



COLLEGE OF ENGINEERING

IMPACT • ACCESS • INCLUSION



Undergraduate Advising Form • MECHANICAL ENGINEERING (Lincoln)

CATALOG YEAR 2026-2027

This form is meant as a planning tool only. Please meet with your advisor each term.

SEM 1 15 HRS	MATH 106 (5) Calculus I <i>Pre: MPE 106 or MATH 102 or MATH 103</i>	CHEM 111 (4) Chemistry for Engineering and Technology <i>Pre: MPE 106 or MATH 102 or MATH 103</i>	ENGR 100 (3) Interpersonal Skills for Engineering Leaders	ACE (3) (5, 6, 7, or 9)	ENGR 10 (0) Freshman Seminar
SEM 2 15 HRS	MATH 107 (4) Calculus II <i>Pre: MATH 106</i>	PHYS 211 & 221 (5) General Physics I & Lab <i>Pre: MATH 106</i>	CSCE 155N (3) Computer Science I: MATLAB <i>Pre: MATH 102 or MPE 103</i>	ACE 1 Writing (3) Choose from <i>ENGL 151 or ENGR 220</i>	
SEM 3 17 HRS	MATH 208 (4) Calculus III <i>Pre: MATH 107</i>	PHYS 212 (4) General Physics II <i>Pre: PHYS 211, MATH 107</i>	MECH 223 (3) Statics <i>Pre: PHYS 211, MATH 107</i>	MECH 130 (3) Introduction to Geometric Modeling and Mechanical Design Practices	BSEN 206 (3) Engineering Economics <i>Pre: Sophomore Standing</i>
SEM 4 16 HRS	MATH 221 (3) Differential Equations <i>Pre: MATH 107</i>	MATL 360 (4) Elements of Materials Science <i>Pre: CHEM 109A/L or CHEM 111, PHYS 212 Co: MECH 223</i>	MECH 325 (3) Elastic Bodies <i>Pre: MECH 223, MATH 208</i>	MECH 373 (3) Dynamics <i>Pre: MECH 223, MATH 208</i>	MECH 200 (3) Thermodynamics <i>Pre: MECH 223</i>
SEM 5 16 HRS	MATH 314 (3) Linear Algebra <i>Pre: MATH 107</i>	MECH 318 (3) Applied Linear Algebra and Comp. Methods <i>Pre: MATH 208, CSCE 155N Co: MATH 221</i>	MECH 230 (3) Intro to MECH Design <i>Pre: MECH 130, MECH 325</i>	MECH 342 (3) Kinematics & Dynamics of Machinery <i>Pre: MECH 130, MECH 373</i>	ECEN 211 & 231 (4) Elements of Electrical Engineering <i>Pre: MATH 107, PHYS 211</i>
SEM 6 15 HRS	MECH 310 (3) Fluid Mechanics <i>Pre: MECH 373, MATH 221 Co: MECH 200</i>	MECH 350 (3) Dynamics & Control of Engr Systems <i>Pre: MECH 373, ECEN 211, CSCE 155N Co: MATH 314</i>	MECH 380 (3) Measurements <i>Pre: ECEN 231, ENGL 151 or ENGR 220 Co: MECH 321, MECH 350, MECH 310</i>	MECH 300 (3) Thermal Systems & Design <i>Pre: MECH 200, CSCE 155N</i> Sp	MECH 343 (3) Elements of Machine Design <i>Pre: MECH 325, MATL 360 Co: MECH 342, MECH 321</i> Sp
SEM 7 16 HRS	MECH 446 (2) Senior Design I <i>Pre: BSEN 206, MECH 200, 230, 342, and Professional Admission to degree program Co: MECH 310, 350</i> Fa	MECH 370 (3) Manufacturing Methods & Processes <i>Pre: MATL 360, MECH 325</i>	MECH 420 (3) Heat Transfer <i>Pre: MECH 310</i>	MECH 488 (2) Kinematics & Machine Design Lab <i>Pre: MECH 342 Co: MECH 380</i>	TECH ELEC (3) ACE (3) (5, 6, 7, or 9)
SEM 8 16 HRS	MECH 447 (2) Senior Design II <i>Pre: MECH 446</i> Sp	MECH 487 (2) Thermal Fluids Lab <i>Pre: MECH 200, 380 Co: MECH 420</i>	SENIOR ELEC (3)	DESIGN ELEC (3)	ACE (3) (5, 6, 7, or 9)

MECHANICAL ENGINEERING

COLLEGE REQUIREMENTS

- Students may repeat a maximum of three engineering courses.
- Students may take any one engineering course a maximum of two times.
- Pass/No Pass is only an option for up to 12 credits of ACE courses 5, 6, 7, and 9. Pass/No Pass is not an option for other required courses or Engineering electives.
- Students can be reviewed for professional admission twice within one department. If they do not receive professional admission after the second review, they can change their major. If they stay in the College of Engineering they must meet the professional admission criteria of their new major after one review or they must change their major outside of the college.
- Must fulfill the requirements of the catalog year of admission, can change to a subsequent catalog year in consultation with an advisor.
- 30 of the last 36 degree hours must be registered for and completed at UNL or UNO.
- College probation
 - Students with a cumulative GPA of less than 2.4 will be placed on college probation
 - Students move back to good academic standing when their cumulative GPA is 2.4 or higher
 - Students will be dismissed from the College of Engineering after two sequential semesters on college probation
 - Students cannot graduate from the College of Engineering while on college probation

DEPARTMENT REQUIREMENTS

- Grade of 'C' or better required for the following classes: MATH 106, MATH 107, MATH 208, PHYS 211, and MECH 223.
- Taking CHEM 109A, 109L, and 110A is allowed as a substitution for CHEM 111.
- PHYS 222 General Physics Lab II (1 cr) may substitute for PHYS 221 General Physics Lab I.
- Choose one ACE elective from each of the four ACE Student Learning Outcomes 5, 6, 7, and 9.
- Choose one from the following ACE 1 electives: ENGL 151 or ENGR 220. ENGL 150 is allowed as a substitution for ACE 1 credit.
- CSCE 155E (a C programming course) is an acceptable substitute for CSCE 155N, though the Matlab programming language is preferable for the degree.
- The capstone design sequence must be taken in the order shown in the curriculum and should be taken in the last full academic year (fall-spring) of the program (i.e. MECH 446 in the fall & MECH 447 in the spring).
- Design and technical electives must be chosen from a list of approved 400-level mechanical engineering elective courses provided by the department every semester.
- Senior electives may be either another mechanical engineering technical elective, another mechanical engineering design elective, or, with prior written approval from your advisor, a 300 or higher level engineering, science, or math course.
- Professional admission – mechanical engineering students will be reviewed for professional admission upon completion of MECH 223 and 43 credit hours (and 12 UNL credit hours for transfer students). To be granted professional admission, a student must:
 - Earn a major GPA of 2.7 or higher at time of review
 - Have no more than 4 withdraws on their record
 - Have no more than 3 repeated courses
 - One must earn professional admission after two reviews or change their major. The second review will occur in the subsequent semester of first review