

# Space Control, Tactics and Operations Certificate Program

The Naval Postgraduate School offers a certificate program in Space Control, Tactics, and Operations via distributed learning (DL).

## Purpose of Certificate

The Space Control, Tactics, and Operations Certificate provides a technical overview in space control and the implications of operating in a contested environment.

## Areas of focus include:

- Orbital Mechanics
- Modeling and Simulation
- Launch Systems
- Offensive and Defensive Space Control

## Certificate Courses Include:

- **SS3500**  
Orbital Mechanics and Launch Systems
- **SS3600**  
Space Systems Modeling and Simulation
- **SS4856**  
Rendezvous and Proximity Operations (TS/SCI)
- **AE4860**  
Space Control (TS/SCI)

## Program Eligibility

Active U.S. military officers and enlisted personnel, as well as DoD employees and contractors with Command endorsement (Tuition is paid for USN/USMC students). TS/SCI clearance required.

## Prerequisites

- Baccalaureate degree with completion of college-level algebra, geometry, trigonometry, logarithms, and physics

## Additional Space Systems Programs

### Certificates

These certificate programs comprise four courses each. Upon successful completion of the course work, students will be awarded a certificate of completion.

#### Space Systems Fundamentals

Targeted primarily towards employees who may have limited or no space experience.

#### Space Systems Design

Targeted primarily at providing DoD space employees with top-level knowledge in spacecraft design.

#### Space Nuclear Command, Control and Communications (NC3)

Supports objectives corresponding to required space, ground, and classified elements of USAF Global Strike Command's strategic nuclear education components

### Degrees

Upon successful completion of the degree requirements, students will be awarded an M.S. degree.

#### Space Systems Operations

This degree is intended to provide an organization with personnel who can plan and manage the operation, tasking, and employment of space surveillance, intelligence collection, communications, navigation and sensing systems throughout the mission lifecycle.

#### Space Systems Engineering

This degree is intended to provide an organization with personnel who have the technical knowledge to plan and manage the development, design, acquisition, operation, tasking and employment of space surveillance, communications, navigation and sensing systems throughout the mission lifecycle.

### Find out more about our programs:

[nps.edu/web/ssag/degrees-and-curriculum](https://nps.edu/web/ssag/degrees-and-curriculum)



## Benefits

Knowledge and analytical skills acquired in the Space Control, Tactics, and Operations Certificate Program will prepare you to:

- Understand Space Operations in a potentially contested environment
- Understand threats and vulnerabilities of space systems
- Develop offensive and defensive courses of action to counter adversary action or deny adversary use of space capabilities
- Understand the orbital mechanics, sensors, and operational considerations involved in proximity operations
- Engage in partnerships with other military services and agencies, such as the National Reconnaissance Office (NRO), National Security Agency (NSA), the National Geospatial-Intelligence Agency (NGA), and Defense Information Systems Agency (DISA), to achieve naval space goals
- Compete for leadership positions in space programs and organizations



## Contact

**Program Coordinator**

[SSAGCertificatePrograms@nps.edu](mailto:SSAGCertificatePrograms@nps.edu)

## Space Control, Tactics, and Operations Certificate Information

**Certificate Description**

[my.nps.edu/web/dl/cert\\_SSC](http://my.nps.edu/web/dl/cert_SSC)

**Certificate Application Information**

[www.nps.edu/Academics/Admissions/  
ApplyOnline/ApplyNow.html](http://www.nps.edu/Academics/Admissions/ApplyOnline/ApplyNow.html)

## Careers for Graduates Include:

USSPACECOM Staff Officer

NAVWAR Space Systems Project Officer

National Reconnaissance Project Officer

NETWARCOM Staff Officer

Combined Space Operations Center  
(CSPOC) Staff Officer

VERSION DATE 11/26/2019

SPACE SYSTEMS ACADEMIC GROUP  
CERTIFICATE PROGRAM

# SPACE

## CONTROL, TACTICS, & OPERATIONS



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