

# CSU Northridge, Computer Science Department

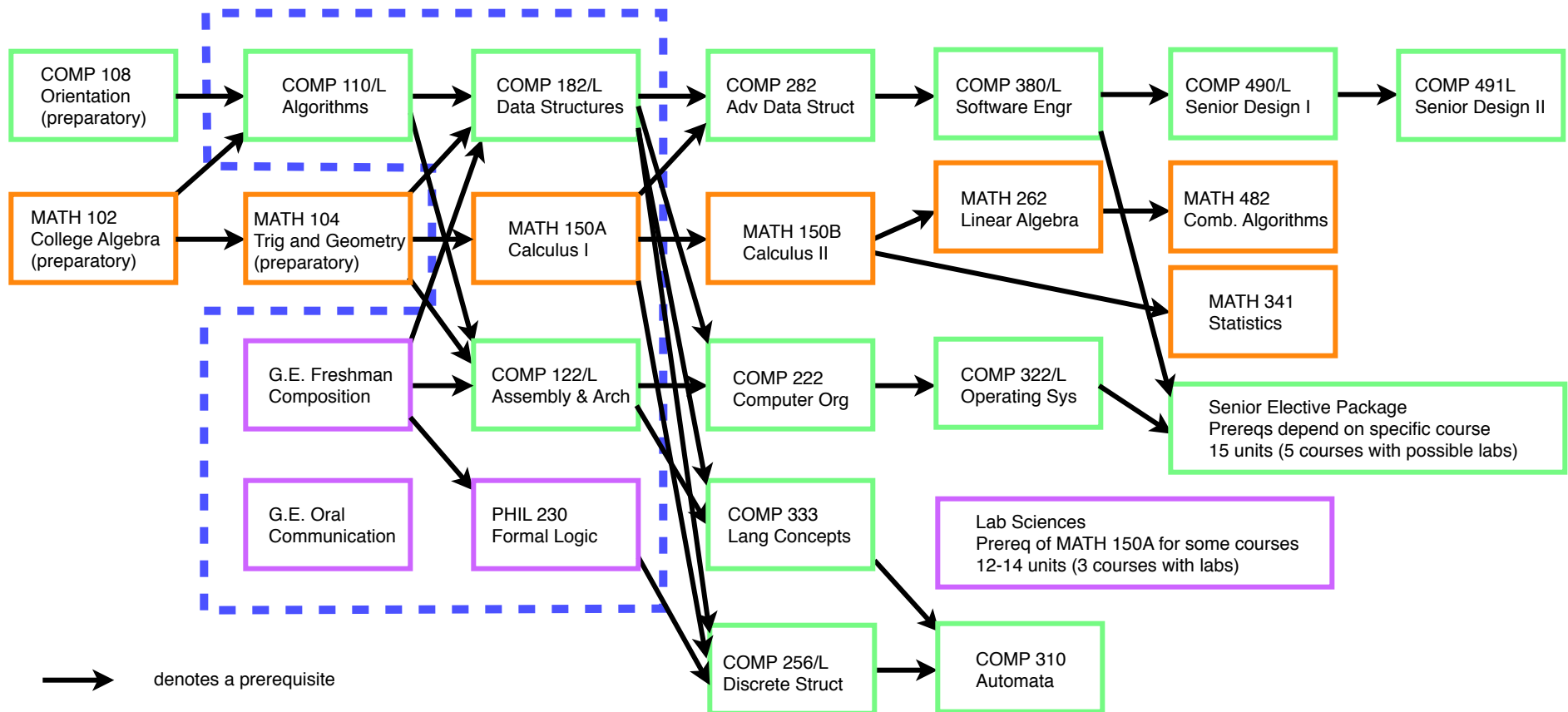
## COMPUTER SCIENCE MAJOR

### 2012-14 Catalog Requirements

#### Pre-Major Preparatory

#### Pre-Major Requirements

#### Major Requirements



→ denotes a prerequisite

--- courses in pre-major

Placement in courses leading to the pre-major requirements is dependent on SAT/ACT, ELM and MPT scores. Consult with an academic advisor for proper placement.

After the seven courses in the pre-major are completed, student must request a change to the full major. Because of prerequisite structure it is best to complete all courses in pre-major prior to attempting the next level of courses; pre-majors are prohibited from enrolling in 300 and above COMP courses prior to start of instruction.

A Graduation Evaluation is required 2 to 3 semesters prior to planned date of graduation.

## Computer Science B.S. degree (120 units)

The required units are divided into:

Computer Science Core	
Lower Division.....	20 units
Upper Division.....	18 units
Mathematics.....	18 units
Formal Logic.....	3 units
Lab Sciences.....	12-14 units
Senior Electives in Computer Science.....	15 units
General Education/U.S. History/Government....	30 units
Free Elective Units.....	2-4 units

## Lab Science Requirements (12-14 units)

Select one of the following **two semester lab science course sequences** ..... 8-10 units

Physics 220A, 220AL, 220B, 220BL  
Chemistry 101, 101L, 102, 102L (prerequisite of CHEM 100 might be required)  
Biology 106, 106L, 107, 107L

Select an additional **third lab science course** from a field of study different from the one selected above..... 4-5 units

Biology 106, 106L	Geology 101, 102 (lab)
Chemistry 101, 101L	Geology 110, 112 (lab)
Geography 101, 102 (lab)	Physics 220A, 220AL
Geography 103, 105 (lab)	

## Senior Electives in Computer Science (15 units)

Areas of emphasis:

Artificial Intelligence	Information System Design
Computer Graphics/Multimedia	Object Oriented Programming/Design
Computer Networks and Security	Operating Systems
Embedded Applications	Software Engineering
Human/Computer Interface	Web Engineering

Computer Science majors are required to take 15 units of senior electives. A student may wish to discuss their career goals with an advisor prior to selecting their senior electives. The advisor will suggest appropriate sequences of courses for the student to select from. All 400 and 500 level COMP courses (with the exception of 450, 490, 491, 494 and 499) and MATH 481A are pre-approved for inclusion as Senior Electives.

Requests for inclusion of a 400 or 500 level course as a senior elective that does not meet the requirements stated above must be approved by the student's advisor and the Department Chair prior to enrollment in the course.

**A First Year Sequence for Freshmen Needing Developmental Courses**  
(Taken as part of the pre-major preparatory sequence appearing on the other page.  
The preparatory sequence may extend the four-year program by one to two years.  
Check with your academic advisor regarding the proper course sequence.)

Semester 1:

Developmental math or MATH 102  
Stretch English  
G.E. course  
G.E. course

Semester 2:

Developmental math or MATH 102 or 104  
Stretch English or G.E. Fresh. Comp.  
COMP 108  
G.E. course

## Grade Requirements for Undergraduate Courses in the Major

(Current catalog year course prerequisite requirements apply to all major course work not yet completed; major degree requirements are determined by the catalog year of the major; always apply the higher of the two standards.)

### A. Transfer courses

"C" or better for all transfer courses

### B. Courses taken at CSUN - rules depend on the academic year of the University

Catalog of your major [2010-2011 means from August 2010 through July 2011]; consult with the Dept Office if your catalog year is not listed; although every attempt has been made to accurately represent the following information, your responsibility is to follow the rules that appear in the appropriate University Catalog for the year for your major and in your DPR report.

1. **1989-1996 Catalog years:** "C-" or better in all prerequisite courses required by the major ("C" or better in MATH 150A) and "D-" or better in all non-prerequisite courses required by the major except for Concentrated Studies Package courses where "C-" or better is required
2. **1996-2000 Catalog years:** "C-" or better in all prerequisite courses required by the major ("C" or better in prerequisite math courses) and "D-" or better in all non-prerequisite courses required by the major except for Concentrated Studies Package courses where "C-" or better is required
3. **2000-2002 Catalog years:** "C-" or better in all courses required by the major ("C" or better in prerequisite math courses)
4. **2002-2003 Catalog year:** "C-" or better in all courses required by the major ("C" or better in prerequisite math courses); 2.0 overall GPA in for the eight courses required by the pre-major (the G.E. A.1 and A.4 courses are part of the pre-major but not part of the major)
5. **2003-2006 Catalog years:** "C" or better in each of the eight courses required by the pre-major (this includes the G.E. A.1 and A.4 courses) and "C-" or better in all remaining courses required by the major ("C" or better in prerequisite math courses)
6. **2006-2010 Catalog years:** Same grade requirements as 2003-2006 but major is reduced to 120 units when combined with G.E. Plan R and seven course pre-major
7. **2010-2014 Catalog years:** Same grade requirements as 2006-2010 but COMP 490/L & 491L replaced COMP 450, COMP 256/L replaced MATH 326, COMP 232 renumbered as COMP 333

### C. Overall GPA requirements (both to stay in good academic standing and graduate)

1. 2.0 or higher overall GPA for all courses taken at CSUN
2. 2.0 or higher overall GPA for all courses taken (combination of CSUN & transfer)
3. 2.0 or higher overall GPA for all upper division courses required by the major