

# INDUSTRIAL ENGINEERING - MASTER OF SCIENCE IN INDUSTRIAL ENGINEERING

New Mexico State University's 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 credits 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 456 | Large Scale Systems Engineering           | 3       |
| I E 459 | Systems Thinking and Decision Making      | 3       |
| I E 460 | Evaluation of Engineering Data            | 3       |
| I E 466 | Reliability                               | 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 515 | Stochastic Processes Modeling             | 3       |
| I E 522 | Queuing Systems                           | 3       |
| I E 523 | Advanced Engineering Economy              | 3       |
| I E 524 | Advanced Production and Inventory Control | 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 537 | Large Scale Systems Engineering           | 3       |

|         |                                                        |   |
|---------|--------------------------------------------------------|---|
| I E 545 | Characterizing Time-Dependent Engineering Data         | 3 |
| I E 561 | Advanced Safety Engineering                            | 3 |
| I E 563 | Topics in Engineering Administration                   | 3 |
| I E 567 | Design and Implementation of Discrete-Event Simulation | 3 |
| I E 571 | Advanced Quality Control                               | 3 |
| I E 575 | Advanced Manufacturing Processes                       | 3 |
| I E 590 | Selected Topics                                        | 3 |