

# SYSTEMS ENGINEERING (M.S. ONLINE)

Select 6 credits of elective courses.

6

**Total Credits**

**30**

The M.S. in Systems Engineering program aims to provide specialized skills and training engineers will need to address subjects related to systems engineering according to the standard set by the International Council on Systems Engineering in an online instruction method. The program offers two concentrations: 1) General Commercial Systems, and 2) Defense Systems.

## Admission Requirements

Admission to the M.S. in Systems Engineering is contingent upon admission to the Graduate School (<http://bulletins.wayne.edu/graduate/general-information/admission/>). Students must have a bachelor's degree or the equivalent in Engineering from an accredited college or university. Students from all science, technology, engineering, and math (STEM) disciplines will be considered for admission. Professional experience will be considered in admission.

## Program Requirements

The M.S. in Systems Engineering is offered in an entirely online format. The program requires students to complete a minimum of thirty credits in course work. There will be two concentrations: General Commercial Systems and Defense Systems. Both concentrations offer a thesis option. All coursework must be completed in accordance with the regulations of the Graduate School (<http://bulletins.wayne.edu/graduate/general-information/academic-regulations/>) and the College of Engineering (<http://bulletins.wayne.edu/graduate/college-engineering/academic-regulations/>).

### General Commercial Systems Concentration

| Code                                   | Title   | Credits   |
|--|---|-----------|
| <b>Core Courses</b>                    |   |           |
| IE 6405                                | Integrated Product Development                | 3         |
| IE 6270                                | Engineering Experimental Design               | 3         |
| SYE 6490                               | Introduction to Systems Engineering in Design | 3         |
| SYE 7495                               | Systems Engineering Capstone                  | 3         |
| <b>Concentration Course</b>            |   |           |
| SYE 6491                               | Systems Engineering Thinking and Concepting   | 3         |
| <b>Elective Courses</b>                |   |           |
| Select 15 credits of elective courses. |   | 15        |
| <b>Total Credits</b>                   |   | <b>30</b> |

### Defense Systems Concentration

| Code                         | Title   | Credits |
|------------------------------|---|---------|
| <b>Core Courses</b>          |   |         |
| IE 6405                      | Integrated Product Development                      | 3       |
| IE 6270                      | Engineering Experimental Design                     | 3       |
| SYE 6490                     | Introduction to Systems Engineering in Design       | 3       |
| SYE 7495                     | Systems Engineering Capstone                        | 3       |
| <b>Concentration Courses</b> |   |         |
| SYE 6491                     | Systems Engineering Thinking and Concepting         | 3       |
| SYE 6492                     | Adaptive Acquisition                                | 3       |
| SYE 7491                     | Systems Engineering Processes – Early to Mid-Design | 3       |
| SYE 7492                     | Systems Engineering Processes – Late to Post-Design | 3       |
| <b>Elective Courses</b>      |   |         |