

Master's Programs in Engineering

The Frank H. Dotterweich College of Engineering offers the Master of Science degree with a major in Engineering, Industrial Management or Computer Science. The engineering majors include Chemical, Civil, Electrical, Environmental, Industrial, Mechanical, Mechatronics, and Natural Gas Engineering. The college also offers the Master of Engineering degree, which is further explained below. The Master of Science degree is a Thesis, Research Project or Courses Only Option requiring the completion of 30 to 36 semester hours of graduate work including the thesis on the Thesis Option. The Thesis Option degree is recommended for those interested in research or those wishing to work toward a doctoral degree. Detailed requirements for each of the plans are described in the general section of this catalog. Specifics of the Master of Engineering degree are explained below.

Master of Engineering

The Master of Engineering degree is a special program intended to prepare students for professional careers in engineering and to provide the opportunity for advanced studies to practicing engineers. Students who intend to continue academic work toward a doctoral degree are urged to see the Master of Science degree with a major in engineering. The Master of Engineering degree requires the completion of 36 semester hours of approved graduate work. Registration as a Professional Engineer in the State of Texas may qualify a person to complete this degree in 30 semester hours.

Twenty-one hours of course work must be in the field of engineering; 6 of those hours must be in the candidate's field of engineering practice. The remaining 15 hours may be chosen from the fields of engineering, mathematics, science and business administration. All of the hours must be at the 5000 or above level.

The candidate's course work requirements will be approved through consensus of the candidate and the Master of Engineering guidance committee. With the approval of the guidance committee, a candidate may be allowed to transfer, for degree credit, college course credits usable for graduate studies, not to exceed 15 semester hours. Additional course work above the 36 semester hours requisite for the degree may be required by the guidance committee to ensure that students have sufficient background for the courses in their degree plans. The committee will consist of one representative from each of the professional degree areas presently offered by the Frank H. Dotterweich College of Engineering.

A research or design project and report will be required. This is defined as a research paper or design project produced as a major assignment in a 3 hour graduate 5000 level course or by completing 3 hours of 5305 Research. A comprehensive examination shall be passed by the candidate, consisting of an oral defense of the candidate's design or research project and related areas.

Before the granting of this degree the candidate will have spent a minimum of four years of full-time professional activity of an engineering nature and quality acceptable to the guidance committee.

Admission to any of the graduate programs in the Frank H. Dotterweich College of Engineering requires a baccalaureate degree and adequate course work in the field of interest and a satisfactory score on the GRE Aptitude test.