# Systems Engineering Distance Learning Programs NAVAL POSTGRADUATE SCHOOL

## **Master's Degrees**

**DISTANCE LEARNING** 

#### 311 Systems Engineering (MSSE or MSES)

This two year sixteen-course master's degree is designed for Navy SYSCOMs and DoD organizations faced with a wide range of systems engineering and integration challenges. The program is tailorable by domain tracks and is designed for the engineering and scientific workforces. Courses provide students core SE core skills, advanced understanding and hands-on experience in SE methods, tools and technologies relevant to their work, resulting in employees with greater knowledge and expertise to enable them to better meet the needs of their customers. Students earn MSSE (if ABET ENG undergraduates or able to demonstrate equivalence), MSES (all others) and DAU equivalencies in ENG career field.

**LEARN MORE** https://my.nps.edu/web/dl/degProgs\_SE\_nonRes

#### 312 Aviation Systems Engineering (MSSE or MSES)

This two year eight-course master's degree provides graduates of the U.S. Naval Test Pilot School (USNTPS) the opportunity to obtain a Master of Science in Systems Engineering (provided they hold an ABET undergraduate engineering degree, or can establish equivalency) or Master of Science in Engineering Systems (all others) with an Aviation Systems specialization leading to a 5804P subspecialty code. The program is delivered by distance learning and builds upon the USNTPS academic and flight test instruction, with the student's USNTPS final flight test project and report (DTII) serving in lieu of a thesis, and will provide the advanced systems engineering knowledge, tools and skills necessary for the graduate to be successful as a class desk systems engineer in a Naval Aviation Systems Command (NAVAIR) mission billet or equivalent DoD or Defense contractor position.

**LEARN MORE** https://my.nps.edu/web/dl/degProgs\_312ASE\_TPS

# 711 Systems Engineering Management-Systems Integrated Development (MSSEM)

This two year sixteen-course master's degree prepares students to enter technical management positions through an education focused on the systems engineering process. The program is intended to broaden the technical capabilities of students who may have non-technical backgrounds so they can participate in the systems engineering process as productive integrated team members. Students learn the systems engineering process and engineering management tools, techniques and best practices to help them schedule, cost, and analyze program risks. Students also earn DAU equivalencies in ENG career field.

# 721 Joint Executive Systems Engineering Management-Product Development (MSSEM or MSPD)

This two year sixteen-course master's degree is a groundbreaking interdisciplinary leadership program designed for senior engineering and technical professionals. By integrating engineering and management elements, the program strives to develop a new kind of leader with a holistic perspective and knowledge of the total life-cycle acquisition system. Students acquire the fundamental skills and strategic perspectives required of effective change agents as well as an enhanced ability to recognize barriers to success early in a system's development cycle when corrective actions are least costly. Students also earn a MIT certificate and DAU equivalencies in PM/ENG career fields.

LEARN MORE https://my.nps.edu/web/dl/degProgs\_PD21

# 722 Systems Engineering Management-Systems and Program Management (MSSEM)

This two year sixteen-course master's degree combines systems engineering with program management knowledge and skills. It is designed to broaden the technical capabilities of DoD acquisition workforce members with nontechnical backgrounds so that they can successfully manage and lead programs or projects in support of the defense acquisition system. Students learn the systems engineering process, from establishing system requirements through test and evaluation; and how to manage, schedule and budget programs and work with DoD suppliers through contracts to meet program obligations. Students also earn DAU equivalencies for PM and ENG level III, T&E and POM level II and CON level I.

**LEARN MORE** https://my.nps.edu/web/dl/degprogs\_msspm\_nonres

## **Contact**

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#### **Certificates**

DISTANCE LEARNING

#### 232 Lead Systems Integrator (LSI)

This four-course certificate is designed to provide graduate level courses for senior government engineers, preparing them to assume positions as Lead System Integrators through the exploration of design and trade-off analyses of SoS architectures, the execution of SoS acquisitions, and the engineering implications to the role of the LSI in contract management.

**LEARN MORE** https://my.nps.edu/web/dl/cert\_lsi

#### 242 Reliability & Maintainability Engineering (R&ME)

This five-course certificate is designed to provide graduate level courses for DoD logisticians, engineers and program managers who are responsible for establishing and achieving R&ME requirements as part of the systems engineering process in support of systems development in the Defense acquisition system.

**LEARN MORE** https://my.nps.edu/web/dl/cert\_RME

#### 282 Systems Engineering (SE)

This three-course certificate is designed to provide graduate level foundation courses in systems engineering to anyone interested in deepening their understanding of how DoD designs, develops and produces large complex systems. Students learn a disciplined approach to finding the right solution to the right problem: on-time, on-budget, supportable, and with minimal risk. This certificate can be given a domain focus by adding a fourth course. Students also earn DAU equivalencies in ENG career field.

**LEARN MORE** https://my.nps.edu/web/dl/cert\_SE

## **Doctorate Degree**

DISTANCE LEARNING

#### 582 PhD in Systems Engineering

Students take advanced graduate level courses in SE (minimum of six above the master's degree) to pass oral and qualifying examinations and perform research that leads to a dissertation involving some aspect of systems engineering.

**LEARN MORE** https://my.nps.edu/web/dl/degProgs\_PhDinSE

SEMINAR SERIES

# Systems Engineering Innovation and Technology Outreach (SE iTech Outreach)

The SE iTech Outreach seminar series in research, education and practice provides organizations that face a wide range of systems engineering and integration challenges an opportunity for an Systems Engineering faculty member to conduct an onsite two-hour seminar on relevant Navy and/or DoD topics at no cost.

#### **LEARN MORE**

For more information about scheduling an iTech Outreach seminar at your command or in your area, please contact Dr. Walter "Wally" Owen, Associate Chair for Distributed Programs & Outreach, (831) 402-6086, wowen@nps.edu.

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