Department of Mechanical Engineering General Advising for Juniors and Seniors

Prepared by Dr. Padilla Spring 2022

Mechanical Engineering Advising Website
https://www.unr.edu/me/undergraduate-program/advising

College of Engineering Advising Website
https://www.unr.edu/engineering/student-resources/advising
Policies

• No exceptions policy
  – Waivers will not be given for pre-requisites or co-requisites

• Repeat Policy
  – A course may only be taken a maximum of 3 times
    • C or better courses: you have 3 tries to get a C
    • Other courses: you have 3 tries to get a D-
  – The third time you take a course
    • You need permission to enroll in a course a 3rd time
    • You must go to the college of engineering advisors and sign a form stating you know that it is your final chance to enroll in the course
Requirements for ENGR 301 & Capstone

• ENGR 301 Pre-requisites:
  – General Education courses (CO1-CO3) completed
  – At least 3 courses from CO4-CO8 completed
  – PHYS 181 with a "C" or better
  – Junior or Senior standing

• ME 451
  – Pre-req: ME 310, ME 314, ME 351, ME 322
  – Co-req: ENGR 301

• ME 452
  – Pre-req: ENGR 100, ENGR 301, ME 451
Restricted Electives

• Fall
  – ME 414/414L: Intermediate Heat Transfer
  – ME 431/431L: Advanced Mechanics
  – ME 444/444L: Intermediate Dynamics

• Spring
  – ME 432/432L Materials
  – ME 453/453L: Vibrations
  – ME 467/467L: Intermediate Fluids
Summer Courses

• Required
  – ENGR 241
  – ME 242
  – ME 310
  – ME 311
  – ME 351
  – ENGR 301

• Electives
  – ME 354 - Introduction to Manufacturing Processes
  – ME 496 - Mechanical Engineering Internship Projects
General Electives - Fall 2021

• ME 354 Intro to Manufacturing Processes
• ME 411 Comparative Biomechanics
• ME 475 Introduction to Combustion
• ME 482 Aerodynamics
• ME 496 - Mechanical Engineering Internship Projects
• ME 493 Special Topics – Linear Theory of Elasticity
  – Prerequisites: CEE 372, MATH 285,
  – Recommended: MATH 330
  – Introduction to the linearized theory of elasticity. Governing differential equations and boundary conditions, strain and stress, constitutive relations, plane and other symmetric problems, waves.
General Electives - Spring 2023 (Tentative)

- ME 312 Thermodynamics II
- ME 354 Intro to Manufacturing Processes
- ME 422 Introduction to Robotics
- ME 458 Flight Stability and Control
- ME 463 Nonlinear Dynamics and Chaos
- ME 476 Internal Combustion Engines
- ME 480 Gas Dynamics
- ME 486 Biosolid and Biofluid
- ME 496 - Mechanical Engineering Internship Projects
Elective Restrictions/Substitutions

• ME 493: Special Topics
  – Only 6 credits is allowed for your degree

• Maximum of 3 credits towards your degree
  – ME 499: Independent Study
  – ME 496: Mechanical Engineering Internship Projects
  – ME 493 - Design Process
  – Courses outside of the ME department
    • If you would like to use an upper division course that does not have an ME prefix but is related you must get advisor approval.
Math/Science Electives

- ATMS 411 Introduction to Atmospheric Physics
- ATMS 412 Introduction to Air Pollution
- ATMS 413 Introduction to Synoptic Meteorology
- ATMS 414 Physical Climatology
- BME 401 Introduction to Biomedical Engineering
- MSE 401 Corrosion of Metals
- MSE 433 Electronic, Magnetic and Optical Properties of Materials
- MSE 460 Physical Metallurgy I
- MSE 461 Physical Metallurgy II
- MSE 470 Polymeric and Composite Materials
- MSE 472 Introduction to Ceramics
- PHYS 182 Physics for Scientists and Engineers III
- PHYS 351 Classical Mechanics
- PHYS 422R Applications of Quantum Mechanics
- PHYS 425 Thermal and Statistical Physics
- PHYS 426 Physics of Solids
- PHYS 473 Electricity and Magnetism
- MATH 307 Symbolic Logic
- MATH 310 Introduction to Analysis I
- MATH 311 Introduction to Analysis II
- MATH 330 Linear Algebra I
- MATH 331 Groups, Rings and Fields
- MATH/STAT 352 Probability and Statistics
- MATH 373 Theory of Positive Integers
- MATH 381 Methods of Discrete Mathematics
- MATH 401 Set Theory
- MATH 410 Complex Analysis
- MATH 411 Real Analysis
- MATH 412 Functional Analysis
- MATH 420 Mathematical Modeling
- MATH 422 Optimal Analysis
- MATH 430 Linear Algebra II
- MATH 440 Topology
- MATH 441 Intro Algebra Topology
- MATH 442 Differential Geometry
- MATH 443 Differential Geometry and Relativity I
- MATH 461 Probability Theory
- MATH 488 Partial Differential Equations
FE Requirement

• Enroll in ENGR 490 the same semester you plan to take the FE
  – There are no meetings for ENGR 490

• Register and pay to take the FE

• If you do not take the FE the same semester you are enrolled in ENGR 490
  – You will get an incomplete
Applying for Graduation

• **Apply for graduation in MyNevada**
• May Graduation Deadline: March 1
• August Graduation Deadline: June 1
• December Graduation Deadline: October 1
Graduate School

- Accelerated BS/MS program
- Accelerated BS/MBA program
- MS and PhD degrees