

## SPIRE REGISTRATION INFORMATION for 2020 Spring

	<u>PREREQUISITES</u>	<u>ELIGIBILITY RESTRICTIONS</u>	<u>CLASS NOTES/COMMENTS</u> <small>INFORMATION ONLY - DOES NOT AFFECT SPIRE ENROLLMENT.</small>
<b>CICS 197R</b> ST-INTRO TO DATA ANALYSIS IN R  <i>Jasper McChesney</i>		FRESHMEN AND SOPHOMORE NON-COMPSCI MAJORS ONLY.	COURSE RUNS FOR 6 WEEKS (1/27/20-3/6/20: 1/27, 1/31, 2/3, 2/7, 2/10, 2/14, 2/17, 2/21, 2/24, 2/28, 3/2, 3/6). REGISTRATION ONLY BEFORE ADD/DROP ENDS, THROUGH 2/3. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: <a href="https://www.cics.umass.edu/overrides">https://www.cics.umass.edu/overrides</a> .
<b>CICS 298A</b> P-LEADRSHP:COMMUNCTNG-EXPTISE  <i>Emma Anderson</i>	COMPSCI 186 OR COMPSCI 187 WITH A GRADE OF C OR BETTER.	FRESHMEN, SOPHOMORE, JUNIOR COMPUTER SCIENCE AND INFORMATICS MAJORS ONLY.	SENIORS AND 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: <a href="https://www.cics.umass.edu/overrides">https://www.cics.umass.edu/overrides</a> .
<b>CICS 305</b> SOC ISS IN CMPYNG  <i>Michelle Trim, Justin Obara, Siobhan Mei</i>	ENGLWRIT 112 (OR ENGLISH WRITING WAIVER), COMPSCI 220, COMPSCI 230 AND COMPSCI 240 (OR 250), ALL WITH A GRADE OF C OR BETTER, OR ENGLWRIT 112 (OR ENGLISH WRITING WAIVER) AND INFO 248, BOTH WITH A GRADE OF C OR BETTER.	SENIOR AND JUNIOR CS AND INFORMATICS MAJORS ONLY.	SATISFIES JUNIOR YEAR WRITING REQUIREMENT. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: <a href="https://www.cics.umass.edu/overrides">https://www.cics.umass.edu/overrides</a> .
<b>COMPSCI 105</b> COMPUTER LITERACY  <i>William Verts</i>		UNDERGRADUATE NON-CS MAJORS ONLY.	CS MAJORS ARE NOT ELIGIBLE FOR THIS COURSE. ALL STUDENTS MUST HAVE ACCESS TO A COMPUTER FOR PERFORMING ASSIGNMENTS. COMPUTER MUST RUN WINDOWS 7, 8, OR 10, OR MAC OS/X 10.6 AND LATER, WITH A RECENT VERSION OF MICROSOFT OFFICE (NOTHING EARLIER THAN MICROSOFT OFFICE 2010 FOR WINDOWS OR MICROSOFT OFFICE 2011 FOR MAC). NOT ALL ASSIGNMENTS CAN BE PERFORMED ON A MAC, BUT STUDENTS WITHOUT WINDOWS (OR WITHOUT A COMPUTER) MAY USE CAMPUS WINDOWS PC LABS. PLEASE CHECK 105 WEBSITE. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: <a href="https://www.cics.umass.edu/overrides">https://www.cics.umass.edu/overrides</a> .
<b>COMPSCI 119</b> INTRO PROGRAMMING  <i>William Verts</i>		UNDERGRADUATE NON-CS MAJORS ONLY.	CS MAJORS ARE NOT ELIGIBLE FOR THIS COURSE. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: <a href="https://www.cics.umass.edu/overrides">https://www.cics.umass.edu/overrides</a> .
<b>COMPSCI 121</b> PROBLEM SOLVING W/COMPUTERS  <i>Gordon Anderson, Neena Thota</i>	COMPLETION OF THE R1 GEN ED (OR A SCORE OF 20 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.	UNDERGRADUATE STUDENTS ONLY.	INTENDED FOR CS MAJORS OR THOSE APPLYING TO THE MAJOR. NON-MAJORS MAY OPT TO TAKE COMPSCI 119 (OR COMPSCI 190F). ATTENDANCE IN LECT AND LAB IS MANDATORY. ICLICKER IS REQUIRED. FOR QUESTIONS ABOUT 121 COURSE ADMINISTRATION, CONTACT CS121admin@cs.umass.edu. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: <a href="https://www.cics.umass.edu/overrides">https://www.cics.umass.edu/overrides</a> .
<b>COMPSCI 145</b> REP,STORNG&RET INFO  <i>William Verts</i>	R1.	UNDERGRADUATE NON-CS MAJORS ONLY.	CS MAJORS ARE NOT ELIGIBLE FOR THIS COURSE. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: <a href="https://www.cics.umass.edu/overrides">https://www.cics.umass.edu/overrides</a> .
<b>COMPSCI 186</b> USING DATA STRUCTURES  <i>Jaime Dávila</i>	COMPSCI 121 WITH A GRADE OF C OR BETTER AND COMPLETION OF THE R1 GEN ED (OR A SCORE OF 20 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.	FRESHMAN AND SOPHOMORE UNDERGRADUATES ONLY.	PROPOSAL SUBMITTED TO CHANGE PREREQUISITE TO ACCOMMODATE MATH PLACEMENT EXAM SCORES. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: <a href="https://www.cics.umass.edu/overrides">https://www.cics.umass.edu/overrides</a> .
<b>COMPSCI 187</b> PROGRAMMING W/DATA STRCTRS  <i>Matthew Rattigan, Meng-Chieh Chiu</i>	COMPSCI 121 WITH A GRADE OF B OR BETTER (OR COMPSCI 186 (OR COMPSCI 190D) WITH A GRADE OF C OR BETTER).	UNDERGRADUATE CS MAJORS ONLY.	THE PREREQUISITE FOR COMPSCI 187 REQUIRES A GRADE OF B OR BETTER IN COMPSCI 121 (OR C OR BETTER IN COMPSCI 186 (OR COMPSCI 190D)). ATTEND LAB EVEN IF BEFORE FIRST CLASS MEETING. CS MINORS, APPLICANTS-ON-CONTRACT, AND OTHERS NOT MEETING ELIGIBILITY, OR STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: <a href="https://www.cics.umass.edu/overrides">https://www.cics.umass.edu/overrides</a> .

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<b>COMPSCI 197C</b> ST-PGMG IN C  <i>Run Zhu</i>	COMPSCI 186 OR 187 WITH A GRADE OF C OR BETTER.	FRESHMEN AND SOPHOMORE CS MAJORS ONLY.	STUDENTS WHO HAVE TAKEN COMPSCI 230 ARE NOT ELIGIBLE FOR THIS COURSE. COURSE RUNS FOR 6 WEEKS (9/11, 9/18, 9/25, 10/2, 10/9, and 10/16). CS MINORS AND APPLICANTS-ON-CONTRACT NOT MEETING ELIGIBILITY, OR STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: <a href="https://www.cics.umass.edu/overrides">https://www.cics.umass.edu/overrides</a> . STUDENTS ARE ENCOURAGED TO BRING A LAPTOP. WINDOWS USERS SHOULD DOWNLOAD PUTTY HERE: <a href="http://www.chiark.greenend.org/~sgtatham/putty/download.html">http://www.chiark.greenend.org/~sgtatham/putty/download.html</a> .
<b>COMPSCI 197U</b> ST-A HANDS-ON INTRO TO UNIX  <i>Arun Dunna</i>		FRESHMEN AND SOPHOMORE CS MAJORS, INFORMATICS MAJORS, AND CICS EXPLORATORY TRACK STUDENTS ONLY.	COURSE RUNS FOR 6 WEEKS (1/27/20-3/6/20: 1/27, 1/29, 2/3, 2/5, 2/10, 2/12, 2/17, 2/19, 2/24, 2/26, 3/2, 3/4). ADD/DROP THROUGH 2/3. INSTRUCTOR CONSENT REQUIRED TO WITHDRAW 2/4-2/7 ONLY. CONSIDERATION OF JUNIORS, THEN SENIORS, IF AVAILABLE SEATS. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: <a href="https://www.cics.umass.edu/overrides">https://www.cics.umass.edu/overrides</a> .
<b>COMPSCI 198J</b> P-HIGH SCHOOL TEACHING PRACTICUM  <i>Ramesh Sitaraman</i>	COMPSCI 121 AND COMPSCI 187 BOTH WITH A GRADE OF A- OR BETTER.	UNDERGRADUATES ONLY.	INSTRUCTOR CONSENT REQUIRED. MAY BE REPEATED FOR CREDIT.
<b>COMPSCI 220</b> PGMG METHODOLOGY  <i>Marius Minea, Jaime Dávila</i>	COMPSCI 187 WITH A GRADE OF 'C' OR BETTER.	CS MAJORS ONLY.	STUDENTS ARE STRONGLY ADVISED NOT TO TAKE 220 AND 230 IN THE SAME SEMESTER. DUE TO ENROLLMENT PRESSURE, THE UPC RESERVES THE RIGHT TO DROP STUDENTS ENROLLED IN BOTH FROM EITHER COURSE WHEN NECESSARY. CS MINORS, APPLICANTS-ON-CONTRACT, AND OTHERS NOT MEETING ELIGIBILITY, OR STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: <a href="https://www.cics.umass.edu/overrides">https://www.cics.umass.edu/overrides</a> .
<b>COMPSCI 230</b> CMPTR SYS PRINC  <i>Meng-Chieh Chiu</i>	COMPSCI 187 WITH A GRADE OF 'C' OR BETTER.	CS MAJORS ONLY.	STUDENTS ARE STRONGLY ADVISED NOT TO TAKE 220 AND 230 IN THE SAME SEMESTER. DUE TO ENROLLMENT PRESSURE, THE UPC RESERVES THE RIGHT TO DROP STUDENTS ENROLLED IN BOTH FROM EITHER COURSE WHEN NECESSARY. CS MINORS, APPLICANTS-ON-CONTRACT, AND OTHERS NOT MEETING ELIGIBILITY, OR STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: <a href="https://www.cics.umass.edu/overrides">https://www.cics.umass.edu/overrides</a> .
<b>COMPSCI 240</b> RSNG UNDER UNCERTAINTY  <i>Shiting Lan</i>	COMPSCI 187 AND MATH 132 WITH A GRADE OF 'C' OR BETTER.	CS MAJORS ONLY.	STUDENTS ARE ADVISED NOT TO TAKE 240 AND 250 IN THE SAME SEMESTER. DUE TO ENROLLMENT PRESSURE, THE UPC RESERVES THE RIGHT TO DROP STUDENTS ENROLLED IN BOTH FROM EITHER COURSE WHEN NECESSARY. CS MINORS, APPLICANTS-ON-CONTRACT, AND OTHERS NOT MEETING ELIGIBILITY, OR STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: <a href="https://www.cics.umass.edu/overrides">https://www.cics.umass.edu/overrides</a> .
<b>COMPSCI 250</b> INTRO TO COMPUTATION  <i>David Barrington, Hia Ghosh</i>	COMPSCI 187 AND MATH 132 WITH GRADE OF 'C' OR BETTER.	CS AND MATH MAJORS ONLY.	STUDENTS ARE ADVISED NOT TO TAKE 240 AND 250 IN THE SAME SEMESTER. DUE TO ENROLLMENT PRESSURE, THE UPC RESERVES THE RIGHT TO DROP STUDENTS ENROLLED IN BOTH FROM EITHER COURSE WHEN NECESSARY. OPEN TO CSENG MAJORS WITH ECE 241 (OR ECE 242) WITH C OR BETTER, IF AVAILABLE SEATS. CS MINORS, APPLICANTS-ON-CONTRACT, AND OTHERS NOT MEETING ELIGIBILITY, OR STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: <a href="https://www.cics.umass.edu/overrides">https://www.cics.umass.edu/overrides</a> .
<b>COMPSCI 311</b> INTRO TO ALGORITHMS  <i>David Barrington, Marius Minea</i>	COMPSCI 187 AND COMPSCI 250 (OR MATH 455) WITH A GRADE OF C OR BETTER.	LECT 01: JUNIOR AND SENIOR CS MAJORS ONLY. LECT 02: SOPHOMORE, JUNIOR AND SENIOR CS MAJORS ONLY.	STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: <a href="https://www.cics.umass.edu/overrides">https://www.cics.umass.edu/overrides</a> .
<b>COMPSCI 320</b> INTRO TO SOFTWARE ENGINEERING  <i>David Fisher, Neena Thota</i>	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 529. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: <a href="https://www.cics.umass.edu/overrides">https://www.cics.umass.edu/overrides</a> .

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<b>COMPSCI 326</b> WEB PROGRAMMING  <i>Emery Berger</i>	COMPSCI 220 (OR COMPSCI 230) WITH A GRADE OF C OR BETTER, OR INFO 248 AND COMPSCI 186 (OR COMPSCI 187) BOTH WITH A GRADE OF C OR BETTER.	SENIOR AND JUNIOR CS AND INFORMATICS MAJORS ONLY.	NO OPTION FOR PASS/FAIL. SATISFIES INTEGRATIVE EXPERIENCE REQUIREMENT FOR CS AND INFORM MAJORS. RESERVED SEATS: ELIGIBLE STUDENTS MAY BE UNABLE TO ENROLL IN OPEN SEATS UNTIL THE RESERVE FOR INFORM MAJORS IS MET. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: <a href="https://www.cics.umass.edu/overrides">https://www.cics.umass.edu/overrides</a> .
<b>COMPSCI 328</b> MOBILE HEALTH SENSING&ANALYTCS  <i>Deepak Ganesan</i>	COMPSCI 187 (OR INFO 248 AND COMPSCI 186) WITH A GRADE OF C OR BETTER.	SENIOR AND JUNIOR CS AND INFORMATICS MAJORS ONLY.	STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: <a href="https://www.cics.umass.edu/overrides">https://www.cics.umass.edu/overrides</a> .
<b>COMPSCI 333</b> INTERNET OF THINGS  <i>Sunghoon Lee</i>	COMPSCI 187 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: <a href="https://www.cics.umass.edu/overrides">https://www.cics.umass.edu/overrides</a> .
<b>COMPSCI 345</b> PRACT & APPLICS OF DATA MGMT  <i>Alexandra Meliou</i>	COMPSCI 187 (OR INFO 248 AND COMPSCI 186) WITH A GRADE OF C OR BETTER.	SENIOR AND JUNIOR CS AND INFORMATICS MAJORS ONLY.	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. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: <a href="https://www.cics.umass.edu/overrides">https://www.cics.umass.edu/overrides</a> .
<b>COMPSCI 348</b> PRINCIPLES OF DATA SCIENCE  <i>David Jensen</i>	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 OVERRIDES VIA THE ON-LINE FORM: <a href="https://www.cics.umass.edu/overrides">https://www.cics.umass.edu/overrides</a> .
<b>COMPSCI 365</b> DIGITAL FORENSICS  <i>Arun Dunna</i>	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: <a href="https://www.cics.umass.edu/overrides">https://www.cics.umass.edu/overrides</a> .
<b>COMPSCI 373</b> INTRO TO COMPUTER GRAPHICS  <i>Rui Wang</i>	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 WHO HAVE TAKEN COMPSCI 473 ARE NOT ELIGIBLE. STUDENTS WHO HAVE TAKEN 373 CANNOT TAKE COMPSCI 497C SPECIAL TOPICS IN COMPUTER GRAPHICS. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: <a href="https://www.cics.umass.edu/overrides">https://www.cics.umass.edu/overrides</a> .
<b>COMPSCI 377</b> OPERATING SYSTEMS  <i>Mark Corner</i>	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: <a href="https://www.cics.umass.edu/overrides">https://www.cics.umass.edu/overrides</a> .
<b>COMPSCI 383</b> ARTIFICIAL INTELLIGENCE  <i>Matthew Rattigan</i>	COMPSCI 220 (OR COMPSCI 230) AND COMPSCI 240 (OR STAT 515), BOTH WITH GRADE OF 'C' OR BETTER.	<b>SOPHOMORE, JUNIOR AND SENIOR CS MAJORS ONLY.</b>	STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: <a href="https://www.cics.umass.edu/overrides">https://www.cics.umass.edu/overrides</a> .

**SPIRE REGISTRATION INFORMATION for 2020 Spring**

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<b>COMPSCI 446</b> SEARCH ENGINES  <i>David Fisher</i>	COMPSCI 240 OR COMPSCI 383 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: <a href="https://www.cics.umass.edu/overrides">https://www.cics.umass.edu/overrides</a> .
<b>COMPSCI 453</b> COMPUTER NETWORKS  <i>Parviz Kermani</i>	COMPSCI 230 (OR COMPSCI 377) 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: <a href="https://www.cics.umass.edu/overrides">https://www.cics.umass.edu/overrides</a> .
<b>COMPSCI 461</b> SECURE DISTRIBUTED SYSTEMS  <i>Gregory Stone</i>	COMPSCI 326, COMPSCI 345, COMPSCI 377, COMPSCI 453, OR COMPSCI 497P WITH A GRADE OF 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: <a href="https://www.cics.umass.edu/overrides">https://www.cics.umass.edu/overrides</a>
<b>COMPSCI 466</b> APPLIED CRYPTOGRAPHY  <i>Adam O'Neill</i>	COMPSCI 311 WITH A GRADE OF C OR BETTER.	JUNIOR AND SENIOR CS MAJORS ONLY.	STUDENTS WHO HAVE TAKEN HIGHER-LEVEL MATHEMATICS (IN PARTICULAR MATH 411, MATH 455, MATH 471, OR MATH 513 (COMPSCI 575)) ARE PARTICULARLY INVITED TO ENROLL. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: <a href="https://www.cics.umass.edu/overrides">https://www.cics.umass.edu/overrides</a> .
<b>COMPSCI 490S</b> SOFTWARE ENTREPRENEURSHIP  <i>Neena Thota</i>	COMPSCI 326 (OR COMPSCI 320) WITH A GRADE OF C OR BETTER.	JUNIOR AND SENIOR CS AND INFORM MAJORS ONLY.	STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: <a href="https://www.cics.umass.edu/overrides">https://www.cics.umass.edu/overrides</a>
<b>COMPSCI 491G</b> S-COMPUTER NETWORKING LAB  <i>Parviz Kermani</i>	COMPSCI 453 WITH A GRADE OF C OR BETTER.	JUNIOR AND SENIOR CS MAJORS ONLY.	CLASS MEETS IN ASSIGNED ROOM, THE NETWORKING LAB LGRT 224. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: <a href="https://www.cics.umass.edu/overrides">https://www.cics.umass.edu/overrides</a> .
<b>COMPSCI 501</b> FORMAL LANGUAGE THEORY  <i>Neil Immerman</i>	UNDERGRADUATES: COMPSCI 311 WITH A GRADE OF 'C' OR BETTER.	LECT 01: JUNIOR AND SENIOR CS MAJORS ONLY. LECT 02: MS-CMPSCI STUDENTS ONLY.	LECT 01 FOR UNDERGRADS; LECT 02 FOR GRADS. IT IS RECOMMENDED THAT UNDERGRADUATE STUDENTS HAVE A B- OR BETTER IN COMPSCI 311 IN ORDER TO ATTEMPT 501. SEATS HELD FOR INCOMING GRAD STUDENT REGISTRATION. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: <a href="https://www.cics.umass.edu/overrides">https://www.cics.umass.edu/overrides</a> .
<b>COMPSCI 514</b> ALGORITHMS FOR DATA SCIENCE  <i>Cameron Musco</i>	UNDERGRADUATES: COMPSCI 240 AND COMPSCI 311 WITH A GRADE OF B+ OR BETTER.	LECT 01: JUNIOR AND SENIOR CS MAJORS ONLY. LECT 02: MS-CMPSCI STUDENTS ONLY.	LECT 01 FOR UNDERGRADS; LECT 02 FOR GRADS. SEATS HELD IN LECT 02 FOR INCOMING GRAD STUDENT REGISTRATION. WAS COMPSCI 590D. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: <a href="https://www.cics.umass.edu/overrides">https://www.cics.umass.edu/overrides</a> .
<b>COMPSCI 520</b> THEORY AND PRACTICE-SOFTENGIN  <i>Heather Conboy</i>	UNDERGRADUATES MUST HAVE COMPLETED COMPSCI 320 WITH A GRADE OF C OR BETTER.	LECT 01: JUNIOR AND SENIOR CS MAJORS ONLY. LECT 02: MS-CMPSCI STUDENTS ONLY.	LECT 01 FOR UNDERGRADS; LECT 02 FOR GRADS. SEATS HELD IN LECT 02 FOR INCOMING STUDENT REGISTRATION. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: <a href="https://www.cics.umass.edu/overrides">https://www.cics.umass.edu/overrides</a> .

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<b>COMPSCI 529</b> SOFTWARE ENGINEERING PROJ MGMT  <i>David Fisher, Neena Thota</i>	COMPSCI 320 WITH A GRADE OF A- OR BETTER.	UNDERGRADUATE CS MAJORS ONLY.	PERMISSION OF INSTRUCTOR REQUIRED. MEETS WITH COMPSCI 320. STUDENTS NEEDING INSTRUCTOR PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: <a href="https://www.cics.umass.edu/overrides">https://www.cics.umass.edu/overrides</a> .
<b>COMPSCI 535</b> COMPUTER ARCHITECTURE  <i>Charles Weems</i>	UNDERGRADUATES: COMPSCI 335 WITH A GRADE OF 'C' OR BETTER.	LECT 01: JUNIOR AND SENIOR CS MAJORS ONLY. LECT 02: MS-CMPSCI STUDENTS ONLY.	LECT 01 FOR UNDERGRADS; LECT 02 FOR GRADS. SEATS HELD IN LECT 02 FOR INCOMING GRAD STUDENT REGISTRATION. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: <a href="https://www.cics.umass.edu/overrides">https://www.cics.umass.edu/overrides</a> .
<b>COMPSCI 577</b> OS DESIGN AND IMPLEMENTATION  <i>Prashant Shenoy</i>	COMPSCI 377 WITH A GRADE OF C OR BETTER.	LECT 01: JUNIOR AND SENIOR CS MAJORS ONLY. LECT 02: MS-CMPSCI STUDENTS ONLY.	LECT 01 FOR UNDERGRADS; LECT 02 FOR GRADS. SEATS HELD IN LECT 02 FOR INCOMING GRAD STUDENT REGISTRATION. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: <a href="https://www.cics.umass.edu/overrides">https://www.cics.umass.edu/overrides</a> .
<b>COMPSCI 589</b> MACHINE LEARNING  <i>Justin Domke</i>	UNDERGRADUATES: COMPSCI 383 AND MATH 235 WITH A GRADE OF C OR BETTER.	LECT 01: JUNIOR AND SENIOR CS MAJORS ONLY. LECT 02: MS-CMPSCI STUDENTS ONLY.	LECT 01 FOR UNDERGRADS; LECT 02 FOR GRADS. STUDENTS MAY REQUEST TO TAKE MATH 235 LINEAR ALGEBRA AS A CO-REQUISITE WITH INSTRUCTOR PERMISSION. SEATS HELD FOR INCOMING GRAD STUDENT REGISTRATION. GRADUATE STUDENTS IN ECE, MATH, STATS IF AVAILABLE SEATS. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: <a href="https://www.cics.umass.edu/overrides">https://www.cics.umass.edu/overrides</a> .
<b>COMPSCI 590A</b> SYSTEM DEFENSE AND TEST  <i>Parviz Kermani</i>	UNDERGRADUATES: COMPSCI 460 (OR COMPSCI 597N OR COMPSCI 660) WITH A GRADE OF C OR BETTER.	UNIV LECT 01: JUNIOR AND SENIOR CS MAJORS ONLY. UNIV LECT 02: MS-CMPSCI STUDENTS ONLY. UWW LECT 01: CMPSCI AND ECE GRADUATE STUDENTS ONLY.	<p>WAS INFOSEC 690S. LECT 01 FOR UNDERGRADS; LECT 02 FOR GRADS. PROPOSAL TO ADD PREREQUISITE IN PROGRESS. SENIOR AND JUNIOR CS MAJORS WITH COMPSCI 460 (OR COMPSCI 597N OR COMPSCI 660) WITH A GRADE OF C OR BETTER ARE ELIGIBLE. CSENG MAJORS WITH APPROPRIATE BACKGROUND WITH INSTRUCTOR PERMISSION, IF AVAILABLE SEATS. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: <a href="https://www.cics.umass.edu/overrides">https://www.cics.umass.edu/overrides</a>.</p> <p>UWW LECT 01: ONLINE COURSE FOR GRADUATE STUDENTS ONLY. GRADUATE STUDENTS FROM OTHER DEPARTMENTS WITH INSTRUCTOR PERMISSION, IF AVAILABLE SEATS. REGISTRATION FOR UWW SECTION: <a href="https://www.umass.edu/online/how-enroll">https://www.umass.edu/online/how-enroll</a></p>
<b>COMPSCI 590G</b> GAME PROGRAMMING  <i>Evangelos Kalogerakis</i>	UNDERGRADUATES: COMPSCI 220, COMPSCI 311, AND MATH 235 ALL WITH A GRADE OF C OR BETTER.	LECT 01: JUNIOR AND SENIOR CS MAJORS ONLY. LECT 02: MS-CMPSCI STUDENTS ONLY.	LECT 01 FOR UNDERGRADS; LECT 02 FOR GRADS. SEATS HELD IN LECT 02 FOR INCOMING GRAD STUDENT REGISTRATION. STUDENTS NEEDING INSTRUCTOR PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: <a href="https://www.cics.umass.edu/overrides">https://www.cics.umass.edu/overrides</a> .
<b>COMPSCI 590J</b> CYBER EFFECTS  <i>Seth Landsman, Daniel Walters, Edward Walters, Adam Woodbury</i>	UNDERGRADUATES: COMPSCI 230 (OR ECE 322) AND COMPSCI 460 (OR ECE 371) BOTH WITH A GRADE OF C OR BETTER.	LECT 01: JUNIORS AND SENIORS ONLY. LECT 02: MS-CMPSCI STUDENTS ONLY. UWW LECT 01: GRADUATE CMPSCI AND ECE STUDENTS ONLY.	<p>LECT 01 FOR UNDERGRADS; LECT 02 FOR GRADS. SEATS HELD IN LECT 02 FOR INCOMING STUDENT REGISTRATION. UNDERGRADS MAY SUBSTITUTE ANY INTRODUCTION TO COMPUTER/NETWORK SECURITY COURSE AT THE 300-LEVEL OR HIGHER WITH A GRADE OF C OR BETTER FOR ECE 371, WITH PERMISSION OF INSTRUCTOR. OTHER GRADUATE STUDENTS WITH PERMISSION OF INSTRUCTOR. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: <a href="https://www.cics.umass.edu/overrides">https://www.cics.umass.edu/overrides</a>.</p> <p>UWW LECT 01: OTHER GRADUATE STUDENTS WITH PERMISSION OF INSTRUCTOR.</p>
<b>COMPSCI 590K</b> ADV DIGITAL FORENSIC SYSTEMS  <i>Marc Liberatore</i>	UNDERGRADUATES: COMPSCI 365 OR 377 WITH A GRADE OF C OR BETTER.	LECT 01: JUNIOR AND SENIOR CS MAJORS ONLY. LECT 02: MS-CMPSCI STUDENTS ONLY. UWW LECT 01: MS-CMPSCI STUDENTS ONLY.	<p>STUDENTS WHO HAVE COMPLETED COMPSCI 590F ARE NOT ELIGIBLE FOR THIS COURSE. LECT 01 FOR UNDERGRADS; LECT 02 FOR GRADS. SENIOR AND JUNIOR CSENG MAJORS WITH APPROPRIATE BACKGROUND WITH INSTRUCTOR PERMISSION, IF AVAILABLE SEATS. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: <a href="https://www.cics.umass.edu/overrides">https://www.cics.umass.edu/overrides</a>.</p> <p>UWW section 01: Online course for COMPSCI &amp; ECE graduate students only. Graduate students from other departments may enroll with instructor permission, but only if there are available seats. Registration for UWW section: <a href="https://www.umass.edu/online/how-enroll">https://www.umass.edu/online/how-enroll</a></p>

## SPIRE REGISTRATION INFORMATION for 2020 Spring

	<u>PREREQUISITES</u>	<u>ELIGIBILITY RESTRICTIONS</u>	<u>CLASS NOTES/COMMENTS</u> <small>INFORMATION ONLY - DOES NOT AFFECT SPIRE ENROLLMENT.</small>
<b>COMPSCI 590M</b> INTRODUCTION TO SIMULATION  <i>Peter Haas</i>	UNDERGRADUATES: COMPSCI 187 AND STATISTC 515 WITH A GRADE OF C OR BETTER.	LECT 01: JUNIOR AND SENIOR CS MAJORS ONLY. LECT 02: MS-CMPSCI GRAD STUDENTS ONLY.	LECT 01 FOR UNDERGRADS; LECT 02 FOR GRADS. SEATS SAVED 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: <a href="https://www.cics.umass.edu/overrides">https://www.cics.umass.edu/overrides</a> .
<b>COMPSCI 590U</b> MOBILE AND UBIQ COMPUTING  <i>Tauhidur Rahman</i>	UNDERGRADUATES: COMPSCI 230 AND COMPSCI 240 WITH A GRADE OF C OR BETTER.	LECT 01: JUNIOR AND SENIOR CS MAJORS. LECT 02: MS-CMPSCI STUDENTS ONLY.	LECT 01 FOR UNDERGRADS; LECT 02 FOR GRADS. SEATS HELD IN LECT 02 FOR INCOMING GRAD STUDENT REGISTRATION. SOME BACKGROUND IN MACHINE LEARNING, SIGNAL PROCESSING, EMBEDDED SYSTEMS, PHYSICAL COMPUTING IS HELPFUL. INSTRUCTOR PERMISSION FOR STUDENTS WITH ALTERNATE PREREQUISITES. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ONLINE FORM: <a href="https://www.cics.umass.edu/overrides">https://www.cics.umass.edu/overrides</a> .
<b>COMPSCI 590V</b> DATA VISUALIZATION&EXPLORATION  <i>Ali Sarvghad Batn Moghaddam</i>	UNDERGRADUATES: COMPSCI 220 (OR COMPSCI 230), WITH A GRADE OF B OR BETTER.	LECT 01: JUNIOR AND SENIOR CS MAJORS ONLY. LECT 02: MS-CMPSCI STUDENTS ONLY.	LECT 01 FOR UNDERGRADS; LECT 02 FOR GRADS. SEATS HELD IN LECT 02 FOR INCOMING GRAD STUDENT REGISTRATION. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: <a href="https://www.cics.umass.edu/overrides">https://www.cics.umass.edu/overrides</a> .
<b>COMPSCI 591NR</b> S-NEURAL NETWORKS&NEURODYNAMIC  <i>Robert Kozma</i>	UNDERGRADUATES: COMPSCI 311 WITH A GRADE OF 'C' OR BETTER.	LECT 01: JUNIOR AND SENIOR UNDERGRADUATES ONLY. LECT 02: MS-CMPSCI STUDENTS ONLY.	LECT 01 FOR UNDERGRADS; LECT 02 FOR GRADS. MEETS WITH COMPSCI 691NR. STUDENTS NEEDING INSTRUCTOR PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: <a href="https://www.cics.umass.edu/overrides">https://www.cics.umass.edu/overrides</a> .
<b>COMPSCI 603</b> ROBOTICS  <i>Roderic Grupen</i>		COMPSCI GRADUATE STUDENTS ONLY.	A BACKGROUND IN LINEAR ALGEBRA, DIFFERENTIAL EQUATIONS, AND PROGRAMMING SKILLS ARE ASSUMED. 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: <a href="https://www.cics.umass.edu/overrides">https://www.cics.umass.edu/overrides</a> .
<b>COMPSCI 611</b> ADVANCED ALGORITHMS  <i>Ramesh Sitaraman</i>		COMPSCI GRADUATE STUDENTS ONLY.	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: <a href="https://www.cics.umass.edu/overrides">https://www.cics.umass.edu/overrides</a> .
<b>COMPSCI 645</b> DB DSGN & IMPLMNTN  <i>Yanlei Diao</i>		COMPSCI GRADUATE STUDENTS ONLY.	STUDENTS SHOULD HAVE TAKEN AN UNDERGRADUATE LEVEL COURSE ON OPERATING SYSTEMS (COMPSCI 377) OR DATABASES(COMPSCI 445). SEATS HELD FOR INCOMING GRAD STUDENT REGISTRATION. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: <a href="https://www.cics.umass.edu/overrides">https://www.cics.umass.edu/overrides</a> .
<b>COMPSCI 661</b> SECURE DISTRIBUTED SYSTEMS  <i>Gregory Stone</i>		UNIV LECT 01: CMPSCI GRADUATE STUDENTS ONLY. UWW LECT 01: CMPSCI AND ECE GRADUATE STUDENTS ONLY.	COURSE PREVIOUSLY COMPSCI 690P. 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. REGISTRATION FOR UNIV SECTION IS OPEN TO CS GRADS (CICS RA OR TA CONTRACTED). STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: <a href="https://www.cics.umass.edu/overrides">https://www.cics.umass.edu/overrides</a> . UWW LECTURE 01 IN-PERSON. REGISTRATION FOR UWW SECTION: <a href="https://www.umass.edu/online">https://www.umass.edu/online</a>
<b>COMPSCI 677</b> DISTRIBUTED AND OPERATING SYS  <i>Marco Serafini</i>		LECT 01: CMPSCI GRADUATE STUDENTS ONLY. LECT 02: GRADUATE STUDENTS ONLY.	INSTRUCTOR PERMISSION REQUIRED FOR SENIOR CS MAJORS CLEARED BY THE UPD, IF AVAILABLE SEATS. BACKGROUND IN UNDERGRAD OS(COMPSCI 377) IS HELPFUL. SEATS HELD FOR INCOMING GRAD STUDENT REGISTRATION. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: <a href="https://www.cics.umass.edu/overrides">https://www.cics.umass.edu/overrides</a> .

## SPIRE REGISTRATION INFORMATION for 2020 Spring

PREREQUISITES	ELIGIBILITY RESTRICTIONS	CLASS NOTES/COMMENTS <small>INFORMATION ONLY - DOES NOT AFFECT SPIRE ENROLLMENT.</small>
<b>COMPSCI 683</b> ARTIFICIAL INTELLIGENCE  <i>Shlomo Zilberstein</i>	CMPSCI GRADUATE STUDENTS ONLY.	STUDENTS WHO HAVE TAKEN AN UNDERGRADUATE AI COURSE PREFERRED. SEATS HELD FOR INCOMING GRAD STUDENT REGISTRATION. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: <a href="https://www.cics.umass.edu/overrides">https://www.cics.umass.edu/overrides</a> .
<b>COMPSCI 685</b> ADV NATURAL LANG PROCESSING  <i>Brendan O'Connor</i>	CMPSCI GRADUATE STUDENTS ONLY.	WAS COMPSCI 690N. 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: <a href="https://www.cics.umass.edu/overrides">https://www.cics.umass.edu/overrides</a> .
<b>COMPSCI 688</b> PROBABILISTIC GRAPHICAL MODELS  <i>Justin Domke</i>	CMPSCI GRADUATE STUDENTS ONLY.	SEATS HELD FOR INCOMING GRAD STUDENT REGISTRATION. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: <a href="https://www.cics.umass.edu/overrides">https://www.cics.umass.edu/overrides</a> .
<b>COMPSCI 690J</b> ADVANCED CRYPTOGRAPHY  <i>Adam O'Neill</i>	CMPSCI GRADUATE STUDENTS ONLY.	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: <a href="https://www.cics.umass.edu/overrides">https://www.cics.umass.edu/overrides</a> .
<b>COMPSCI 690OP</b> OPTIMIZATION IN CS  <i>Madalina Fiterau Brostean</i>	CMPSCI GRADUATE STUDENTS ONLY.	SOME LEVEL OF MATHEMATICAL MATURITY, SUCH AS EXPOSURE TO UNDERGRADUATE LEVEL CALCULUS AND LINEAR ALGEBRA, IS DESIRABLE. STUDENTS ARE EXPECTED TO BE FAMILIAR WITH A HIGH-LEVEL PROGRAMMING LANGUAGE. SEATS HELD FOR INCOMING GRAD STUDENT REGISTRATION. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: <a href="https://www.cics.umass.edu/overrides">https://www.cics.umass.edu/overrides</a> .
<b>COMPSCI 690RA</b> RANDOMIZED ALGORITHMS  <i>Andrew McGregor</i>	CMPSCI GRADUATE STUDENTS ONLY.	GRADUATE STUDENTS ARE EXPECTED TO HAVE MATHEMATICAL MATURITY, EXPOSURE TO ALGORITHM DESIGN AND ANALYSIS AT THE ADVANCED UNDERGRADUATE (SUCH AS COMPSCI 311) OR BEGINNING GRADUATE LEVEL (SUCH AS COMPSCI 514 OR 611) AND A SOLID GROUNDING IN LINEAR ALGEBRA AND PROBABILITY THEORY. STUDENTS WITHOUT SUCH BACKGROUND CAN SEEK PERMISSION OF THE INSTRUCTOR. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: <a href="https://www.cics.umass.edu/overrides">https://www.cics.umass.edu/overrides</a> .
<b>COMPSCI 690W</b> ADV WRLSS NTWK AND SNSNG IN IOT  <i>Jie Xiong</i>	CMPSCI AND ECE GRADUATE STUDENTS ONLY.	CMPSCI GRADUATE STUDENTS ARE EXPECTED TO HAVE AN UNDERGRADUATE PREPARATION EQUIVALENT TO COMPSCI 230, 240, AND EITHER COMPSCI 328, 390N, OR 453. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: <a href="https://www.cics.umass.edu/overrides">https://www.cics.umass.edu/overrides</a> .
<b>COMPSCI 691NR</b> S-NEURAL NETWORKS&NEURODYNAMIC  <i>Robert Kozma</i>	CMPSCI GRADUATE STUDENTS ONLY.	MEETS WITH COMPSCI 591NR. UNDERGRADUATE COURSE IN ALGORITHMS EQUIVALENT TO COMPSCI 311 IS ASSUMED. STUDENTS NEEDING INSTRUCTOR PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: <a href="https://www.cics.umass.edu/overrides">https://www.cics.umass.edu/overrides</a> .
<b>COMPSCI 692M</b> S-COMPUTING FOR COMMON GOOD  <i>Narges Mahyar</i>	CMPSCI GRADUATE STUDENTS ONLY.	STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: <a href="https://www.cics.umass.edu/overrides">https://www.cics.umass.edu/overrides</a> .

**SPIRE REGISTRATION INFORMATION for 2020 Spring**

	<u>PREREQUISITES</u>	<u>ELIGIBILITY RESTRICTIONS</u>	<u>CLASS NOTES/COMMENTS</u> <small>INFORMATION ONLY - DOES NOT AFFECT SPIRE ENROLLMENT.</small>
<b>COMPSCI 692Q</b> S-DISTRIB QUANTUM INFO SYSTEMS  <i>Donald Towsley</i>	COMPSCI 690Q	COMPSCI GRADUATE STUDENTS ONLY	STUDENTS WITHOUT COMPSCI 690Q (FALL 2019) REQUIRE INSTRUCTOR PERMISSION. CONTACT INSTRUCTOR BEFORE CLASS START OR ATTEND THE FIRST CLASS MEETING.
<b>COMPSCI 692R</b> S-MACH LEARNNG-REAL WORLD:CASE  <i>Edward Rietman</i>		COMPSCI GRADUATE STUDENTS ONLY.	STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: <a href="https://www.cics.umass.edu/overrides">https://www.cics.umass.edu/overrides</a>
<b>COMPSCI 692S</b> S-SYSTMS FOR ML, ML FOR SYSTMS  <i>Marco Serafini</i>		COMPSCI GRADUATE STUDENTS ONLY.	SECT 01=3 CR; SECT 02=1 CR. SEATS HELD FOR INCOMING GRAD STUDENT REGISTRATION. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: <a href="https://www.cics.umass.edu/overrides">https://www.cics.umass.edu/overrides</a> .
<b>COMPSCI 692T</b> S-DISTRIBTD ML AND DATA MINING  <i>Peter Haas, Donald Towsley</i>		COMPSCI GRADUATE STUDENTS ONLY.	LECT 01=3 CR; LECT 02=1 CR. STUDENTS NEEDING INSTRUCTOR PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: <a href="https://www.cics.umass.edu/overrides">https://www.cics.umass.edu/overrides</a> .
<b>COMPSCI 701</b> ADV TOPICS IN CMPSCI		DOCTORAL, MASTERS CMPSCI GRADUATE 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 begun and completed within the same semester. REQUEST OVERRIDE VIA THE SPECIAL ON-LINE FORM: <a href="https://www.cics.umass.edu/content/registration">https://www.cics.umass.edu/content/registration</a>
<b>COMPSCI 701Y</b> ADV TOPICS IN CMPSCI (1ST SEM)		DOCTORAL, MASTERS CMPSCI GRADUATE 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: <a href="https://www.cics.umass.edu/content/registration">https://www.cics.umass.edu/content/registration</a>
<b>COMPSCI 891M</b> S-THEORY OF COMPUTATION  <i>Andrew McGregor</i>		DOCTORAL, MASTERS GRADUATE STUDENTS ONLY.	MAY BE REPEATED FOR CREDIT UP TO 6 TIMES. OTHERS NOT MEETING ELIGIBILITY, OR STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: <a href="https://www.cics.umass.edu/overrides">https://www.cics.umass.edu/overrides</a> .
<b>COMPSCI 899</b> PHD DISSERTATION			COURSE OPEN ONLY TO CS GRADUATE STUDENTS WHO HAVE PASSED PORTFOLIO. REQUEST OVERRIDE VIA THE SPECIAL ON-LINE FORM: <a href="https://www.cics.umass.edu/content/registration">https://www.cics.umass.edu/content/registration</a>
<b>COMPSCI H250</b> HNRS COLLOQ: INTRO COMPUTATION  <i>David Barrington</i>	COMPSCI 187 AND MATH 132 WITH A GRADE OF C OR BETTER (OR COMPSCI 250 WITH A GRADE OF B OR BETTER).	COMMONWEALTH HONORS COLLEGE CS AND MATH MAJORS ONLY.	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. REQUEST OVERRIDE VIA THE ON-LINE FORM: <a href="https://www.cics.umass.edu/overrides">https://www.cics.umass.edu/overrides</a> .



**SPIRE REGISTRATION INFORMATION for 2020 Spring**

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<b>COMPSCI H311</b> INTRO TO ALGORITHMS (COLLOQ)  <i>Marius Minea</i>	<b>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).</b>	COMMONWEALTH HONORS COLLEGE JUNIOR AND SENIOR CS AND MATH MAJORS ONLY.	NO OPTION FOR PASS/FAIL. STUDENTS MUST BE ENROLLED IN COMPSCI 311 (OR HAVE COMPLETED COMPSCI 311 WITH A GRADE OF B OR BETTER). REQUEST OVERRIDE VIA THE ON-LINE FORM: <a href="https://www.cics.umass.edu/overrides">https://www.cics.umass.edu/overrides</a> .
<b>COMPSCI H320</b> HNRS COLLOQ: SOFTW ENGINEERING  <i>David Fisher</i>	<b>COMPSCI 220 WITH A GRADE OF C OR BETTER (OR COMPSCI 320 WITH A GRADE OF B OR BETTER).</b>	COMMONWEALTH HONORS COLLEGE JUNIOR AND SENIOR CS MAJORS ONLY.	NO OPTION FOR PASS/FAIL. STUDENTS MUST BE ENROLLED IN COMPSCI 320 (OR HAVE COMPLETED COMPSCI 320 WITH A GRADE OF B OR BETTER). REQUEST OVERRIDE VIA THE ON-LINE FORM: <a href="https://www.cics.umass.edu/overrides">https://www.cics.umass.edu/overrides</a> .
<b>COMPSCI H446</b> HNRS COLLOQ: SEARCH ENGINES  <i>David Fisher</i>	<b>COMPSCI 240 OR COMPSCI 383 WITH A GRADE OF C OR BETTER (OR COMPSCI 446 WITH A GRADE OF B OR BETTER).</b>	COMMONWEALTH HONORS COLLEGE JUNIOR AND SENIOR CS MAJORS ONLY.	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: <a href="https://www.cics.umass.edu/overrides">https://www.cics.umass.edu/overrides</a> .
<b>COMPSCI H589</b> HNRS COLLOQ: MACHINE LEARNING  <i>Benjamin Marlin</i>	<b>COMPSCI 383 AND MATH 235 WITH A GRADE OF C OR BETTER (OR COMPSCI 589 WITH A GRADE OF B OR BETTER).</b>	COMMONWEALTH HONORS COLLEGE JUNIOR AND SENIOR CS MAJORS ONLY.	NO OPTION FOR PASS/FAIL. 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: <a href="https://www.cics.umass.edu/overrides">https://www.cics.umass.edu/overrides</a> .
<b>INFO 197P</b> ST-PROG IN PYTHON FOR DATA SCI  <i>Emma Anderson</i>	COMPSCI 121 WITH A GRADE OF C OR BETTER.	INFORM MAJORS ONLY.	COURSE RUNS FOR 6 WEEKS (3/25/20-4/29/20: 3/25, 3/27, 4/1, 4/3, 4/8, 4/10, 4/15, 4/17, 4/22-NO CLASS, 4/24, 4/29). REGISTRATION ONLY BEFORE ADD/DROP ENDS, THROUGH 2/3. INSTRUCTOR WILL CONSIDER OTHER MAJORS, IF AVAILABLE SEATS, AFTER NOVEMBER 18. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: <a href="https://www.cics.umass.edu/overrides">https://www.cics.umass.edu/overrides</a> .
<b>INFO 203</b> A NETWORKED WORLD  <i>Mohammadhassan Hajiesmaili</i>		INFORM MAJORS ONLY.	STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: <a href="https://www.cics.umass.edu/overrides">https://www.cics.umass.edu/overrides</a> .
<b>INFO 248</b> INTRO TO DATA SCIENCE  <i>Gordon Anderson</i>	COMPSCI 121 AND PSYCH 240 (OR OIM 240, OR STATISTICS 240, OR STATISTICS 515, OR RES-ECON 212, OR SOCIOL 212) BOTH 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. THE PROJECT PROVIDES STUDENTS WITH AN OPPORTUNITY TO EXPLORE THE TOPICS IN MORE DEPTH IN A SPECIALIZED DOMAIN. SOFTWARE: R AND R STUDIO, SQL-BASED APP, OTHER