

COMPUTER SCIENCE †

124 Hours

| <u><i>Freshman Year</i></u> | <u><i>Credit</i></u> | <u><i>Sophomore Year</i></u> | <u><i>Credit</i></u> |
|-------------------------------------|----------------------|-------------------------------------|----------------------|
| CMPS 150 | 3 | CMPS 261 | 3 |
| CMPS 260 | 3 | CMPS 310 | 2 |
| EECE 140 | 3 | CMPS 341 | 3 |
| ENGL 101 | 3 | CMPS 351 | 3 |
| ENGL 102 | 3 | MATH 362 | 3 |
| MATH 270 | 4 | Elective (CMCN) ⁴ | 3 |
| MATH 301 | 4 | Electives (SCI) ^{5,9} | 8 |
| Elective (ARTS) ^{1,9} | 3 | Electives (AHBS) ^{9,10} | 3 |
| Elective (BHSC) ^{2,9} | 3 | Concentration Elective ⁶ | <u>3</u> |
| Elective (HIST) | <u>3</u> | | 31 |
| | 32 | | |
| | | | |
| <u><i>Junior Year</i></u> | <u><i>Credit</i></u> | <u><i>Senior Year</i></u> | <u><i>Credit</i></u> |
| CMPS 430 | 3 | CMPS 450 | 3 |
| CMPS 440 | 3 | CMPS 460 | 3 |
| CMPS 453 | 3 | Concentration Elective ⁶ | 9 |
| CMPS 455 | 3 | Elective (CMPS) ⁷ | 6 |
| STAT 427 | 3 | Elective (BHSC) ^{2,9} | 3 |
| STAT 454 | 3 | Electives ⁸ | <u>4</u> |
| ENGL 365 | 3 | | 28 |
| Elective (LIT) ³ | 3 | | |
| Electives (SCI) ^{5,9} | 4 | | |
| Elective ⁸ | 2 | | |
| Concentration Elective ⁶ | <u>3</u> | | |
| | 33 | | |

† This program is accredited by the Computing Accreditation Commission of ABET. Students will be allowed to enter Upper Division if they have earned a grade of C or better in CMPS 150, 260, 261, as well as MATH 270, 301. To qualify for graduation a student must earn a grade of C or better in all CMPS, MATH, STAT, and EECE courses that are applied to the degree, as well as all concentration electives.

¹ Chosen from Dance, Music, Theater, or Visual Arts.

² Chosen from Anthropology, Geography, Economics, Political Science, Psychology, or Sociology, with at least one course at the 200-level or above.

³ Chosen from advisor approved list of English.

⁴ CMCN 101, 200, 222 or 310.

⁵ Must include both biological and physical sciences. All three courses must be courses for majors. At least two of these courses must be in a two-semester sequence with labs.

⁶ Concentrations: video game design and development, cognitive science, information technology, scientific computing, and computer engineering. A list of courses that satisfy concentration electives is available in the CMPS department.

⁷ At least 3 hours of CMPS electives must be at the 400-level.

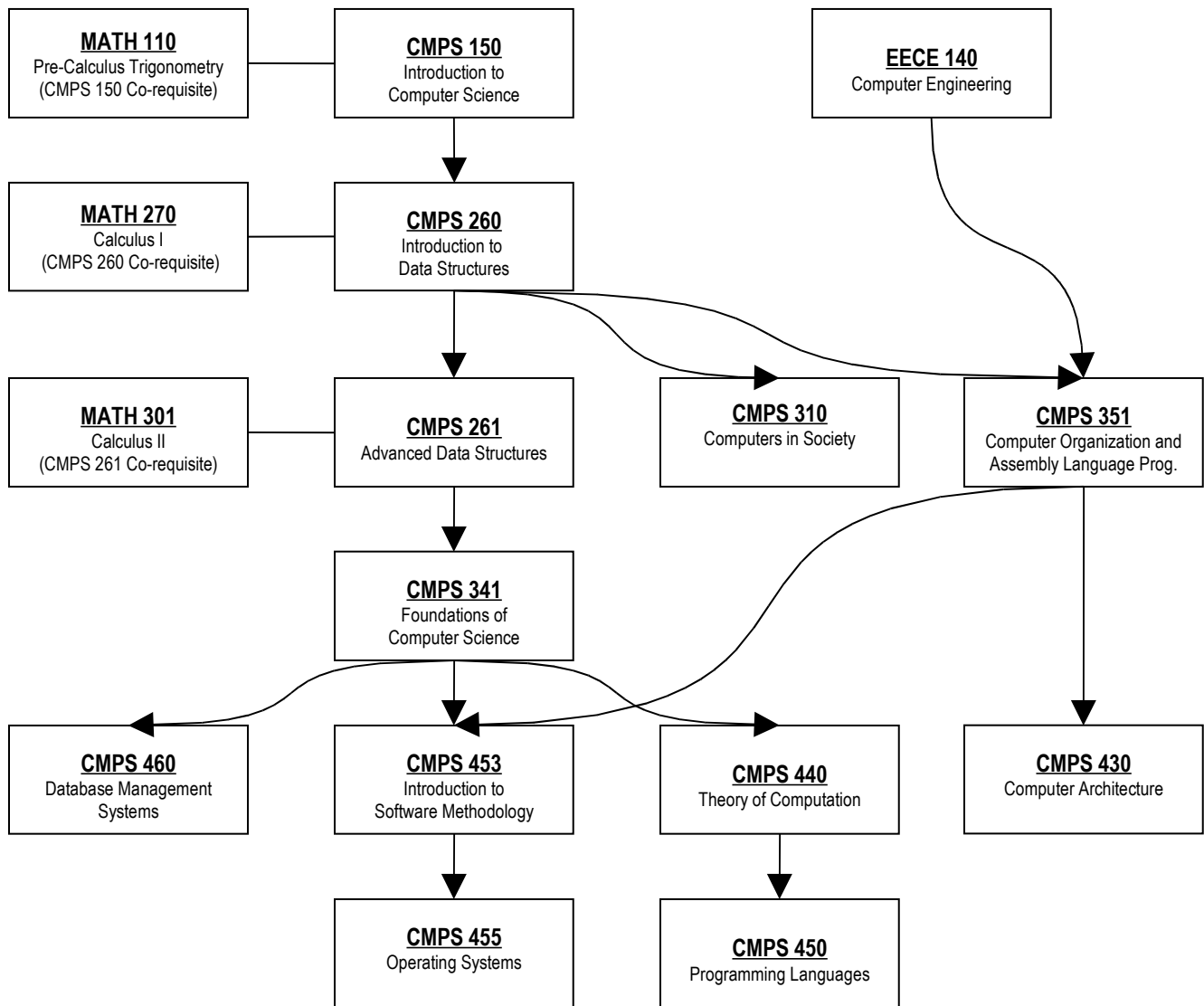
⁸ Students may apply at most two KNEA courses to free electives.

⁹ Selection may depend on concentration.

¹⁰ Chosen from Arts, Humanities or Behavioral Sciences.

Summary of Computer Science Requirements

Computer Science Core and Pre-requisite Structure



Computer Science Electives

CMPS 327
Introduction to Video Game
Design & Development

CMPS 352
Scientific Computing

CMPS 353
Principles of File
Organization

CMPS 359
Topics in Software
Development (1-3 credits)

CMPS 360
Programming in Java

CMPS 415
Computer Graphics

CMPS 420
Artificial Intelligence

CMPS 427
Video Game Design and
Development

CMPS 451
Compiler Construction

CMPS 452
Human - Computer
Interface Design

CMPS 497/498
Special Projects

CMPS 499
Special Topics in
Computer Science

SCIENCE ELECTIVES

Physical Sciences

CHEM 107 3hrs
CHEM 108 3hrs
CHEM 115 2hrs

GEOL 111 4hrs
GEOL 112 4hrs

PHYS 201 4hrs
PHYS 202 4hrs
PHYS 215 1hr
PHYS 216 1hr

Biological Sciences

BIOL 101/110 3hrs
BIOL 102/111 3hrs
BIOL 103/112 1hr
BIOL 104/113 1hr

A student must select one sequence of courses with the respective labs. If the Physical Science sequence is chosen, then the student must select a Biological Science as the third science course, otherwise the student must select a Physical Science. Students must complete a minimum of 12 credit hours of science.

Students in the Electrical Engineering area of concentration must take Physics as the lab sequence and one of the Biology courses.

Notes:

1. CHEM 115 has CHEM 108 as a pre-requisite; this means that Chemistry cannot be taken as a Physical Science if the Biology science sequence was chosen.
2. Students in the Electrical Engineering area of concentration must earn a grade of C or better in PHYS 202 because it is a pre-requisite of EECE 353.
3. If Biology is not chosen for the lab sequence, the lab is not required if the credit hour is not needed to complete 12 credit hours in the sciences.
4. The second Physics course requires Calculus III as a co-requisite.

COMPUTER SCIENCE ELECTIVES

All concentration areas require 9 credit hours of Computer Science electives. Six of these 9 hours must fulfill the area of concentration requirements. Three hours are to be chosen from the available CMPS electives, but only 3 of these 9 hours may be at the 300-level.

Note that students who wish to enroll for a Special Project (CMPS 497, 498) must have completed CMPS 261, CMPS 341, CMPS 351, and MATH 301. The student must also have an overall GPA of 3.0 or better.

LITERATURE ELECTIVES

ENGLISH - 201, 202, 203, 204, 205, 206, 215, 216, 312, 320, 321, 322, 333, 341, 372, 380, 400G, 401G, 402G, 403G, 404G, 407G, 411G, 412G, 413G, 414G, 417G, 418G, 419G, 421G, 422G, 423G, 424G, 426G, 429G, 430G, 433G, 434G, 435G, 437G, 439G, 441G, 442G, 450G, 460G, 466G, 496G.

ARTS ELECTIVES

DANCE - 101, 102, 111, 112

MUSIC - 300, 301, 302, 303, 304, 308, 362, 425, 464, 465

Other studio courses may fulfill the core requirements. Approval for such substitutions may be obtained from the Office of Academic Planning and Faculty Developments, Rm. 315, Martin Hall.

THEATRE - 161, 261, 457, 458

VISUAL ARTS – 120, 121, 122, 215, 220, 235, 321, 323, 335, 422

Other studio and art history courses taken with the permission of the instructor may fulfill the core requirement for students in certain majors. Applicability and approval for such substitutions must be obtained from both the Department of Visual Arts (Rm. 310, Fletcher Hall), and the Office of Academic Planning and Faculty Development (Rm. 315, Martin Hall).

HUMANITIES ELECTIVES

COMMUNICATION - 101, 200, 222, 310

FOREIGN LANGUAGES

French Literature courses: 311, 431G, 441G, 471, 472, 481G, 491G, 492G,

Non-literature language courses above the introductory level: 201, 202, 361, 362.

German Literature courses: 311, 405G, 441-442G, 471-472G

Non-literature courses above the introductory level: 201-202.

Latin Literature courses: LATN 301, 302

Non-literature courses above the introductory level: 201-202.

Russian Literature courses: 201, 202

Spanish Literature courses: SPAN 311, 441G, 442G, 480G,

Non-literature courses above the introductory level: 201-202, 358-359.

LITERATURE - See above section entitled LITERATURE - English.

HISTORY - All courses except HIST 390 and 400-level courses

HUMANITIES - All courses except 400-level courses

PHILOSOPHY - All courses

BEHAVIORAL SCIENCES ELECTIVES

ANTHROPOLOGY - 201, 202, 303, 304, 310, 375, 385, 386

ECONOMICS - 201, 202, 300

GEOGRAPHY - All courses except GEOG 375 and 400-level courses

POLITICAL SCIENCE - All courses except POLS 398 and 400-level courses

PSYCHOLOGY – 110, 311, 312, 313, 360, 370, 405

SOCIOLOGY - 100, 241, 305, 310, 325, 350, 362, 364, 370, 395

If you are considering other options, check with the advisor. At least one of the two BHSC requirements MUST be at the 200-level or above.

ARTS, HUMANITIES AND BEHAVIORAL SCIENCES ELECTIVES

Any of the courses listed for:

Arts

Humanities

and Behavioral Sciences

NON-CREDIT COURSES

No Computer Science major may receive credit for ANY of the following:

1. ACSK courses
2. ADOS All courses except ADOS 420
3. BSAT 101, 205, 206, 306, 311, 321
4. BCOM All courses
6. CMPS All courses for non-majors
7. ENGR 101
8. ITEC 101
9. MATH - No course that is a prerequisite to a required course: 92, 100, 105, 107, 109, 110, 117, 201, 206, 210, 217, 250, 317, 411, 412, 430, 435, 463, 465, 466, 470
10. Any KNEA courses beyond 4 credit hours
11. QMET 251, 252, 450
12. STAT 214.

ENTRANCE INTO UPPER DIVISION

Upper Division classification is required to enroll in any 400-level courses. To enter Upper Division, you need to complete 30 hours of non-remedial courses AND have completed the following courses with a grade of C or better:

ENGL 102, MATH 301, CMPS 261

Students must be in Upper Division to enroll in 400-level courses.

SEMESTER COURSE OFFERINGS

| Course | FALL | SPRING |
|---------------|-------------|---------------|
| CMPS 150 | ✓ | ✓ |
| CMPS 207 | ✓ | |
| CMPS 260 | ✓ | ✓ |
| CMPS 261 | ✓ | ✓ |
| CMPS 310 | ✓ | ✓ |
| CMPS 327 | ✓ | |
| CMPS 341 | ✓ | ✓ |
| CMPS 351 | ✓ | ✓ |
| CMPS 352 | ✓ | |
| CMPS 353 | | ✓ |
| CMPS 359 | ✓ | ✓ |
| CMPS 360 | | ✓ |
| CMPS 415 | ✓ | |
| CMPS 420 | | ✓ |
| CMPS 427 | | ✓ |
| CMPS 430 | ✓ | ✓ |
| CMPS 440 | | ✓ |
| CMPS 450 | ✓ | |
| CMPS 451 | | ✓ |
| CMPS 452 | | ✓ |
| CMPS 453 | ✓ | |
| CMPS 455 | ✓ | ✓ |
| CMPS 460 | | ✓ |
| CMPS 499 | ✓ | ✓ |

Advising

The Computer Science Department has established an advising structure that is supported by the Computer Science faculty and graduate students.

During the early advising period, you will be assigned to one of the faculty members by your last name. You may sign up with your advisor using the sign-up sheets in the CMPS Department office, Room 222.

After the early advising period, students will be advised by either setting up an appointment with their faculty member advisor, or by setting up an appointment with the department's graduate student advisor in Room 222G.

Appointments for Advising

You must make an appointment with your assigned faculty advisor. Please refer to ULink to see who your faculty advisor is. During the early advising period, sign up for an advising appointment using the sign-up sheet in the CMPS Department office, Room 222.

Schedule of Classes

The Schedule of Classes can be accessed online. Select the *Current Students Link*, then the *Schedules of Classes* link under the heading **Courses and Calendars**. Use information found in the schedule of classes to complete a trial schedule **before your appointment**.

Your advisor will clear your advising hold after you have completed an advising session with him/her.

Advantages of Early Registration

Scheduling is not something that should be done at the last minute. Taking some time to choose your classes wisely will help you graduate on schedule and also improves your performance each semester by distributing the workload of difficult project courses.

Information about Courses and Curriculum

Prerequisite – A prerequisite is an academic requirement which must be satisfied prior to enrolling in a course.

Corequisite – A corequisite is an academic requirement which must be satisfied concurrent with enrolling in a course. A student requesting a course must be currently enrolled in all corequisites listed for that course or must otherwise satisfy the instructor and the head of the department that he/she has had the equivalent preparation.

To obtain information about courses and the curriculum, consult the UL Lafayette catalog, the Computer Science Web Page (<http://www.louisiana.edu/Academic/Sciences/CMPS>), or this *Advising Handout*. These sources of information include the curriculum, the prerequisite structure of the computer science core, courses which may be chosen to fulfill the various degree requirements, regular fall and spring course offerings, and courses which do not count towards your degree.