

Mechanical (Petroleum) Engineering

FIRST YEAR		SECOND YEAR		THIRD YEAR		FOURTH YEAR	
FALL	SPRING	FALL	SPRING	FALL	SPRING	FALL	SPRING
GESM (GE B) 4	WRIT 150 4	GE C 4	GE B 4	WRIT 340 WRIT 150 4	AME 302 MATH 245 4	GE C 4	GE D* 4
AME 101L 3	GE A* 4	AME 201 PHYS 151Lg or 161Lg or 171 3	AME 204 AME 201 or CE 205 3	AME 301 AME 201 or CE 205 3	AME 308 AME 204, (AME 301) 3	PTE 461 PHYS 152L and 408b 3	AME 331 AME 310, (AME 309 or CE 309) 3
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	PTE 463 CHEM 105aLg or 115aLg, MATH 245, PHYS 151L 3	AME 309 AME 201, (MATH 245) 4	PTE 465 PTE 464 3	AME 409 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 152L 4	MASC 310 4	PTE 464 PTE 463 3	AME 408 AME 204 or CE 225 3	TECHNICAL ELECTIVE 4
ENGR 102 2	ITP 168 2	OPTIONAL ELECTIVE 3	AME 310 MATH 226 or 227 or 229 3	AME 341aL PHYS 152L or 162L, MATH 126 or 127 or 129 3	AME 341bL AME 341aL 3	AME 441aL AME 341bL 3	OPTIONAL ELECTIVE 3
OPTIONAL ELECTIVE 1				OPTIONAL ELECTIVE 1	OPTIONAL ELECTIVE 1	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 (66 UNITS)

AME 101L: Intro. to Mech. Engr. & Graphics

AME 201: Statics

AME 204: Strength of Materials

AME 301: Dynamics

AME 302: Dynamic Systems

AME 308: Comp. Aided Analysis for Design

AME 309: Fluid Dynamics

AME 310: Engineering Thermodynamics I

AME 331: Heat Transfer

AME 341aL: Mechoptronics Laboratory I

AME 341bL: Mechoptronics Laboratory II

AME 408: Comp. Aided Design of Mech
Systems

AME 409: Senior Design Project

AME 441aL: Senior Projects Laboratory

ENGR 102: Engineering Freshman Academy

ITP 168: Introduction to MATLAB

PTE 461: Formation Evaluation

PTE 463L: Intro. to Transport Processing in
Porous Media

PTE 464L: Petroleum Reservoir Engineering

PTE 465L: Drilling Technology

MASC 310: Mechanical Behavior of Materials

TECHNICAL ELECTIVE

SPECIAL NOTES

Courses with the * symbol may be satisfied with AP, IB or A-Level exams. See page 16 for more information.

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 15 for more information and consult your advisor for detailed assistance.

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

TECHNICAL ELECTIVES: Any upper-division course in engineering, chemistry, physics, and mathematics. See academic advisor for exceptions/substitutions.