COMPUTER SCIENCE COURSES

Computer related courses are offered in several departments of the university. They are grouped here for the convenience of students who are interested in the study of computer science or computer applications in specific fields. See appropriate department for non-C S C course descriptions.

COMPUTER SCIENCE (C S C)

180T. Programming in Specialized Computer Languages (2–3)

Prerequisite: permission of instructor. Programming and usage of an application oriented language selected from the areas of string and list processing, simulation, CAI, formal algebraic manipulation, query, text editing and processing (e.g. GPSS, SNOBOL, LISP, CSMP).

GRADUATE COURSES (C S C)

Note: Prerequisite to all graduate courses: Math 72, E E 106, Q M 63 or 64, 169, or equivalent, or permission of instructor.

210. Information Structures (3)

Structural representation of information; linear lists, strings, arrays, and orthogonal lists; tree and graph structures; multilinked structures; storage systems; storage allocation and utilization; symbol tables; searching and sorting techniques.

220. Programming Languages (3)

Syntax and semantics specification of languages; parsing; properties of algorithmic languages; list processing, string manipulation, multipurpose, and simulation languages.

227. Computational Methods for Time Series Data (3)

Prerequisite: Math 107 or equivalent; permission of instructor. Digital processing of single- and multi-channel time series data and preparation of Fortran programs. Z-transforms; correlation and spectral analysis; recursive and convolution filtering; beamforming; power spectrum estimation, other signal-to-noise ratio improvement and signal detection methods.

230. Organization of Computing Systems (3)

Logic and memory elements; Boolean functions and minimizations; digital arithmetic, storage, control, and input-output facilities; system organization, multiprogramming, multiprocessing, and real-time features.

250. Systems Programming (3)

Prerequisite: C S C 210, 220, and 230. Batch processing programs, characteristics, and limitations; multiprogramming and multiprocessing systems; addressing techniques, core management, file system design and management, system accounting, and operating system behavior.

RELATED COURSES

Business

Q M	60.	Computer Concepts (3)
	63.	Automation and Computer Languages—FORTRAN (3)
	64.	Automation and Computer Languages—COBOL (3)
	162.	Advanced Computer Programming (3)
	166.	Applied Computer Systems (3)
	168.	Data Processing Management (3)
	169.	Machine Language Programming (3)
	173.	Computer Configuration (3)
	227.	Computers and Programming (3)
	262.	Seminar in Programming (3)
	266.	Data Processing, Management, and Computer Selection (3)