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I.M C, I S 21 22

A. CSC 115 (or CSC 105 and 106).
B. CSC 125 or 255—4 or 3 hours.
C. CSC 235, 321, 360, 365.
D. CSC 395 or 411—3 hours.

.M D M S 21

Choose at least two courses from each list:
A. ART 120, 221, 345, 346, 347, 348
B. COM 220, 236, 320, 327, 356, 365
C. CSC 200, 265, 335, 360, 361

I. M C, E S 18

A. EGR 109, 209, 325
B. CSC 255, 329
C. MAT 315, 360

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All senior computer science majors must take the Major Field Test in computer science as one requirement for CSC 498 (see below).

The ACM (A C, M) S C, is composed of students who are interested in today's world of computing. The club promotes an increased knowledge of the science, design, development, construction, languages, and applications of modern computing machinery. It provides a means of communication between persons interested in computing machinery and their applications.

( ) Hours Credit; F–Fall, W–Winter; S–Spring; Su–Summer

100. I C, L (3) F, S
An introductory class on computer literacy for the non-major/minor adult student. This course is not intended for the traditional student. The purpose of the course is to prepare the student for successful use of computer technology and to achieve competency through hands-on practice. Cannot be taken after CSC 105.

105. S M, A, (3) F, S
An introduction, for the non major/minor, to computers and their applications. Includes computer and information literacy, but the main emphasis is on competency with software through hands-on practice. Due to content overlap, students cannot get credit for both 105 and 115.*

106. A D, (1) A N
How to analyze a problem and design a solution with a

220. C , R , M (3) S
Prerequisite: CSC 115.
A hands-on approach to competence in configuring, installing, diagnosing, repairing, upgrading, and maintaining microcomputers and associated technologies. The course covers both core hardware and OS technologies.

235. C , E (3) S
Major social and ethical issues in computers and the Internet, including impact of computers on society and the computer professional's code of ethics.

255. P C (3) S
Prerequisites: CSC 115 or EGR 109.
Introduces the procedural programming paradigm using ANSI C. Must earn a C or higher to apply to CSC major/minor.

265. F H C , I (3) S
Corequisite: CSC 115
Introduces HCI, including human factors, HCI aspects of application domains, human-centered evaluation, developing effective interfaces, accessibility, emerging technologies, human-centered software development.

310. I A S (3) S
Corequisites: CSC 130, 235, and 365.
Introduces IAS including fundamental aspects, security mechanism, operational issues, policy, attacks, security domains, forensics, information states, security services, threat analysis and vulnerabilities.

321. D M S (3) F
Prerequisites: CSC 115 and Junior standing.
Hands-on approach to the design of databases: conceptual design using E-R model and logical design using the relational model and database programming using SQL. The architecture of database application is discussed including the 3-tiered model and web access. Queries, forms, reports and application will be studied by implementing them in a client-server environment.

329 P C , (3) A
Pre-requisite: CSC 255
An overview of the various forms of parallelism currently used in computing, including the role of hardware, the operating system, and software. Modern techniques for parallelism are examined, including threads, distributed computing, and GPU-based computation. Students will achieve proficiency in at least one tool for parallel programming and will use that tool to solve real-world problems that can benefit from a parallel rather than a sequential approach.

335. C , G , (3) F O
Prerequisite: CSC 125 or 255.
Recommended Prerequisite: MAT 315.
An investigation of a wide range of computer graphics via programming techniques. Topics include graphic display theory, graphic techniques, applications, and hardware.

341. S E (3) F
Prerequisite: CSC 125.
Issues involved with the life cycle of large and complex software systems. Topics include software planning, specifications, coding, testing, and maintenance.

360. B S M (3) F
Fundamentals of web site development and management, graphical web-building tools, multi-level site planning and

465. F L (3) F A N
Prerequisites: CSC 255 and MAT 315. Recommended prerequisite: CSC 455.
Theoretical foundations of computer science including formal languages and automata, parsing of context-free languages, Turing machines, computability, and complexity.

485. I , C , S (1-3) A N
Prerequisite: CSC 115; one of CSC 220, 235; one of 321, 360, 365.
Selected students are assigned as interns to obtain supervised practical work related to the CS discipline at a business or non-profit organization.

498. C , S S (2-3) S
Prerequisite: 20 hours of CSC and taken in Senior Year.
The setting for administering the Major Field Test and addressing topics where the department perceives need for additional instruction. Students will synthesize previously learned concepts by developing and implementing a solution to a real-world programming problem. Each project will culminate in a report presented at a regional conference. The course may be modified at the discretion of the department.

Available in multiple departmental prefix: