



“As a trained scientist, the SCML program prepared me for advancement as a people and project manager in the ever-expanding and competitive biotech industry. There is much to be learned from the variety of backgrounds and expertise of the faculty and numerous guest lecturers.”

Andrew Deffenbough
MS in Science Management
& Leadership

Scientists and engineers are highly trained scholars with advanced technical skills but most have received little training in the management of projects. Many find it difficult to manage interactions with peers, management and others. In fact, even the hottest research project will fail if basic project management skills are not applied properly to enhance technical productivity. Successful projects promote career satisfaction and advancement.

That’s why Webster’s Master of Science in Science Management and Leadership provides a comprehensive skill set for leading other scientists and engineers through complicated projects and studies as well as the tools needed to handle the unique pressures of this type of highly technical work.

Scientists and engineers who work in industry, academia, government, and elsewhere will be able to get the necessary and practical project management experience, leadership training and people skills needed to guide and manage other scientists, engineers and teams to optimize productivity, performance and effectiveness.

✓ POINTS OF DISTINCTION

- The Science Management and Leadership Program is an applicant for accreditation with the Project Management Institute (PMI) Global Accreditation Center for Project Management Education Programs (GAC). PMI is the major accrediting body for institutions providing project management education.
- Faculty teach the very latest practices in the field, allowing you to take what you learn in class and apply at work.
- The newest research and improvements for science management and leadership are incorporated into the classes.
- Courses offer proven strategies for professional training, management, and development in the science industry including key areas such as intellectual property, marketing and regulatory and quality affairs.

WHY WEBSTER?

- Small, convenient classes to fit your schedule
- Personal attention and skill building in teamwork and collaboration
- Classes begin 5 times per year
- Academic excellence since 1915
- More than 100 campus locations



PROGRAM CURRICULUM

The Master of Science (MS) in Science Management and Leadership is designed for professional scientists and engineers who are advancing in their careers in management and leadership roles. The program aims to provide these professionals with competencies in project management, leadership, regulatory and quality affairs, intellectual property, business law, finance, marketing, communications, and ethics.

The program will also provide a mentoring system and networking experiences.

Core Courses

- SCML 5050 Communication for Professional Science Management and Leadership
- MNGT 5590 Organizational Behavior
- SCML 5590 Ethics and Social Responsibility in Science Management and Leadership
- PATA 5120 Foundations in Intellectual Property Law
- SCML 5700 Marketing and Comparative Analysis for Science Management and Leadership
- BUSN 5200 Basic Finance for Managers
- SCML 5800 Project Management
- SCML 5850 Regulatory and Qualitative Affairs for Science Management and Leadership
- SCML 6000 Practical Application in Science Management and Leadership

To learn more, visit our online catalog:

www.webster.edu/gradcatalog.

Q&A

Q Is Webster's degree relevant to today's workplace issues and challenges?

A Yes, it prepares you for ever-changing job demands by staying in touch with dynamic changes in science-based project management. We use feedback from program alumni, current students, and industry representatives to keep the program at the cutting edge of project management.

YOUR NEXT STEP

Students who have earned a bachelor's degree from an accredited four-year college or university are eligible to apply for admission to Webster University's graduate programs.

Now's the time to call or visit to learn how Webster University can meet your educational needs.

For more information about our graduate programs, or to apply online, visit: webster.edu.

CORE COURSE DESCRIPTIONS

SCML 5050 Communication for Professional Science Management and Leadership (3)

This course teaches effective ways to communicate both in writing and verbally with colleagues across disciplines, with business and corporate supervisors, and with the general public. Topics also include crisis management and dealing with difficult people. Preparing memos, slide show presentations, reports, and briefing papers will be practiced.

MNGT 5590 Organizational Behavior (3)

This course introduces students to the basic principles of human behavior that effective managers use. These include abilities and attitudes, attribution, motivation, group dynamics, power and politics, leadership, conflict resolution, organizational culture, and organizational structure and design.

SCML 5590 Ethics and Social Responsibility in Science Management and Leadership (3)

Topics include: moral, social and legal issues in contemporary business management; ethical theories as frameworks for managerial decisions; corporate social responsibility; dilemmas of conscience for science managers; ethical issues in the workplace; morality and leadership; codes of conduct and professional standards. Analysis and discussion of case studies comprise a significant portion of the class.

PATA 5120 Foundations in Intellectual Property Law (3)

This course is a survey of the four primary areas of intellectual property--patents, trademarks, copyrights, and trade secrets. This course will compare and contrast the protections afforded by each of these primary areas of intellectual property law, and will clarify the scope and limits of patent protection for new inventions and discoveries.

SCML 5700 Marketing and Comparative Analysis for Science Management and Leadership (3)

This course focuses on marketing strategies for science-based industries, product management (including pricing and inventory control), SWOT analysis, competitive intelligence, branding, and methods of market research. Students will also learn how to be effective participants of a focus group.

BUSN 5200 Basic Finance for Managers (3)

Management professionals must be able to understand financial information contained in financial statements and reports and be able to understand financial information contained in financial statements and reports in order to evaluate their unit's financial performance, to communicate clearly with others, and to apply financial information when making decisions.

SCML 5800 Project Management (3)

Students will demonstrate the ability to manage science-based projects in accordance with Project Management Institute (PMI) standards. They will learn to use current project planning tools to develop project plans that aid in bringing a project to completion on time and within budget. Special attention will be given to the WBS, cost, scope, time, and scheduling.

SCML 5850 Regulatory and Qualitative Affairs for Science Management and Leadership (3)

This course examines the philosophy, structure and select guidelines and standards associated with regulatory, standards and quality assurance and quality control (QA/QC) organizations such as the USDA, US EPA, US FDA, US DOT, OSHA, EFSA, the OECD, ANSI and ISO.

SCML 6000 Practical Application in Science Management and Leadership (3)

This capstone course will have the senior student carry out a well-defined team-based project including marketing and business plans for a new science-based company or other appropriate project using PMI standards. All aspects of the SCML curriculum will be included in the project. Each student and team will make a final presentation and paper to a panel that includes mentors.