



Requirements for Non-Engineers

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For those non-engineers who desire to do work leading to the MSE and have not passed the Fundamentals of Engineering Exam (FE), the following coursework (undergraduate) is required. These courses are to be taken prior to admission to the respective graduate program. It is assumed that Calculus through Differential Equations has been completed.

**From the Engineering Core (see catalog), the following courses are required:
(18 hours)**

- ISE 390 and 391 Probability and Engineering Statistics I and II (6 hours)
- ISE 321 Engineering Economy (3 hours)
- EE 300 Electrical Circuit Analysis I (3 hours)
- MAE 271 Statics (3 hours)
and
- MAE 341 Thermodynamics I (3 hours)
or
MAE 352 Fluid Mechanics I (3 hours)

If deficient in Computer Programming, the following is required:

- CPE 112 Computer Methods in Engineering (3 hours)

If deficient in Science, the following is required:

- PH 111 General Physics with Calculus I (3 hours)
- PH 112 General Physics with Calculus II (3 hours)
- CH 121 General and Inorganic Chemistry (3 hours)
- CH 125 General and Inorganic Chemistry Laboratory I (1 hour)

The exact requirements will vary from student to student depending upon their specific needs and prep program of study. In general, the minimum is 21 hours and the maximum is dependent up on the particular academic background of the student.