Additional Requirements

If you do not have an engineering B.S., you will need to meet some additional requirements. These additional requirements are in place to ensure that you are well-prepared for lasting success in the program. The courses provide you with foundational knowledge that will serve you in the program and beyond. The **prerequisites** listed below will need to be completed before applying. Then, during the program, you can make up the **deficiencies** listed below.

Prerequisites

Prerequisites are courses that must be taken in order to apply. Applicants with a non-engineering BS degree are expected to have **passed with letter grades** the following UC Davis equivalent science and mathematics courses:

a) Differential and Integral Calculus (Calculus - MATH 21 A, B & C; Vector Calculus - MATH 21 D; Linear Algebra - MATH 22 A; Differential Equations - MATH 22B)

b) Physics (Classical Physics - PHY 9A & B; Electricity and Magnetism - PHY 9C)

c) Chemistry (General Chemistry - CHE 2A & B)

Deficiencies

Deficiencies are course that must be passed before graduation, but do not need to have been passed in order to apply. These courses do not need to be completed before applying for the program. Students must pass with a letter grade any missing UC Davis equivalent engineering core and upper division engineering courses listed below **during** their MS or Ph.D. program:

a) Circuits 1: ENG 17

b) Statics: ENG (35)

c) Circuits: ENG 100

d) Dynamics: ENG 102

e) Fluids: ENG 103/EBS 103

f) Mechanics of materials: ENG 104

g) Thermodynamics: ENG 105

h) Two additional upper division courses in engineering