

# SYSTEMS ENGINEERING

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## Degree Requirements

### Master of Engineering (M.Eng.)

Requirements listed here are in addition to Graduate Council policies listed under GCAC-700 Professional Degree Policies (<http://gradschool.psu.edu/graduate-education-policies/>).

The M. Eng. in Systems Engineering degree is conferred upon students who earn a minimum of 36 credits of course work while maintaining an average grade-point average of 3.0 or better in all course work, including at least 18 credits at the 500 or 800 level (with at least 6 credits at the 500 level). The program curriculum includes 18 credits of core courses, 15 credits of electives, and 3 credits of capstone experience.

| Code  | Title  | Credits   |
|---|--|-----------|
| <b>Required Courses</b>   |  |           |
| SYSEN 520   | Systems Engineering  | 3         |
| SYSEN 522   | Systems Verification Validation & Testing                  | 3         |
| SYSEN 532   | Simulation in Systems Engineering: Discrete-Time Systems   | 3         |
| SYSEN 534   | Simulation in Systems Engineering: Continuous-Time Systems | 3         |
| SYSEN 880   | Systems Architecture and Models                            | 3         |
| SWENG 586   | Requirements Engineering                                   | 3         |
| <b>Electives</b>  |  |           |
| An additional 15 credits of elective courses must be selected from a list of approved elective courses maintained by the graduate program office.   |  | 15        |
| <b>Culminating Experience</b>   |  |           |
| All students will complete their program of study with a capstone project that provides students with an opportunity to apply their knowledge of the systems engineering theories, methods, processes, and tools learned throughout their program, in a culminating and summative experience. Students complete the capstone project while enrolled in SYSEN 894. |  | 3         |
| <b>Total Credits</b>  |  | <b>36</b> |