Department of Computer Science

College of Science and Mathematics
Montclair State University, Richardson Hall

MONTCLAIR
STATE
UNIVERSITY

Computer Science Minor

Requirements for Computer Science Minor

Students may earn a minor in computer science by satisfactorily completing a minimum 19 semester hour program which includes CMPT 183, 184, 285, 287, and at least two other approved CMPT courses. At least 9 semester hours must be taken at Montclair State University.

COMPUTER SCIENCE MINOR

Complete the following for a total of 19 semester hours:

1. Complete the following 2 requirement(s):
    1. Complete the following 4 courses:

CMPT 183	Foundations of Computer Science I	3
CMPT 184	Foundations of Computer Science II	3
CMPT 285	Discrete Mathematical Structures	3
CMPT 287	Data Structures, File Structures and Algorithms	4

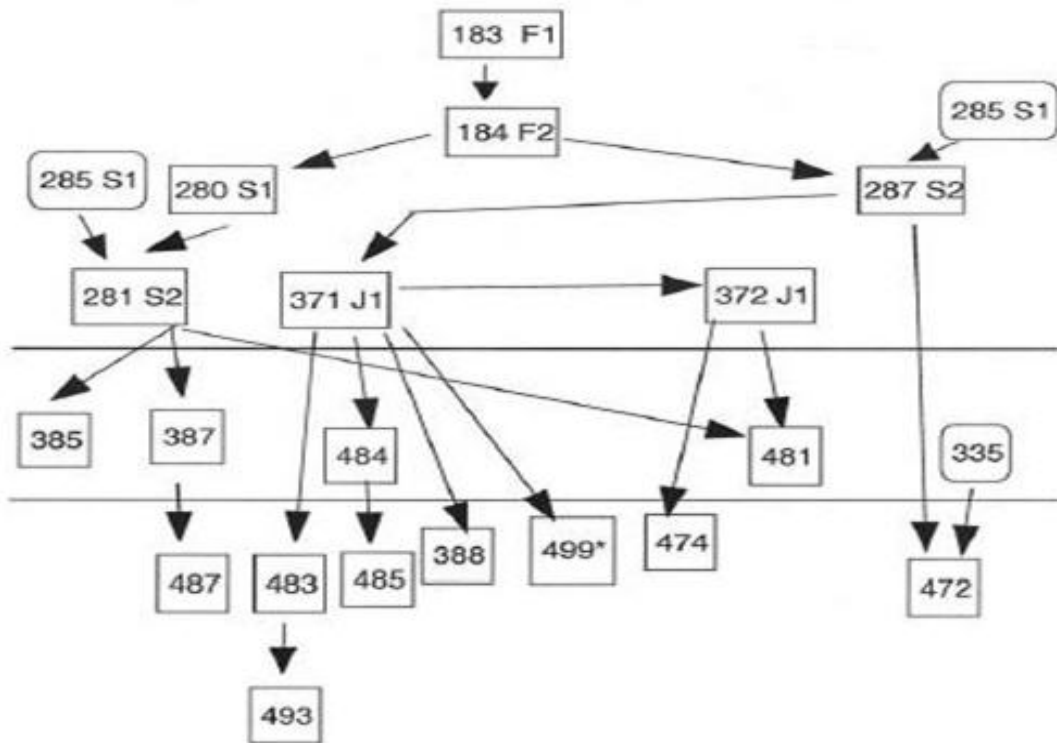   2. Complete 6 semester hours from the following:

CMPT 250	Web Tools	3
CMPT 261	Business Data Processing	3
CMPT 273	Introduction to Computers in Business	3
CMPT 280	Assembly Language and Computer Architecture	3
CMPT 281	Theory of Digital Machines	3
CMPT 288	Introduction to Cognitive Science	3
CMPT 289	Introduction to APL	3
CMPT 296	Topics in a Programming Language	1
CMPT 300	Introduction to Science Databases	1
CMPT 320	Intranet and Internet Security	3

CMPT 330	Network Technology	3
CMPT 350	Parallel and Distributed Computing	3
CMPT 351	Introduction to Image Processing	3
CMPT 363	Introduction to Numerical Computing	3
CMPT 371	Software Engineering I: Analysis and Design	4
CMPT 372	Software Engineering II: Implementation and Testing	4
CMPT 381	File Processing	3
CMPT 382	System Analysis and Design	3
CMPT 384	Systems Software	3
CMPT 385	Computer System Organization	3
CMPT 387	Principles of Data Communications	3
CMPT 388	Foundations of Artificial Intelligence	3
CMPT 472	Computer Graphics	3
CMPT 474	Software Engineering	3
CMPT 481	Operating Systems	3
CMPT 483	Database Systems	3
CMPT 484	Fundamentals of Programming Languages	3
CMPT 485	Compiler Construction	3
CMPT 486	Design of Computer Interfaces	3
CMPT 487	Local Area Networks (LAN's)	3
CMPT 490	Honors Seminar in Computer Science	3
CMPT 493	Advanced Database Theory	3
CMPT 495	Topics in Computer Science for Undergraduates	1-3
CMPT 497	Undergraduate Research in Computer Science I	1-3
CMPT 498	Undergraduate Research in Computer Science II	1-3
CMPT 499	Cooperative Education in Computer Science	3-8

Students must follow the pre-requisite tree for the course they take[1]

---

[1] See prerequisite tree on page 4

Prerequisite Tree for Computer Science Courses

Prerequisite Tree for Information Technology & Computer Science Courses