

# Mechanical Engineering

FIRST YEAR		SECOND YEAR		THIRD YEAR		FOURTH YEAR	
FALL	SPRING	FALL	SPRING	FALL	SPRING	FALL	SPRING
WRIT 150 4	GESM (GE B) <sup>#</sup> 4	GE C 4	AME 208 co-req: MATH 245 4	GE C 4	MASC 310L 4	GE B 4	WRIT 340 WRIT 150 4
AME 101L (MATH 125) 4	GE A* 4	AME 201 MATH 125 or 126 or 226 4	AME 204 AME 201 4	AME 301 AME 201, (MATH 245) 4	AME 310 PHYS 151 and MATH 125 or 126 or 226 4	AME 431 AME 310, (AME 309) 4	GE D 4
MATH 125 (GE F)* 4	MATH 126 or MATH 129* MATH 125 4	MATH 226 or MATH 229 MATH 126 or 129 4	MATH 245 MATH 226 or 229 4	AME 308 AME 204, (AME 301) 4	AME 309 AME 201, (MATH 245) 4	TECHNICAL ELECTIVE 4	TECHNICAL ELECTIVE 4
CHEM 105AL or MASC 110L* 4	PHYS 151L (GE E) MATH 125 or 126 or 226 4	PHYS 152L PHYS 151L, (MATH 226) 4	PHYS 153L PHYS 152 4	AME 341aL PHYS 152, AME 208 4	AME 341bL AME 341a 4	AME 441aL AME 308, AME 341a, AME 341b 4	CAPSTONE ELECTIVE 4
ENGR 102 2	TAC 168 2	OPTIONAL ELECTIVE 2	OPTIONAL ELECTIVE 2	AME 302a MATH 245 2	OPTIONAL ELECTIVE 2	OPTIONAL ELECTIVE 2	OPTIONAL ELECTIVE 2

## MATHEMATICS (16 UNITS)

**MATH 125:** Calculus I\*

**MATH 126 or MATH 129:** Calculus II\*

**MATH 226 or MATH 229:** Calculus III

**MATH 245:** Mathematics of Phys. and Engr.

## PHYSICS (12 UNITS)

**PHYS 151L:** Mechanics and Thermodynamics

**PHYS 152L:** Electricity and Magnetism

**PHYS 153L:** Optics and Modern Physics

## CHEMISTRY/MATERIALS SCIENCE (4 UNITS)

**CHEM 105aL:** General Chemistry\*

or **MASC 110L:** Materials Science

## GENERAL EDUCATION (32 UNITS)

**GE A** The Arts (1 Course)\*

**GE B** Humanistic Inquiry (2 Courses)

**GE C** Social Analysis (2 Courses)

**GE D** Life Sciences (1 Course)\*

**GE E** Physical Sciences (1 Course)\*

**GE F** Quantitative Reasoning (1 Course)\*

**GE G,H** Global Perspectives (2 Courses)\*

**GESM** General Education Seminar (1 Course)

## WRITING (8 UNITS)

**WRIT 150:** Writing and Critical Reasoning

**WRIT 340:** Advanced Writing

## ENGINEERING (68 UNITS)

**AME 101L:** Intro. to Mechanical Engineering

**AME 201:** Statics

**AME 204:** Mechanics of Materials & Structures

**AME 208:** Computational Methods in Engineering

**AME 301:** Dynamics

**AME 302a:** Systems

**AME 308:** Computer-Aided Engineering

**AME 309:** Dynamics of Fluids

**AME 310:** Engineering Thermodynamics I

**AME 341aL:** Mechoptronics Laboratory

**AME 341bL:** Mechoptronics Laboratory

**AME 431:** Heat Transfer

**AME 441aL:** Senior Projects Laboratory

**AME CAPSTONE ELECTIVE**

**ENGR 102:** Engineering Freshman Academy

**TAC 168:** Introduction to MATLAB

**MASC 310L:** Materials Behavior & Processing

**TECHNICAL ELECTIVES**

## SPECIAL NOTES

Courses with the \* symbol may be satisfied with AP, IB or A-Level exams. See page 18 for more information.

**GESM#:** GESM can be taken from GE categories: A, B, C, or D. Courses listed in the guide are options for a four-year course plan.

**GE:** Engineering students are encouraged to satisfy GE-G and GE-H with a course that also satisfies a Core Literacy. GE-H may be satisfied by AP/IB. Additionally, your GESM course should be taken in categories A, B, C, or D only. See page 17 for more information and consult your advisor for detailed assistance.

**PHYSICS REQUIREMENT:** PHYS 161-163 and PHYS 171-173 are acceptable towards this requirement.

**AME CAPSTONE:** See academic advisor for approved list of courses.

**TECHNICAL ELECTIVES:** Any upper-division course in engineering, chemistry, physics or mathematics.

**OPTIONAL ELECTIVES:** Consult with your academic advisor to explore optional elective courses. These courses are not required.