

Mechanical Engineering – Technical Electives

ME TECHNICAL ELECTIVES

ME Courses	F23	S24	F24	S25	F25	S26	F26	S27	F27	F28
ME 4343 – Intermediate Heat Transfer		X			X			X		
ME 4833 – Intermediate Fluid Mechanics			X			X			X	
ME 4353 – Alternative Energy Sources		X		X		X		X		X
ME 4373 – Air Conditioning	X		X		X		X		X	
ME 4543 – Combustion Engines	X		X		X		X		X	
ME 4393 – Power Generation Systems		X		X		X		X		X
ME 4193 – Automotive Engineering		X		X		X		X		X
ME 4123 – Failure of Engineering Materials	X		X		X		X		X	
ME 4133 – Mechanical Metallurgy	X		X		X		X		X	
ME 4233 – Fundamentals of FEA		X		X		X		X		X
ME 4990 – Specials Topics in Mechanical Eng										

ADDITIONAL TECHNICAL ELECTIVES

Ag & Bio Engineering

ABE 4523 – Biomedical Materials
 ABE 4563 – Robotics for Biological Systems
 ABE 4613 – Biomechanics
 ABE 4633 – Biomedical Signals and Sensors

Aerospace Engineering

ASE 4233 – Structural Dynamics
 ASE 4423 – Int. Comp Fluid Dynamics
 ASE 4713 – Intro to Unmanned Aircraft

Chemistry

CH 4513 – Organic Chemistry I
 CH 4523 – Organic Chemistry II
 CH 4554 – Integrated Organic I
 CH 4564 – Integrated Organic II

Chemical Engineering

CHE 4143 – Adv Poly/Composite Materials
 CHE 4733 – Introduction to Sustainability

Electrical & Computer Engineering

ECE 4443 – Sensor Processing for Avs
 ECE 4923 – Fdbk Con Sys II

Engineering Mechanics

EM 4123 – Intro. to Finite Element Methods
 EM 4133 – Mechanics of Composite Materials
 EM 4213 – Advanced Mechanics of Materials

Industrial Engineering

IE 4113 – Human Factors
 IE 4613 – Engineering Statistics I
 IE 4624 – Engineering Statistics II
 IE 4733 – Linear Programming
 IE 4923 – Six Sigma Methods and Project
 CE 4753 – Construction Cost Estimation

Mechanical Engineering

ME 4123 – Failure of Engineering Materials
 ME 4133 – Mechanical Metallurgy
 ME 4233 – Fundamentals of FEA
 ME 4343 – Intermediate Heat Transfer
 ME 4543 – Combustion Engines
 ME 4833 – Int. Fluid Mechanics

Petroleum Engineering

PTE 4903 – Petr Reservoir Eng 1
 PTE 4913 – Petr Reservoir Eng 2
 PTE 4923 – Completion Design
 PTE 4953 – Formation Eval
 PTE 4963 – Oil Recovery Methods
 PTE 4993 – Petroleum Econ Analysis

Special Topics

ASE 4990 – Aerospace Composites Manufacturing
 CHE 4990 – Intro to Nuclear Engineering
 ECE 4990 – Power Systems Grounding

IMPORTANT NOTES:

1. At least 1 of the 3 technical elective requirements must be a course offered by the ME department (ME 4XXX).
2. The Topic for ME 4990 will be announced during the semester the course will be offered.
3. These courses are outside of ME, and the schedule is subject to change.
4. Students are limited to ONE Directed Individual Studies (DIS) course to apply towards the three technical elective requirements.
5. A MA 4000 level course may be selected (MUST have “MA” prefix // “not ST”)