

Engineering/CIS/Science Focus Group

presented by

Laura Demsetz

Professor of Engineering, Academic Advisor

demsetz@smccd.edu

650 574-6617

19-046

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During the next hour....

- General transfer information
- Issues common to Engineering/CIS/Science majors
- Class sequencing (the prerequisite chain!)
- Resources
- Preparing for transfer in
 - Engineering
 - CIS
 - Physical Sciences
 - Biological Sciences

Please ask questions along the way!

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General Transfer Information



San Francisco State
 San Jose State
 Cal State East Bay
 Sacramento State
 Cal Poly San Luis Obispo
 Cal Poly Pomona
 ...and 17 more

UNIVERSITY of CALIFORNIA

UC Berkeley
 (UCSF)
 UC Davis
 UC Santa Cruz
 UC Merced
 UC Santa Barbara
 UCLA
 UC Irvine
 UC Riverside
 UC San Diego

Private Schools

Santa Clara University
 California College of the Arts
 M.I.T., Stanford (and similar)
 Drexel, RPI (and similar)
 Northeastern University
 ... and many more

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General Transfer Information

- To transfer, you need 60 transferable units including
 - Big 4: Engl 100, Critical Thinking, Speech (for CSU), Math
 If possible, get these done before your last semester at CSM
 - Major prep (**IMPORTANT!**)
 - General education ([CSU-GE](#), [IGETC*](#)) *not for some UC engineering
- For Fall 20xx transfer
 - Complete applications in Oct/Nov 20xx-1
 - Classes taken through Spring 20xx are considered in the admission process
 - Consider a [Guaranteed Transfer Contract](#) (Sept 20xx-1); check the details now.
- Be realistic with loads
 - No more than 3 major classes per term
 (fewer if you work > 20 hours per week)

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Transfer units & lower division requirements

- All coursework at community colleges →
no upper limit on units before transfer
- The courses you take before transfer will be used to satisfy lower division requirements.
- No more than 70 units are awarded upon transfer.
This is a good thing!
- If you do not complete the required lower division general education classes before transfer, you will have to do so after transfer (along with the upper division requirements).
Some UCs recommend this.
- In a few cases, courses may fulfill an upper division requirement; you will have to take an alternate upper division course upon transfer. (MATH 270, 275; CHEM 231, 232; ENGR 260)

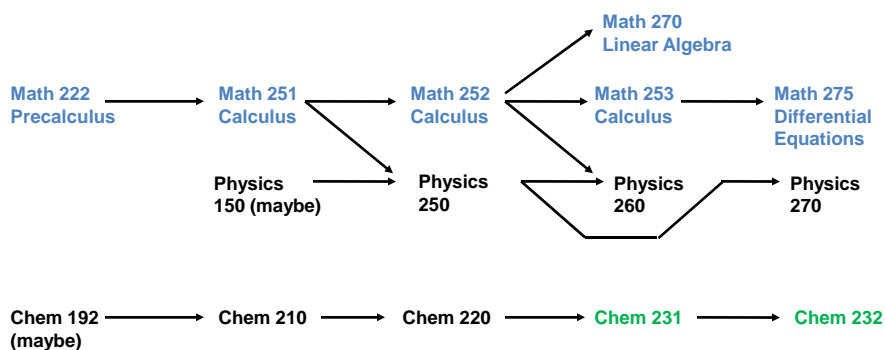
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Common Issues

- Engineering/CIS/Science majors have lots of
 - Lower division major prep
 - Interconnected courses (prerequisite chains)
 - Labs
- Many majors/schools are competitive
- To get through efficiently
 - Don't postpone major classes
 - Take a math class (nearly) every semester
 - Pay attention to the specific requirements of the majors/schools you are considering; consider guaranteed transfer contracts
 - Balance your load

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Sequencing of Major Classes, Part 1

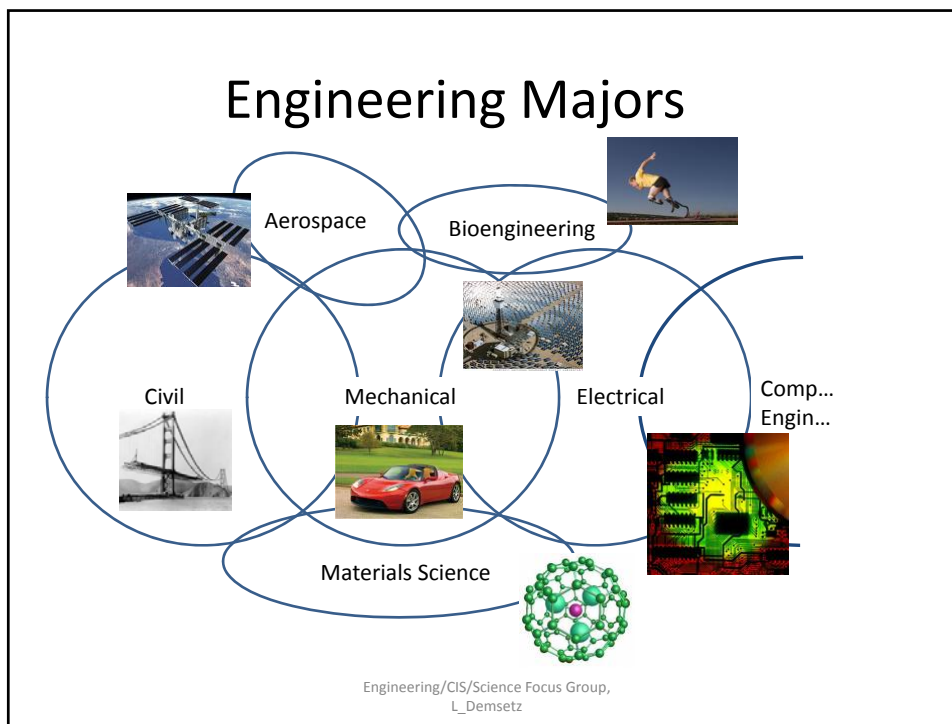


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Resources

- Career Cornerstone <http://www.careercornerstone.org/>
- www.assist.org
- Transfer school website
(especially for Cal Poly San Luis Obispo;
http://admissions.calpoly.edu/apply/transfer_sc)
- SB1440 transfer degrees
<http://collegeofsanmateo.edu/transfer/sb1440.asp>
- CSU-GE and IGETC patterns
<http://collegeofsanmateo.edu/forms/counseling.asp>
- Transfer Center events
<http://collegeofsanmateo.edu/transfer/>
- Transfer school open house / preview days

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Engineering Majors

- Entry level degree in engineering is a bachelor degree; you should prepare to transfer.
- You must specify a specific engineering major when you apply to transfer.
- Choice of major may affect choice of classes starting at calculus.
- Consider getting AS degrees (engineering, physics, math) along the way.

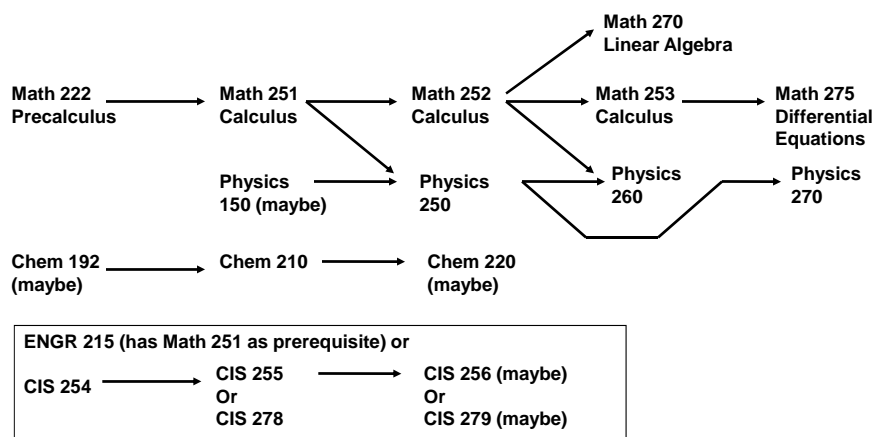
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Major preparation

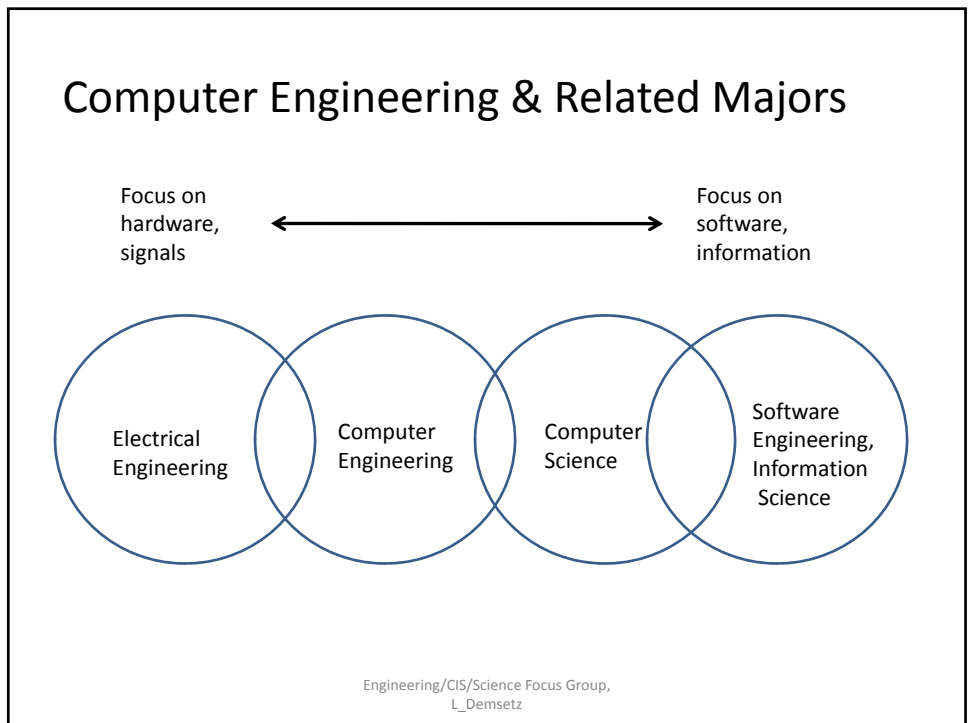
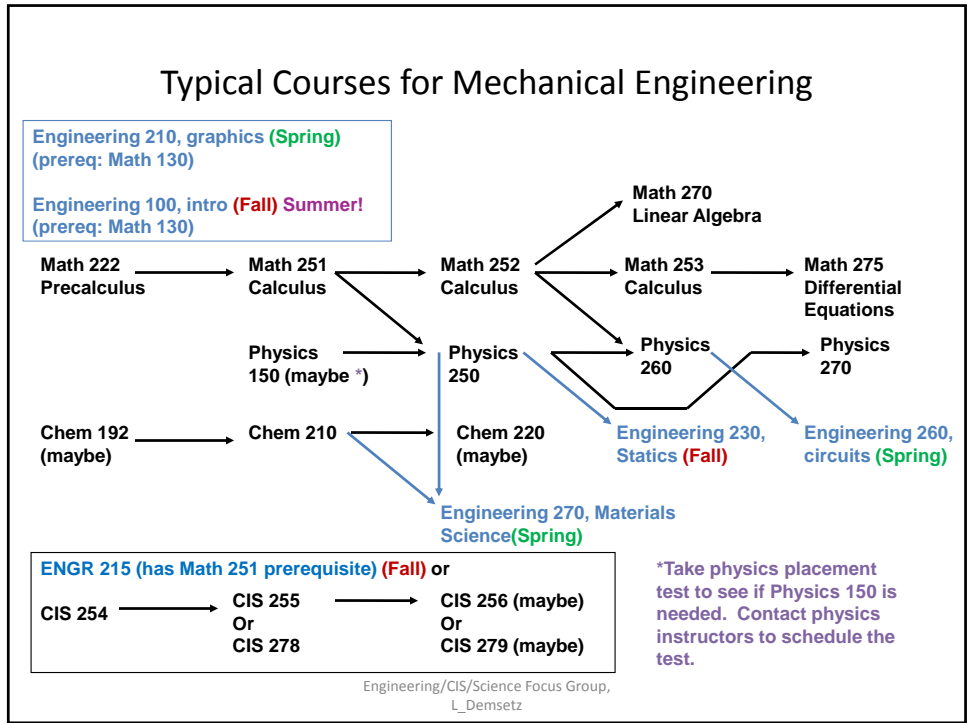
- Math (5 classes starting with Math 251)
- Science
 - 3 physics classes (Phys 270 is a “selective” at UCB)
 - 1 or 2 chemistry classes
 - maybe biology
- Engineering (1 to 5 classes)
- Programming (1 to 3 classes)
- General education
 - UCB, UCD require fewer classes than IGETC
 - Some other UCs recommend keeping a few GE courses for after transfer

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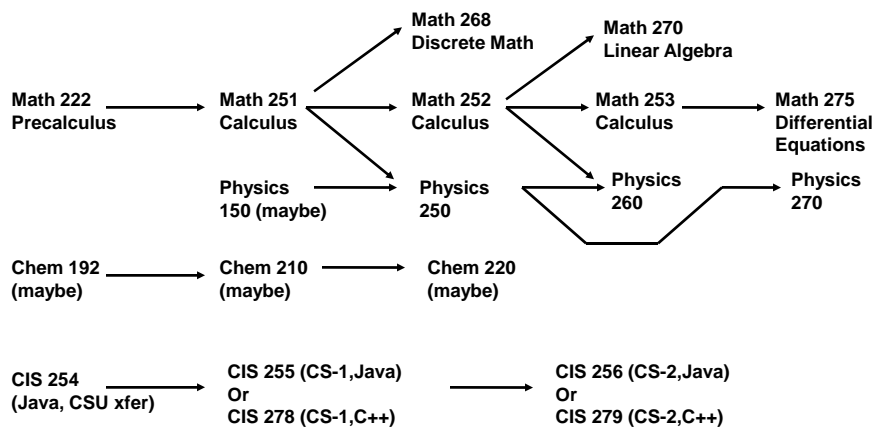
Sequencing of Major Classes Common to Most Engineering Majors



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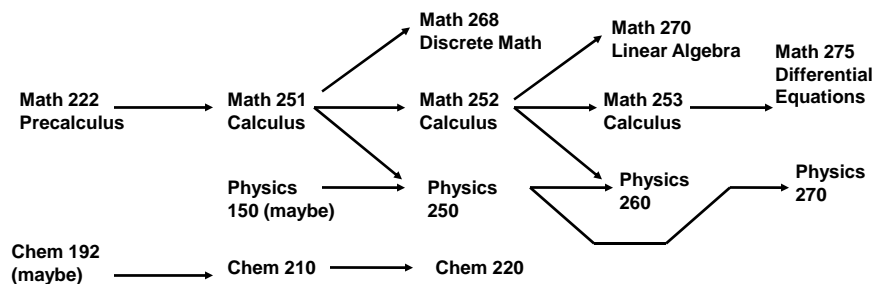


Sequencing of Major Classes Computer Engineering



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Sequencing of Major Classes for Physics and Chem Majors



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Biological Sciences

- Lots of departments
- Major prep usually requires one physics sequence:
 - Physics 210, 220 (trig-based)
 - Physics 210/211, 220/221 (calculus supplement)
 - Physics 250, 260 (calculus-based)
- Major prep usually requires two semesters of calculus
 - Math 241, 242 (applied)
 - Math 251, 252 (but need Math 253 as co-req for Phys 260)
- Major prep usually requires up to four semesters of chemistry
 - Chem 210, 220, 231, 232
- Major prep usually requires four semesters of biology
 - Biol 110, 210, 220, 230
 - or
 - Biol 110, 240, 250, 260

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