

ABOUT THIS PROGRAM

Who can enroll in this program?

- Government civilians and,
- Uniformed officers with a technical background

What are the entrance requirements?

- An undergraduate degree in engineering or other related technical field
- basic math and statistics background
- 2.2 GPA or greater.

What is the academic focus?

The program is designed to give an organization six open course slots above MSSE core requirements to provide a specific technical focus that meets your educational and professional needs.

What are the advantages?

The MSSE program has all Systems Planning, Research, Development and Engineering (SPRDE) career field level III training requirements designed into it's core requirements.

- ACQ101, ACQ201 & PMT250
- SYS201 & SYS301

The MSSE degree also has two NPS Systems Engineering certificates of accomplishment designed into the program.

- Military Fundamentals of SE
- Military SE Integration

When does the program start?

The MSSE program starts at the beginning of any NPS quarter and continues for 2 years. Courses are delivered in a blended learning environment using both onsite and distance-learning methods that include video tele-education (VTE) and web-enhanced online courses.

Panel to be updated?

For More Information:

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<http://ocl.nps.navy.mil/msse>

The MSSE program office at NPS will serve as the single point-of-contact for applicants.

M S S E



MASTER OF SCIENCE IN SYSTEMS ENGINEERING

- *Come join the NPS community!*
- *Earn a Masters degree!*
- *Meet the needs of your organization!*



NAVAL POSTGRADUATE SCHOOL

THE SYSTEMS ENGINEERING PROGRAM

The **MSSE Program** is designed to meet your specific educational requirements for a graduate degree in Systems Engineering.

Systems Engineers apply the engineering thought process to the design and development of large, complex systems.

Systems Engineers:

analyze the need for a system,
determine its operational concept,
develop functional requirements,
produce the system architecture,
allocate the requirements
 among sub-systems,
manage the design of the sub-systems,
assure that the final design is integrated,
assess any trade-offs made, and then,
implement and **test** the solution.

The operating forces rely on the acquisition system to help identify and solve systems engineering and integration problems.

If your organization has a strategic vision to be a world-class systems engineering and integration organization, the MSSE program is well suited for you.



The MSSE program will help your organization meet your customer's expectations by providing your employees with greater systems engineering and integration knowledge and expertise.

THE MSSE CURRICULUM

The MSSE Program consists of a **minimum of 48 academic quarter credits** taught in two-three hour courses per quarter. All coursework is offered through NPS. Sponsors work with the MSSE program manager to determine a technical focus.

An MSSE degree is awarded at program completion and meets DAWIA level III training requirements for the SPRDE careerfield.

A typical program of instruction:

- Q1** Principles of Acquisition & Program Mgt-1
Fundamentals of Systems Engineering
- Q2** Principles of Acquisition & Program Mgt -2
Systems Engineering & Integration
- Q3** Systems Architecture for Systems Eng.
Focused Course*
Military Systems Eng Fundamentals Certificate
- Q4** Systems Analysis
Focused Course*
- Q5** Eng Economics & Cost Estimation
Focused Course*
- Q6** Capstone Design Project
Focused Course*
Military Systems Eng Integration Certificate
- Q7** Capstone Design Project
Focused Course*
- Q8** Capstone Design Project
Focused Course*

*Focused Courses are determined by your specific needs.

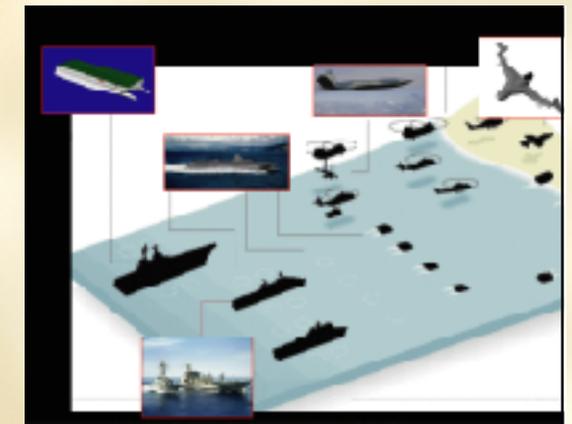
THE CAPSTONE DESIGN PROJECT

MSSE students must satisfactorily complete a Capstone Design Project under academic supervision. All students are expected to contribute significantly to the project.

NPS will conduct a needs assessment with your organization's leadership prior to designing the student capstone project.

Example of a Capstone Design Project

Last year, MSSE students developed the concept and designed a force for **combat in the littorals**.



This force included:

- UAV combat aircraft
- UAV ISRT aircraft ships
- A new, very fast automated carrier built from the keel up to support
- UAVs
- Command and control network
- Logistical support system and ships
- Several new weapon systems such as a Free Electron Laser for point defense