GRADE OF C<br>OR BETTER [OR COMPSCI 446 WITH A GRADE OF B<br>OR BETTER].   | COMMONWEALTH HONORS COLLEGE JUNIOR AND SENIOR CS MAJORS ONLY. | DEPARTMENT CONSENT REQUIRED. NO OPTION FOR PASS/FAIL. STUDENTS MUST BE ENROLLED IN COMPSCI 446 (OR HAVE COMPLETED COMPSCI 446 WITH A GRADE OF B OR BETTER). STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/academics/course-overrides.   |
| COMPSCI H589  HNRS COLLOQ: MACHINE LEARNING  Benjamin Marlin | [ 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 STATISTICS 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.] OR [ COMPSCI 589 WITH A GRADE OF B OR BETTER.] | COMMONWEALTH HONORS COLLEGE JUNIOR AND SENIOR CS MAJORS ONLY. | NO OPTION FOR PASS/FAIL. DEPARTMENT CONSENT REQUIRED. STUDENTS MUST BE ENROLLED IN COMPSCI 589 (OR HAVE COMPLETED COMPSCI 589 WITH A GRADE OF B OR BETTER). REQUEST OVERRIDE VIA THE ON-LINE FORM: https://www.cics.umass.edu/academics/course-overrides  |
| INFO 101 INTRO TO INFORMATICS Michelle Trim                  |  | UNDERGRADUATE NON-CS MAJORS ONLY.                             | CS MAJORS ARE NOT ELIGIBLE FOR THIS COURSE. FOUNDATIONS COURSE FOR THE INFORMATICS MAJOR. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/academics/course-overrides.   |
| INFO 150 MATH FOUND-INFORMATICS David Barrington             |  | INFORM MAJORS ONLY.   | CS AND MATH (STATISTICS) MAJORS ARE NOT ELIGIBLE FOR THIS COURSE. AFTER INFORM MAJORS REGISTER, INFO 150 WILL OPEN TO ALL NON-CS AND NON-MATH/STATS UNDERGRADUATES WHO SHOULD WAIT FOR THE MAJOR ELIGIBILITY RESTRICTION TO BE REMOVED TO SELF-ENROLL OR ADD TO THE WAITLIST (IF AVAILABLE) AND SHOULD NOT REQUEST AN OVERRIDE. ANTICIPATED OPENING DURING THE FIRST WEEK OF CLASSES. R1 MATH USEFUL; NOT ABSOLUTELY REQUIRED. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/academics/course-overrides   |
| INFO 203 A NETWORKED WORLD  Mohammadhassan Hajiesmaili       |  | INFORM MAJORS ONLY.   | CS MAJORS ARE NOT ELIGIBLE FOR THIS COURSE. AFTER INFORM MAJORS REGISTER, INFO 203 WILL OPEN TO ALL NON-CS UNDERGRADUATES WHO SHOULD WAIT FOR THE MAJOR ELIGIBILITY RESTRICTION TO BE REMOVED TO SELF-ENROLL OR ADD TO THE WAITLIST (IF AVAILABLE) AND SHOULD NOT REQUEST AN OVERRIDE. ANTICIPATED OPENING DURING THE FIRST WEEK OF CLASSES. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/academics/course-overrides   |
| 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, RESECON 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 (OTHER THAN COMPSCI 121) MAY BE CONSIDERED FOR OVERRIDE. BASIC MATHEMATICAL MATURITY (COLLEGE ALGEBRA) IS ASSUMED. BASIC PROBABILITY AND STATISTICS, SUCH AS ONE OF THE COURSES REQUIRED FOR REGISTRATION ON SPIRE IS REQUIRED. THIS COURSE CONSISTS OF TWO LECTURES AND ONE LAB SECTION PER WEEK. EACH LECTURE MEETING INCLUDES A PRESENTATION OF CONCEPTUAL MATERIAL AS WELL AS SOME TIME TO WORK ON IMPLEMENTATION OF THE MATERIAL PRESENTED. IN LAB TIME, STUDENTS RECEIVE DETAILED INSTRUCTION ON THE USE OF SOFTWARE TOOLS TO ANALYZE ACTUAL DATA SETS. READINGS WILL BE ASSIGNED AS PREPARATION FOR EACH CLASS MEETING. A PROJECT WILL BE ASSIGNED DURING THE COURSE. STUDENTS WORK IN PAIRS ON THE PROJECT. THE PROJECT PROVIDES STUDENTS WITH AN OPPORTUNITY TO WORK COLLABORATIVELY TO EXPLORE A TOPIC IN MORE DEPTH. AFTER ELIGIBLE INFORM MAJORS REGISTER, WILL OPEN TO ALL ELIGIBLE UNDERGRADUATES, IF AVAILABLE SEATS. ANTICIPATED OPENING DURING THE FIRST WEEK OF CLASSES. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/academics/course-overrides |

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| INFO 324 INTRO CLINICAL HLTH INFORMTCS Sunghoon Lee  | INFO 248 (OR STATISTCS 515 OR COMPSCI 240) WITH A GRADE OF C OR BETTER.                                     | INFORM MAJORS ONLY.                          | PREVIOUSLY INFO 390W. THIS COURSE IS A CORE IN THE INFORMATICS HEALTH AND LIFE SCIENCES (HLS) CONCENTRATION. KNOWLEDGE OF HEALTH DATA OR MEDICINE IS NOT A PREREQUISITE; THIS COURSE IS DESIGNED TO INTRODUCE THE CONCEPTS OF HEALTH AND MEDICAL DATA. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/academics/course-overrides  |
| INFO 348 DATA ANALYTICS WITH PYTHON Matthew Rattigan | INFO 248 AND CICS 160 (OR INFO 190T OR COMPSCI<br>186 OR COMPSCI 187), BOTH WITH A GRADE OF C OR<br>BETTER. | INFORM MAJORS ONLY.                          | PREVIOUSLY CICS 397A. LINEAR ALGEBRA (MATH 235) IS HELPFUL BUT NOT REQUIRED. STUDENTS WITH ALTERNATE PROGRAMMING OR STATISTICS BACKGROUND MAY REQUEST OVERRIDE FOR CONSIDERATION. A PREREQUISITE CHANGE HAS BEEN APPROVED BY THE FACULTY SENATE TO REPLACE CICS 210 WITH CICS 160. AFTER INFORM MAJORS REGISTER, INFO 348 WILL OPEN TO ALL UNDERGRADUATES, IF AVAILABLE SEATS. STUDENTS MEETING PREREQUISITE SHOULD WAIT FOR THE MAJOR ELIGIBILITY RESTRICTION TO BE REMOVED TO SELF-ENROLL OR ADD TO THE WAITLIST (IF AVAILABLE) AND SHOULD NOT REQUEST AN OVERRIDE. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/academics/course-overrides |
| INFO 390C INTRO COMPTNL BIOL&BIOINFRMTCS Anna Green  | INFO 248 WITH A GRADE OF C OR BETTER (OR CICS 210 AND COMPSCI 240 BOTH WITH A GRADE OF C OR BETTER).        | JUNIOR AND SENIOR CS AND INFORM MAJORS ONLY. | JUNIOR AND SENIOR NON-CS AND NON-INFORM MAJORS WITH A C OR BETTER IN STATISTC 240 (OR EQUIVALENT) AND ONE OF COMPSCI 119, CICS 108, OR CICS 110 WITH INSTRUCTOR PERMISSION, IF AVAILABLE SEATS. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/academics/course-overrides   |