INDUSTRIAL ENGINEERING - MASTER OF ENGINEERING IN INDUSTRIAL ENGINEERING

The Department of Industrial Engineering offers the Master of Engineering (M.E. in IE) as the coursework-only degree. It is a Professional Master's degree targeting a working professional who wants to pursue a Master's degree in Industrial Engineering at New Mexico State University.

The program of study leading to the M.E. in IE degree consists of 30 credits. At least 50% of the course work must be taken from the Approved IE Department Course List. This means that students can take up to five electives from engineering disciplines outside the department and/or other areas of interest outside the college.

The M.E in IE degree is also offered by distance education for qualified applicants. The courses with section numbers M70 - M79 are designated as online.

Although there is no oral exam, students will be required to complete an exit interview with an IE faculty member.

Note that NMSU reserves the right to change the program requirements without prior notice. Information in the NMSU Graduate Catalog takes precedence over any other information.

Selection of Advisor

During the first 12 credit hours in the Industrial Engineering Graduate Program, all master's degree students must select a permanent advisor. This must be done prior to registration for the fifth course the student takes. In selecting an advisor, the student should communicate with several members of our graduate faculty to discuss specific program objectives. The student should also use these contacts to become familiar with faculty research projects that are currently in progress. The faculty member must consent to serve as the student's advisor in writing. A list of the graduate faculty of the department with their areas of interest is found on the IE web page at https://ie.nmsu.edu/.

Submission of Programs

After completing 12 credits of graduate coursework, a permanent "Program of Study for Masters Students" form must be submitted to the Graduate School. Acceptance of this program admits the student to candidacy for the degree.

Prefix	Title	Credits
Approved IE Department Course List (Note that courses are listed under their area of primary focus but may address other areas. See course descriptions for more details.)		
Operations Research		
I E 515	Stochastic Processes Modeling	3
I E 522	Queuing Systems	3
I E 525	Systems Synthesis and Design	3
I E 533	Linear Programming	3
I E 534	Nonlinear Programming	3
I E 535	Discrete Optimization	3
I E 567	Design and Implementation of Discrete-Event Simulation	3
Applied Statistics		
I E 460	Evaluation of Engineering Data	3
I E 466	Reliability	3
I E 545	Characterizing Time-Dependent Engineering Data	3
Design and Manufacturing		
I E 478	Facilities Planning and Design	3
I E 524	Advanced Production and Inventory Control	3
I E 571	Advanced Quality Control	3
I E 575	Advanced Manufacturing Processes	3
Engineering Management		
I E 523	Advanced Engineering Economy	3
I E 530	Environmental Management Seminar	1
I E 537	Large Scale Systems Engineering	3
I E 561	Advanced Safety Engineering	3
I E 563	Topics in Engineering Administration	3
Depending on contents, the following course is applicable to any of the above four areas:		
I E 590	Selected Topics	1-3
Optional Electives [1]		
E E 500-level (With approval of advisor and instructor)		
M E 500-level (With approval of advisor and instructor)		
C E 500-level (With approval of advisor and instructor)		
ACCT 500-level (With approval of advisor and instructor)		
BCIS 500-level (With approval of advisor and instructor)		
BFIN 500-level (With approval of advisor and instructor)		
MGMT 500-level (With approval of advisor and instructor)		
ECON 500-level (With approval of advisor and instructor)		
C S 500-level (With approval of advisor and instructor)		
MATH 500-level (With approval of advisor and instructor)		
STAT 500-level (With approval of advisor and instructor)		
A ST 500-level (With approval of advisor and instructor)		

[1] The optional courses outside the department and/or the college should be previously approved by the academic advisor. See your advisor for more detailed information about selecting elective courses.

New Mexico State University master's accelerated program provides **the opportunity for academically qualified undergraduate students** to begin working on a master's degree **during their junior and senior years** while completing a bachelor's degree. Typically, a bachelor's degree requires four years to complete, and a master's degree requires an additional two years. The master's accelerated programs allow students the opportunity to complete a graduate program in an accelerated manner. Students can take up to 12 credits of approved I E courses and get dual course credit that can be applied to both an undergraduate and master's degree. You can also check NMSU's catalog for additional information about our programs.

MAP Requirements

- The Graduate School allows qualified junior or senior students to substitute its graduate courses for required or elective courses in an undergraduate degree program and then subsequently count those same courses as fulfilling graduate requirements in a related graduate program.
- Undergraduate students may apply for acceptance to the accelerated master's program after completing 60 semester hours of undergraduate coursework of which a minimum of 25 semester credit hours must be completed at NMSU.

- The grade point average must be at a minimum of 2.75.
- Students must receive a grade of B or higher in this coursework to be counted for graduate credit. If a grade of B- or lower is earned, it will not count toward the graduate degree.

Accepted MAP Courses

The following courses are accepted for use in the MAP program, any other I E 500+ courses may be considered after a consultation with an advisor. An exception will need to be made to the degree audit in order for the additional course(s) to be included on both the Undergraduate and Graduate degrees.

Prefix	Title	Credits
I E 451	Engineering Economy	3
I E 460	Evaluation of Engineering Data	3
I E 467	Discrete-Event Simulation Modeling	3
I E 478	Facilities Planning and Design	3
I E 490	Selected Topics	3
I E 590	Selected Topics	3