## Undeclared Engineering Major Requirement Check List 2017-2018

The following courses are required of all engineering students regardless of major. Undeclared students should explore the different majors through freshman seminars, service learning, research experiences and contact with faculty and graduate students.

Requirement	Completed	Units	
University Requirements			
University of California Entry Level Writing		n/a	
American History and Institutions		n/a	
Campus Requirements			
CORE 001 (4)			
WRI 010 (4)			
School of Engineering Requirements			
General Education	i		
MATH 021 (4) Calculus I			
MATH 032 (4) Statistics			
PHYS 008/008H (4) Intro to Physics I			
Science Requirement* (4-5)			
Computer Science Requirement**(3-4)			
Arts/Humanities GE (4)			
Social Science GE (4)			
Upper-Division Writing Course (4)			
ENGR 097 or SSHA GE course (3)			
Major Preparation	†		
PHYS 009 (4) Physics II			
MATH 022 (4) Calculus II			
MATH 023 (4) Vector Calculus			
MATH 024 (4) Linear Algebra and Differential Equations			
MATH 032 (4) Probability and Statistics			

- \* Students must select from BIO 001: Contemporary Biology (4), BIO 005: Concepts and Issues in Biology Today (4), ESS 001: Introduction to Earth Systems Science (4) or ESS 005: Introduction to Biological Earth Systems (4).
  - Bioengineering students must take Bio 001 and Bio 001L as part of their major.
  - All other Engineering majors (CSE/ENVE/ME/MSE) may choose one course from the above list.
- \*\*Students must complete one computer science requirement. Student will take ME 021: Engineering Computing (4), or BIOE 021: Computing for Bioengineers (3), or CSE 020: Introduction to Computing I (2) and CSE 021: Introduction to Computing II (2)
  - Bioengineering students must take BIOE 021 as part of their major.
  - Computer Science & Engineering students must take CSE 020 and CSE 021 as part of their major.
  - All other Engineering majors (ENVE/ME/MSE) must take ME 021 as part of their major.

Notes/Comments	