Space Systems Operations Management (MS)

This program is offered by the Walker School of Business & Technology. It is available online and at the Colorado Springs and Peterson Air Force Base campuses.

Program Description
The master of science (MS) degree-seeking student should consult the Admission, Enrollment, and Academic Policies sections for policies regarding application, admission, registration and the academic policies of Webster University.

Program Learning Outcomes

• Students will be able to explain the important terminology, facts, concepts, principles, analytic techniques and theories used in the field of space systems operations management.
• Students will be able to effectively apply important terminology, facts, concepts, principles, analytic techniques and theories used in the field of space systems operations management when analyzing complex factual situations.
• Students will be able to effectively integrate (or synthesize) important facts, concepts, principles and theories in the field of space systems operations management when developing solutions to multifaceted space systems operations management problems in complex factual situations.

Emphasis Areas
The MS in space systems operations management is accredited by the Accreditation Council for Business Schools and Programs (ACSBP).

The MS in space systems operations management is designed to prepare individuals for positions in the public and private sectors of the space industry.

The space systems engineering and technical management emphasis enables the student to understand the environment, technology and complexities of space operations and to apply quantitative and qualitative approaches to planning, executing and managing programs in the global environment of the space industry.

The space systems acquisitions and program management emphasis prepares individuals to handle space-related contracts and unique aspects of space systems acquisitions including software, hardware, personnel resources, budgeting and risk mitigation.

Program Curriculum
The 39 credit hours required for the MS degree must include the following core courses for a major in space systems operations management with an emphasis in space systems engineering and technical management or with an emphasis in space systems acquisitions and program management:

Core Courses

Engineering and Technical Management

• SPSM 5000 Space Environment (Requisite Course) (3 hours)
• SPSM 5730 Space Operations Research (3 hours)
• SPSM 5740 Space Systems Dynamics-Orbital Mechanics (3 hours)
• SPSM 5750 Space Systems Engineering (3 hours)
• SPSM 5770 Space Operations Management (3 hours)
• SPSM 6000 Practical Research in Space Operations (3 hours)

Acquisitions and Program Management

• SPSM 5000 Space Environment (Requisite Course) (3 hours)
• SPSM 5600 Space Systems Acquisition Law (3 hours)
• SPSM 5650 Space Systems Contracting (3 hours)
• SPSM 5730 Space Operations Research (3 hours)
• SPSM 5950 Space Systems Project Management (3 hours)
• SPSM 6000 Practical Research in Space Operations (3 hours)

Five elective courses chosen from the following for either emphasis

• SPSM 5700 Space Commanding Systems (3 hours)
• SPSM 5710 Space Communications Systems (3 hours)
• SPSM 5760 Space Bio-Astronautics (3 hours)
• SPSM 5800 GPS-Space Radio Navigation Systems (3 hours)
• SPSM 5900 Space Commercialization (3 hours)
• SPSM 5910 Space Systems Integration (3 hours)
• SPSM 5930 Space Systems Law and Policy (3 hours)
• SPSM 5940 Space Decision Support Systems (3 hours)
• SPSM 5990 Issues in Space Operations (3 hours)

In addition, the student chooses two elective courses (6 credit hours) from this major or from the program curricula of other George Herbert Walker School of Business & Technology majors.

Admission

Students who are interested in applying to this certificate program should see the Admission Section of this catalog for general requirements.

Send all admissions materials to:
Office of Admission
Webster University
470 E. Lockwood Ave.
St. Louis, MO 63119

Advancement to Candidacy

Students are admitted to their graduate program upon completion of all admission requirements. Students are advanced to candidacy status after successfully completing 12 credit hours of graduate credit, with grades of B- or better. In the MBA program and other specialized programs, courses required as prerequisites to the program do not count toward the 12 credit hours required for advancement.