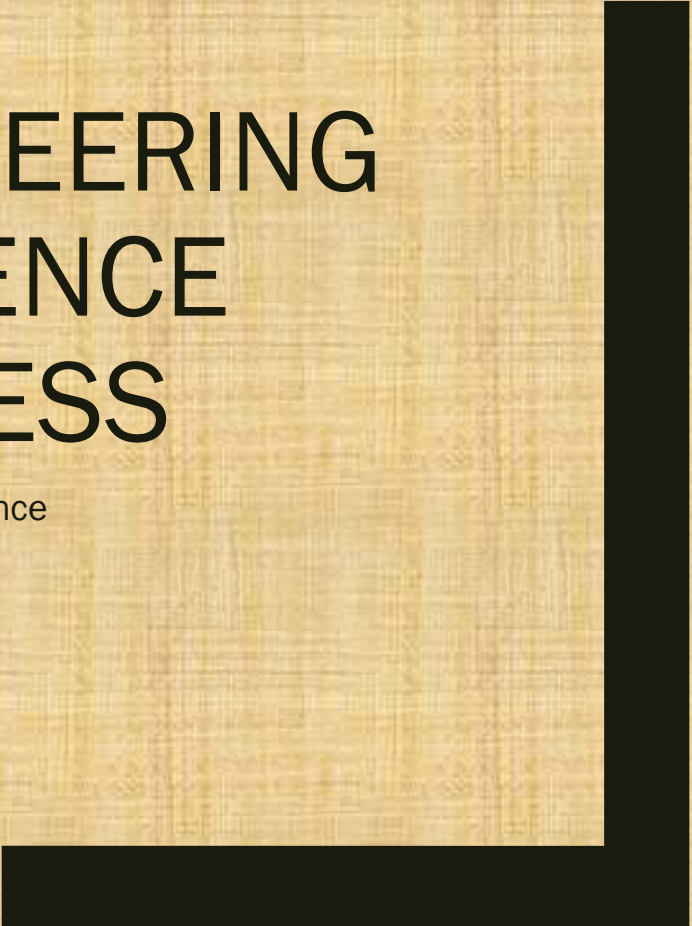


A.C.T NOW: THE COLLEGE OF ENGINEERING AND COMPUTER SCIENCE ROADMAP TO SUCCESS

Presented by the College of Engineering & Computer Science

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Agenda

- Why Sac State?
- Majors
- Math
- Chemistry & Physics
- First Time Freshmen
- Transfer Students
- Resources
- Questions

Why Sac State?

- Hands on
- Teaching focused
- Student Support Services
 - *Advising, Counseling & Tutoring Office*
 - *Internship & Career Services*
 - *Hornet Leadership*
 - *MESA Engineering Program*
 - *Maker Lab and Tech Shop*
 - *Scholarships*

Majors

- Civil Engineering (CE)
- Computer Engineering (CPE)
- Computer Science (CSC)
- Construction Management (CM)
- Electrical and Electronic Engineering (EEE)
- Mechanical Engineering (ME)

Math Requirements

- Civil Engineering, Computer Engineering, Electrical and Electronic Engineering, and Mechanical Engineering
- Computer Science
- Construction Management
- At least Math 30 & 31 (which are calculus 1 & 2)
- Requires Math 30 & 31 or Math 26A & 26B (calculus for social sciences)
- Requires Math 26A (calculus for social sciences) and Stat 1

Chemistry & Physics Requirements

Chemistry

- Civil Engineering, Electrical and Electronic Engineering, and Mechanical Engineering
- Requires Chem 1E (or Chem 1A from community college)

Physics

- Civil Engineering, Computer Engineering, Electrical and Electronic Engineering, and Mechanical Engineering
- Requires Phys 11A & 11C
- Computer Science
- Requires Phys 11A or 5A
- Construction Management
- Requires Phys 5A & 5B

First Time Freshmen

■ Math Readiness

- *Take as much math as possible in high school*
- *ALEKS PPL*
 - Math placement exam
 - Crucial to take prior to summer orientation so they can enroll in math at orientation
 - Student can take up to 4 proctored exams. They should use all to place into highest math possible
 - Roadmaps are based on students starting in math 30. If they do not place into math 30, they are adding 1 -2 semesters of math prior to math 30. This could prolong degree attainment
 - Students taking AP courses should still take the ALEKS PPL as a precaution

First Time Freshmen

■ Chemistry Readiness

- *Recommend to take chemistry in high school for familiarity*
- *Chemistry 1E Diagnostic Exam*
 - *Crucial to take prior to summer orientation so they can enroll in chemistry at orientation*
 - *Student needs to be math 30 eligible*
 - *If do not place into Chem 1E, student can take Chem 4. Adding an additional course*

■ Physics Readiness

- *Sooner they take math 30 and 31, the sooner they can enroll in physics 11A & 11C*
- *Until they enroll in physics, they cannot take some core major courses*
- *Phys 5A & 5B do not require math 30 and 31, just college algebra ready*

■ Other Tips

- *If students are not math ready, they can expect to finish in 5 or more years*

Transfer Students

■ Math Readiness

- *Take at least math 30 & 31 at community college*
- *Also required: Civil Engineering (math 35/100 & 45), Computer Engineering (math 45), Electrical & Electronic Engineering & Mechanical Engineering (math 32 & 45)*
- *Computer Science has math/science electives – taking math 32, 35 or 45 can go towards those*
- *If they do not take at least math 30, they will have to take ALEKS PPL*
 - *Math placement exam*
 - *Crucial to take prior to summer orientation so they can enroll in math at orientation*
 - *Student can take up to 4 proctored exams. They should use all to place into highest math possible*

Transfer Students

■ Chemistry Readiness

- *Take Chem 1A at community college*
- *Chemistry 1E Diagnostic Exam*
 - Crucial to take prior to summer orientation so they can enroll in math at orientation
 - Student needs to be math 30 eligible
 - If do not place into Chem 1E, student can take Chem 4. Adding an additional course

■ Physics Readiness

- *Take Physics 11A & 11C at community college*
- *Computer Science – can also take Phys 5A*
- *Construction Management – require Phys 5A & 5B but will accept Phys 11A & 11C*

Transfer Students

■ Lower division major coursework

- *Take as many courses offered at their community college*
- *The more you take, the less they will need at Sac State*
- *Taking all lower division coursework will ensure that they are eligible to start all upper division coursework*

******This will shorten their time to degree attainment******

■ Other Tips

- *Presumed that students transferring would begin in the 3rd year of roadmap, they are adding 1-2 years if they are not math, science and lower division course ready*
- *Should not prioritize GE over taking math/science or lower division major courses*
- *Students should take Writing Placement for Juniors (WPJ) in semester or summer/winter term after attending so they can have Writing Intensive course as option to take*

Resources

- ECS Website
 - <https://www.csus.edu/college/engineering-computer-science/>
- ECS Student Success Center
 - <https://www.csus.edu/college/engineering-computer-science/student-success/>
- Links to Roadmaps, placement exams and other Resources from Student Success Center
 - <https://www.csus.edu/college/engineering-computer-science/student-success/student-resources.html>

Questions?

- Contact Information
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