

**Master of Science in Biomedical Engineering
Admission to the Major**

To enter the Master of Science in Biomedical Engineering, a student must be admitted to the UNLV Graduate College. One can visit the web page of UNLV Graduate College (www.unlv.edu/graduatecollege) for Graduate College admission requirements, application and deadlines.

In addition to the general requirements for admission to the Graduate College, an applicant for the M.S. program must complete the following requirements:

1. Applicants must complete the on-line process in the “Apply Yourself (AY)” system.
2. In addition to the required information in the general AY application system, the Mechanical Engineering Department has two additional requirements which can also be submitted in the AY system as optional items. Electronic submission is the preferred method. If these items are not completed in the AY system before you finish and make payment, you cannot go back and do them electronically afterwards. In this case, you must mail hardcopies to the Mechanical Engineering Department. The two items are:
 - a. A written statement of purpose indicating interests and objectives in working toward a M.S. degree.
 - b. Two letters of recommendation. There is no specified format. Your references should point out the qualifications that make you a good candidate for admission.
3. The applicant must have a bachelor’s degree in engineering or a closely related discipline. Students with non-engineering backgrounds will be required to complete a set of course work requirements that will assure successful completion of the M.S. specialization and qualify the student to sit for the Fundamentals of Engineering (FE) exam. The Graduate Program Committee (GPC) will decide upon special cases.
4. The applicant must submit his/her official copy of the Graduate Record Examination (GRE) test scores. To be admitted to the graduate program in Mechanical Engineering, the applicant must be at or above the 75 percentile range (of the group taking the GRE

when the applicant takes the exam) in the quantitative reasoning section of the exam. If the applicant is less than 75 percent, at the discretion of the Department of Mechanical Engineering, the applicant may be provisionally admitted to the graduate program with the requirement that he/she retake the GRE during the first semester after admission. If the applicant fails to retake the GRE during the first semester after admission or if the applicant fails to be at or above the 75 percent range in the quantitative reasoning section of the exam after retaking the exam, at its discretion, the Department of Mechanical Engineering may remove the applicant from the graduate program. The GRE university code for UNLV is 4861. The Mechanical Engineering Department code is 1502.

5. The GPC will examine the applicant's academic record and will make the final determination of the applicant's admissibility to the M.S. program. In general, a minimum post baccalaureate GPA of 3.00 on a 4.00 scale or equivalent is required for admission in addition to a GPA of 3.00 on a 4.00 scale or equivalent in all engineering courses.

6. All domestic and international applicants must review and follow the [Graduate College Admission and Registration Requirements](#).

Our department admissions committee looks at all of these requirements when making admissions decisions.

Students who have not taken at least three of the courses listed below (or their equivalent), will be required to do so in addition to course requirements listed below.

BIO 209 – Introduction to Cell Biology
BIO 360 – Mammalian Physiology
CHE 225 – Organic Chemistry I
BIOL 209 – Introduction to Cell Biology
BIOL 223 – Human Anatomy and Physiology I
BIOL 480 – Introduction to Biological Modeling
CHEM 220 – Introductory Organic Chemistry
CHEM 474 – Biochemistry I
CHEM 478 – Endocrinology
MATH 283 – Calculus III
MATH 427 – Differential Equations I
MATH 431 – Mathematics for Engineers and Scientists I
STAT 463 – Applied Statistics for Engineers
ME 301 – Structure and Properties of Solids
ME 302 – Material Mechanics
ME 311 – Engineering Thermodynamics
ME 314 – Introduction to Heat Transfer
ME 380 – Fluid Dynamics for Mechanical Engineers
ME 402 – Computational Methods for Engineers

ME 421 – Automatic Controls

ME 425 – Robotics

The Integrated BS-MS degree program is designed to provide high-achieving MEG undergraduate students with the opportunity to be exposed to graduate courses and to encourage them to continue with graduate degree by reducing the time needed for degree completion. Up to nine credit hours of approved graduate-level course work can be taken as technical electives for the grade of B or better during the senior year and those credit hours will be waived for the graduate degree. The following conditions are needed to enroll in the Integrated BS-MS program:

1. A minimum of two semesters of full-time enrollment in B.S. of Mechanical Engineering program is required.
2. Applications are normally submitted with two semesters remaining in the senior year.
3. A minimum of 90 credit hours of course work applicable to the B.S. of Mechanical Engineering degree with a cumulative GPA of 3.50 or higher must be completed before beginning the joint degree program.
4. Student has to choose the thesis option.

Students are accepted into a degree program as described in the Graduate Catalog. The faculty and corresponding sub-disciplines and sub-plans within the described programs are subject to change at any time.