

Majoring in Mechanical Engineering

For further information, please visit <http://www.me.unlv.edu>

Mechanical Engineering Involves the planning, design, manufacture, and operation of a number of devices, machines and systems. Mechanical Engineering is a broad discipline at the forefront of technological advancements in energy conversion, manufacturing, machine design, fluid mechanics, and aerospace systems. Virtually all facets of modern life are directly affected by the work of mechanical engineers. Today's mechanical engineers are routinely working on a variety of new ideas and innovations including robotics, laser systems, new energy sources, automatic controls, and computer graphics systems in applications related to space technology and aircraft design, orthopedic biomechanics, pollution control, automobile design and combustion engines, robot vision, problems of heating and lubrication, and the development of microprocessors and computer-based computational algorithms. Mechanical engineers continue to work toward meeting the demands of and increasingly complex technological society.

The Curriculum

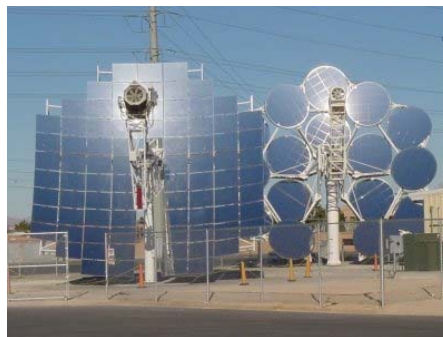
The Mechanical Engineering curriculum at UNLV is molded on the recommendations of the American Society of Mechanical Engineers and is fully accredited by the Accreditation Board for Engineering and Technology (ABET).

The program of 125 credits leads to the degree of Bachelor of Science in Engineering with a major in Mechanical Engineering. In order to meet the requirements of ABET, the program contains specified components in mathematics, chemistry, physics, English, humanities, social science, computer science, engineering science, and engineering design. All students are required to take the Fundamentals of Engineering Examination during their final year of study, a major step toward registration as a Professional Engineer. All states require such registration because engineers are responsible for competent planning and design but also for the safety of the public that depends on their works.

Extra-Curricular Activities

Student chapters of the American Society of Mechanical Engi-

neers, the Institute of Aeronautics and Astronautics, the Society of Automotive Engineers, and the Nevada Society of Professional Engineers sponsor social events, student contests, field trips, and speakers on topics of interest to students. Local chapters of national organizations encourage student participation at their meetings. Such activities provide the first non-academic contact by students with practicing professionals and offer insight into the "real world" of mechanical engineering.



Career Opportunities

Mechanical engineering graduates from UNLV have gone on to rewarding careers with industry, utility companies, consulting engineers and local, state and federal agencies. Many students

decide to continue their education in graduate school at UNLV or at other fine universities. The long term outlook for employment of mechanical engineers appears to be excellent both regionally and throughout the country. Salaries and advancement prospects compare favorably with many other professions. Current starting salaries are in excess of \$40,000.

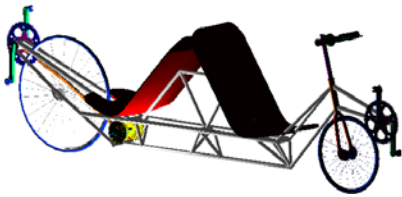


Facilities and Faculty

The Department of Mechanical Engineering is housed in the Thomas T. Beam Engineering Complex, a modern facility of some 101,000 square feet which includes classrooms, laboratories, and offices used by all academic departments within the College of Engineering. The National Supercomputing Center for Energy and the Environment is operated by the

college and is housed in the complex. The students and faculty at UNLV have access to a family of computers ranging from PCs to the Cray supercomputer. Mechanical engineering equipment and instrumentation are located in many departmental labs and include direct access to PCs and graphics work stations.

The mechanical engineering faculty of 12 is dedicated, competent group with strong commitments to effective teaching and quality research. All faculty hold the doctorate degree, many have achieved professional registration, and all participate in the activities of technical and professional societies. Current research activities include materials applications, fluid dynamics, aerodynamics, energy conservation, acoustics, robotics, control theory, and computer aided design.



High School Preparation

A career in mechanical engineering depends on a successful learning experience beginning with solid high school preparation. High school students thinking about engineering should be in a college prep program which includes the following high school courses: 4 years of English with emphasis on composition, rhetoric, and literature; 4 years of mathematics, including algebra, geometry, trigonometry, and analysis; 3 years of Science including chemistry, physics, and biology; 3 years of social science and history; and 1 year of Computer Science. Speech, drafting, typing, and two years of

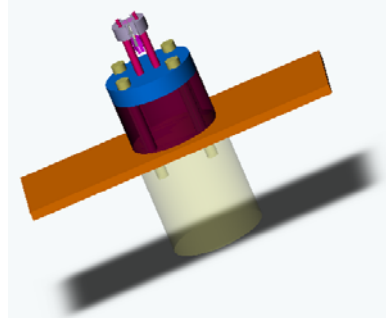
foreign language also would be helpful. ACT or SAT scores and a high school grade point average of 2.5 are required for freshman admission to UNV. Students must demonstrate proficiency in mathematics, English, and chemistry prior to selecting a major.

The Freshman Year

The Freshman year of study for all engineering programs at UNLV is essentially equivalent. The selection of a major is an important decision which a student should make only after studying the alternatives and taking advantage of the counseling opportunities available through the university. A student should contact an advisor and work together in designing a class schedule. A freshman year program for a fully prepared student includes:

<i>First Year – Fall</i>	<i>Cr.</i>
Intro. To Mech & Aerospace Egr	3
Calculus I	4
General Chemistry I	4
English Composition I	3
Constitutions Requirement	<u>4</u>
	18

<i>First Year – Spring</i>	<i>Cr.</i>
Engineering Statics	3
Calculus II	4
Physics I	4
English Composition II	3
UNLV Core Elective	<u>3</u>
	17



The UNLV Campus

The University of Nevada, Las Vegas is committed to academic excellence in each of its more than

165 undergraduate and graduate programs. Following a decade of unprecedented growth in enrollment and facilities, the campus is now focusing its resources on those qualities which make a university great: its academic offerings, its faculty and staff, and its students.

The university's commitment to learning is reflected in the core curriculum required of every student. The core provides a solid background in the humanities, fine arts, mathematics, science, English, and social sciences. Its purpose is to broaden the knowledge of all students, regardless of major.

Over 25,000 students attend classes at UNLV's 335-acre campus, located in the nation's fastest growing city. While most students are Nevada residents, a lively mixture of international and out-of-state students add to the cosmopolitan quality of the campus.

Residence halls on the UNV campus are the home of more than 1,500 students. Each double-room arrangement shares a full bathroom. The complex is complete with meeting rooms, recreational facilities, mail services, fitness rooms, and computer labs.

All academic programs at UNLV are fully accredited by the Northwest Association of Schools and Colleges.

Additional information is available from the UNLV *Undergraduate Catalog* or from:

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