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AA Aeronautics and Astronautics
CS Computer Science
ECE Electrical and Computer
Engineering
IS Information Sciences
MA Applied Mathematics

ME Mechanical Engineering
MR Meteorology
OR Operations Research
PH Physics
SP Space Systems Academic
Group

Space Systems Academic Group

The Space Systems Academic Group (SSAG) along with eight academic departments is an integral part of the Graduate School of Engineering and Applied Sciences. As an interdisciplinary association of professors it provides direction and guidance for two curricula: Space Systems Engineering and Space Systems Operations.



Officer students in the Space Systems curricula fulfill degree requirements for a Master of Science in the department of their choice or in a specialized Engineering Science. A space-oriented thesis is mandatory as well as course work to fulfill the requirements of a space billet. Officer graduates are prepared to manage the technical aspects of a space system life cycle including design, development, installation, and maintenance of spacecraft, space payloads, supporting ground stations, terminals, and C3 connectivity.

The SSAG serves as the focal point for all space-related research performed at NPS. A major goal is to couple NPS space research efforts with the graduate education of military officers. This is typically accomplished through space related thesis research in several areas and includes small satellite projects created specifically as an educational tool for officer students. The SSAG oversees classified and unclassified student involvement in research activities and helps facilitate their placement in follow-on tours.

For additional information on the Space Systems Academic Group, please contact:

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831-656-2154

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www.sp.nps.navy.mil

Naval Postgraduate School

Space Systems Academic Group

Monterey • California



Degrees

- Master of Science in Space Systems Operations
- Master of Science in Astronautical Engineering
- Master of Science in Electrical Engineering
- Master of Science in Mechanical Engineering
- Master of Science in Applied Physics

Students

- Joint Services (Navy, Air Force, Army)
- International Community
- 34 Astronaut Graduates

Curricula

- Space Systems Operations
- Space Systems Engineering

Unique Courses

- Satellite Design (emphasis on operations)
- Spacecraft Design and Integration (emphasis on engineering)
- Space Technology and Applications
- Military Application of Space (including space maneuvers)
- Space Systems and Operations
- Military Satellite Communications
- Military Space Systems and Architecture
- Technology Review and Update Short Course

Facilities

- Open Site EMI/EMC Facility
- Satellite Ground Station Facility
- Space Warfare Computer Laboratory
- FLTSATCOM Satellite Operations
- Simulation and Test Laboratory
- Spacecraft Attitude Dynamics and Control Laboratory
- Spacecraft Environmental Simulation and Test Laboratory
- Radiation Effects Laboratory
- Solar Simulation Facility
- NPS-AFRL Optical Relay Spacecraft Laboratory
- Flash X-Ray Facility
- Electron Linear Accelerator
- Small Satellite Test and Development Laboratory
- Smart Structures Laboratory



Chair Professorships

- Navy Space Technology Program Chair
- Navy Tactical Exploitation of National Capabilities (TENCAP) Chair
- Space Systems Academic Chair
- NASA Michael J. Smith Space Systems Chair
- National Reconnaissance Office Chair
- Lockheed Martin Space and Missile Operations Chair

Faculty and Technical Staff

- Membership consists of faculty from Aero/Astro, Electrical and Computer Engineering, Applied Mathematics, Physics, Mechanical Engineering, Meteorology, Operations Research, Computer Science and Information Systems
- Aerospace Engineer
- Computer Engineer
- Electronics Engineer
- Electronics Technician

Research

Research Centers of Excellence

- Spacecraft Research and Design Center
- Center for Reconnaissance Research
- Center for Radiation Hardened Electronics
- Cryptologic Research Center

Research Sponsors

- Space and Naval Warfare Systems Center-San Diego
- Secretary of the Air Force
- National Aeronautics and Space Administration
- Strategic Systems Programs
- Naval Space Command
- Office of Naval Research
- National Reconnaissance Office
- Space Missile Systems Command
- Naval Engineering Logistics Office

Areas of Concentration

- Military Applications for Space
- Space Reconnaissance and Remote Sensing
- Radiation Hardened Electronics for Space
- Design, Construction and Operations of Small Satellites
- Classified (SCI level) Research
- Satellite Communications Systems
- Military Space Systems and Architectures
- Spacecraft Control and Optimization

FY01 Sponsored Program

