

**ABET Accredited Computer Science Major —B.S. 81-83 credits
Starting with Pre-Calculus and CSCI 200**

Computer Science Department

Contact Person: Jayantha Herath , Dept. Chair herath@stcloudstate.edu

Program Advisors

Dr. Donald Hammes
dohammes@stcloudstate.edu
Dr. Pranava Jha
pkjha@stcloudstate.edu

Dr. Sarnath Ramnath
rsarnath@stcloudstate.edu

Transfer Student Advisors:

Dr. Pranava Jha
pkjha@stcloudstate.edu
Dr. Sarnath Ramnath
rsarnath@stcloudstate.edu

First Semester

ENGL 191⁸-Intro to Rhetorical and Analytical Writing (4 cr.)
CSCI 200⁹ Elements of Computing (3 cr.)
MATH 115^{1,2} – Precalculus (5 cr.)
Democratic Citizenship (3 cr.)

Second Semester

CSCI 201³-Computer Science 1 (4 cr.)
MATH 221³-Calculus & Analytical Geometry I (5 cr.)
CMST 192⁸-Introduction to Speech Communication (3 cr.)
PHIL 194-Critical Reasoning (3 cr.)

Third Semester

CSCI 220³-Computer Architecture I (4 cr.)
CSCI 301³-Computer Science 2 (4 cr.)
MATH 273^{3,6}-Discrete Mathematics I (3 cr.)
First Half of Required Science Sequence (4-5 cr.)

Fourth Semester

CSCI 320³-Computer Architecture II (4 cr.)
ENGL 332 or **CMST 341** (3 cr.)
MATH 373³-Discrete Mathematics II (3 cr.)
Second half of required Science Sequence (4-5 cr.)

Fifth Semester

CSCI 310³-Introduction to Operating Systems (3 cr.)
CSCI 331⁵-Software Systems (3 cr.)
MATH 311/312- (3 cr.)
STAT (Elective) (3 cr.)
Humanities & Fine Arts (Elective) (3 cr.)

Sixth Semester

CSCI 311³ – Systems Programming (2 cr.)
CSCI 330⁴-Programming Language Concepts (3 cr.)
CSCI 4xx⁷ (Elective) (3 cr.)
Science-Elective (3-5 cr.)
Social Science (Elective) (3 cr.)

Seventh Semester

CSCI 334-Communication for Computing Sciences (1 cr.)
CSCI 4xx⁷ (Elective) (3 cr.)
CSCI 4xx⁷ (Elective) (3 cr.)
Math Elective (3-4 cr.)
Physical Education Elective (1 cr.)
Humanities & Fine Arts (Elective) (3 cr.)

Eighth Semester

CSCI 332⁴-Computing Ethics (3 cr.)
CSCI 4xx⁷ (Elective) (3 cr.)
CSCI 4xx⁷ (Elective) (3 cr.)
General Education Elective (3 cr.)
Social Science (Elective) (3 cr.)

¹Math 115 may be replaced by Math 112 and Math 113. In that case, Math 112 must be completed before taking CSCI 201 and Math 113 taken along with CSCI 201.

²Students who are ready to take Math 221 are not required to take this class.

³These courses are offered in both semesters.

⁴Offered in spring semester only.

⁵Offered in fall semester only.

⁶Students normally apply for admission to the major after completing CSCI 200 or 201, Math 221 and Math 273.

⁷Senior-level electives must include courses in at least three different subject areas.

⁸ ENGL 191 may be taken in the second semester of the freshman year if CMST 192 is taken in the first semester

⁹ Students ready for CSCI 201 are not required to take this class.

Notes:

(a) Not all electives are offered every semester. See schedule for offerings.

(b) Students must successfully complete 120 credits to graduate, at least 45 credits at the 300-400 level.

(c) At least one-half of the 300- and 400-level computer science courses in this major program must be taken from our department.

- (d) Transfer students must see a transfer advisor to find out where they are in the program and also to get permission to register for “major only” courses.