Helpful Information

1. **CSc Homepage:** Forms, faculty advising hours, etc.

   https://www.csus.edu/college/engineering-computer-science/computer-science/

2. **ECS Homepage:** https://www.csus.edu/college/engineering-computer-science/
   - Student Success Center: Tutoring, counseling, internship and career services, etc. https://www.csus.edu/college/engineering-computer-science/student-success/
   - ECS Career fair: https://www.csus.edu/college/engineering-computer-science/student-success/career-services/career-fair-students.html

3. **2-year curriculum plan: For updates visit the CSc webpage under Forms.**

   https://www.csus.edu/college/engineering-computer-science/computer-science/_internal/_documents/2-year-plan-jan-2-2019.pdf

4. **University and department course repeat policies:**

   https://catalog.csus.edu/academic-policies/#text

   - Undergraduate students may repeat up to 16 semester-units with grade forgiveness.
   - Undergraduate students may repeat an individual course for grade forgiveness no more than one time. A course may be repeated no more than two times without petition.
   - University repeat limits: 28 units total

   Note 1: Due to an increased number of students and higher demands for CSc classes, we are asked not approve any repeats for the 4th time or exceeding 28 university repeat limit.

   Note 2: In case you find yourself repeating courses, please assess your continued interest in computer science and if necessary consider speaking to an advisor on changing your major. Here are some other recommendations:

   1. Review your transcript carefully to assess your track record and take classes and number of units for success – Do a careful and honest self-assessment
   2. Are you taking too many courses? Plan ahead and better organize your class schedule.
   3. Are you spending 3 hours of study/class time per unit? E.g., for 12 units, you would need 36 hours allocated per week for class and study time, for 15 it would be 45 hours/week.
   4. Are you working too many hours? E.g., if you are working 20 hours/week and also taking 12 units, your study/work week is now 56 hours/week, with 15 units, it would be 65 hours/week.
      - You may be able to carry the work/study load for few weeks, but as times go on, most people will not be able to sustain it and do well.
   5. Do you have bad study habits – Develop a typical weekly study plan that you would be able to commit to.
   6. Utilize your instructors' office hours to ask questions
   7. Utilize the ECS tutoring services

5. **Math/Science 24-unit requirement:** Complete the flowchart from the link below.

   https://www.csus.edu/college/engineering-computer-science/computer-science/_internal/_documents/math-science-unit-calculation-flow-chart.pdf

6. **CSc Catalog Description:**

   https://catalog.csus.edu/colleges/engineering-computer-science/computer-science/bs-in-computer-science/

7. **Info on Java for Transfer Students**

   Sacramento State's introductory programming classes use Java. For that reason, upper-division courses, including CSC 130, assume you are comfortable programming in Java at the level of our CSC 15 and 20 classes. If you completed equivalent courses elsewhere using a different language, it is highly recommended that you become familiar with Java. This is not an overwhelming undertaking since the basic process of programming is the same regardless of language, but the details of how you express algorithms is different for each language.

   The textbook used by most teachers of CSC 15 and 20 at Sac State is *Building Java Programs* by Stuart Reges and Marty Stepp (3rd, 4th, or 5th edition). CSC 15 covers Chapters 1-8 and CSC 20 covers Chapters 8-16. (Chapter 8 is important enough that it gets covered twice.) You can often buy a used copy of the book for $20 and it is worth having as a reference. Alternatively you can look at author slides at https://www.buildingjavaprograms.com/supplements5.shtml.

   Here are some recommended steps to take if you are not a proficient Java programmer.

   Install a Java programming environment.
   - Install a recent long-term support (LTS) version of the Java development kit (JDK) on your computer. Here's Java 11: https://www.oracle.com/java/technologies/javase-jdk11-downloads.html.
   - If you're already comfortable with an IDE that supports Java, you may continue using it. If not, jGrasp (https://www.jgrasp.org/) is a simple IDE used by many of the CSC 15 and 20 instructors. Other popular, more powerful, Java IDE's include Eclipse (https://www.eclipse.org/ide) and IntelliJ (https://www.jetbrains.com/idea).

   Take an online class and/or read.
   - fast-paced free online classes can be found at:
   - www.edx.org/learn/software-engineering
   - and www.edx.org/learn/computer-programming
   - Some useful reading materials are: a Java for C++ programmers tutorial from a professor in Wisconsin (http://pages.cs.wisc.edu/~hasti/cs368/JavaTutorial), tutorials from the owners of Java (https://docs.oracle.com/javase/tutorial), and *Building Java Programs*.

   Learn to use the Java library documentation. To, for example, see all the methods available for a String object, do an internet search for "Java 11 String". The top result is almost always what you want. Documents formatted in this fashion are often called "javadocs".

Get an account at https://practiceit.cs.washington.edu and go into the latest edition of *Building Java Programs*. It is recommend that you do easy and moderate Exercises (not self-checks) from each of Chapter 1-16.

8. Miscellaneous

- CSc 190 prerequisites: Senior status, completion of CSC 130, CSC 131 and four (4) additional CSc 133+ courses, and WPJ.
- 2 units of CSc 19X*: 192, 194, 195, 198, and 199.
- Math/Science required units
- GE units: Consult with ECS Advising:

  https://www.csus.edu/college/engineering-computer-science/student-success/ecs-advising.html

* CSc 196W (Web Programming) as an experiential course