

# Professional Science Master's Programs



THE WORLDS OF SCIENCE AND BUSINESS ARE MERGING AND A NEW BREED OF SCIENTIST IS NECESSARY TO MAINTAIN AMERICA'S COMPETITIVE EDGE IN THE GLOBAL MARKETPLACE. THESE NEW SCIENTISTS ARE PROFESSIONAL SCIENCE MASTER'S (PSM) GRADUATES WHO HAVE THE ACADEMIC AND PROFESSIONAL SKILLS TO EFFECTIVELY BRIDGE SCIENCE AND BUSINESS.

## What is a Professional Science Master's Degree?

The PSM is designed to provide students with the scientific training necessary to advance and excel in science, while simultaneously developing highly-valued business skills. Programs are developed in concert with employers and characterized by "science-plus" curricula, combining rigorous graduate study in science or mathematics with skills-based coursework in management, policy, or law. PSM programs emphasize the written and verbal communication skills, leadership, and team-building required in professional settings. Instead of a thesis, most PSM degrees require a collaborative research project, as well as an internship in a business or the public sector. PSM graduates are equally as comfortable in the science lab as in the board room, court room, and other professional settings.

Where can I find additional information?

Search for PSM programs in your field of interest or learn more about the PSM initiative at [www.professionalsciencemasters.org](http://www.professionalsciencemasters.org)

## Program Examples

### PSM Degree

Applied Computing

### Science/Technology Courses

Modeling, Network Design, Network Security, Simulation, Geographic Information Systems

### Professional Skills

Conflict Resolution, Negotiation, Project Management, Writing, Leadership

Applied Industrial Mathematics

Differential Equations, Linear Algebra, Matrix Theory, Cost Benefit Analysis

Leadership, Organizational Decision Making, Human Resources Management

Bio/Pharmaceutical Discovery and Development

Clinical Biostatistics, Clinical Trial Design, Gene Expression Systems, Proteomics, Molecular Evolution, Experimental Immunology

Applied Entrepreneurship, Intellectual Property and Licensing, U.S. Regulatory Affairs, Project Management

Forensic Science

Drug Chemistry/Toxicology, Molecular Biology, Quantum Chemistry, DNA Technologies

Case Law, Expert Witness Testimony, Formal Reports, Rules of Evidence

## Why Mentor PSM Students and Hire PSM Graduates?

- Interdisciplinary scientists: PSM students receive advanced training at the cutting-edge interfaces of science and technology. The combination of science with workplace skills and experience means PSM graduates require minimal additional training, saving employers time and money in professional development.
- Excellent communicators: PSM programs attract students who 1) are looking for scientific careers in the business, government, or nonprofit sectors 2) thrive in team-oriented environments and 3) seek career advancement.
- Innovative problem-solvers: The PSM capstone experience is a team-oriented, multidisciplinary research project addressing challenges and opportunities in the real world. The PSM graduate's capstone and internship experiences prepare them to hit the ground running for your company.