California State University Los Angeles

Bachelor of Science in Mechanical Engineering, Fall 2024-Spring 2026 Curriculum Recommended Schedule, Calculus Ready

Course
Name
[Pre-requisites]
<Pre/Co-requisites>
# of units

Freshman Year

14 units

- **MATH 2110** Calc. I [Exam, MATH 1040, or MATH 1083] 4
- **CHEM 1040** Gen. Chem. eng. 4
- **ENGR 1500** 2
- **Block A** A2 ENGL 1010 3

15 units

- **MATH 2120** Calc. II [MATH 2110] 4
- **PHYS 2100** Physics I [ME 1070] 4
- **ME 1030** Eng. graphics & CAD <PHYS 2100> 1
- **Block A** A1: COM 1100 / HNRS 1100 3
- **ENGL 2030** Intro to tech. writing 3

Sophomore Year

16 units

- **MATH 2130** Calc. III [MATH 2120] 3
- **PHYS 2200** Physics II [PHYS 2100] 4
- **ME 2010** Statics [PHYS 2100, MATH 2110] 3
- **ME 2030** Intro mech. Design [PHYS 2100, ME 1030] 3
- **Block C** Arts & Humanities 3

15 units

- **ME 3030** Fluid Mech. [ME 2010] 3
- **ME 2070** Materials Sc. and Eng. [CHEM 1040, MATH 2110] 3
- **ME 2050** Strength materials [ME 2010] 3
- **ME 2040** Circuit analysis for ME [PHYS 2200, MATH 2120] 3
- **Block F** Ethnic Studies 3

Junior Year

16 units

- **MATH 2190** Linear alg. & Diff. eq. [MATH 2120] 3
- **ME 3260** Thermo. [PHYS 2100, MATH 2110] 3
- **ME 3120** Strength materials lab [ME 2050] 1
- **ME 3200** Dynamics [ME 2010] 3
- **ME 3230** Machine design I [ME 2030, ME 2050, ME 2070, MATH 2130] 3
- **U.S. History** 3

17 units

- **ME 2800** Num. Meth. I [MATH 2110] 1
- **ME 3040** Stat. Analysis Exp. Data [MATH 2120] 3
- **ME 4061** Heat transfer [ME 3030, ME 3260, MATH 2190] 3
- **ME 4310** Materials lab. [ME 2070] 1
- **ME 3000** Econ. Eng. [Junior or Senior] 3
- **ENGR 3010** Ethics & Prof. [Junior or Senior] 3

Senior Year

15 units

- **ME 3800** Num. Meth. II [ME 2800, MATH 2190] 2
- **ME 4971** Senior Project I [ME 3230, ME 3000, ENGR 3010] <ME 4061, ME 3040, ME 3800> 3
- **ME 4079** Thermal fluids lab. <ME 4061> 1
- **ME 4140** Machine design II [ME 3230] <ME 3140> 3
- **ME 3270** Manufact. Proc. [ME 2030, ME 2050, ME 2070] 3
- **ME xxxx** Elective 3

14 units

- **ME 4972** ME Senior Project II 3
- **ME 4960** EIT Exam Prep [ME 3230, ME 3000, ENGR 3010] <ME 4061, ME 3040, ME 3800> 1
- **ME 3140** Machine Des. Lab <ME 3230> 1
- **ME xxxx** Elective 3
- **ME xxxx** Elective 3
- **US Constit. / Local Govt.** 3