Professional Science Master’s Degree

What It Is:

- The Professional Science Master’s (PSM) degree is a unique professional degree grounded in natural science, technology, engineering, mathematics and/or computational sciences and designed to prepare students for direct entry into a variety of career options in industry, business, or non-profit organizations. It is a distinctive advanced degree for those intending to pursue a career in the practice of science.

- The PSM combines rigorous study in science or mathematics with coursework in workforce skills such as project management, communication, policy, or law. It also emphasizes written and verbal communication skills, leadership, and team-building required in professional settings.

- PSM programs are multidisciplinary in nature and may be interdisciplinary as well. PSM programs prepare students for high-level careers in science that have a strong emphasis on skill areas such as management, policy, and entrepreneurship. PSM graduates are expected to progress toward leadership roles.

- PSM programs are unusually nimble in adjusting to shifting workforce demands and to rapidly changing research strategies and technologies; most have established advisory committees of local employers to ensure their curriculum is responsive to regional workforce needs.

- PSM programs must have a majority of program course work in graduate-level science and/or mathematics courses in one or more disciplines, a professional skills component, an active and engaged employer advisory board, and internships or problem-based projects sponsored by employers.

PSM Program Facts:

- The first PSM program was started in 1997. There are currently over 200 programs at more than 100 colleges and universities in 31 states and the District of Columbia. There are also international programs in Canada, the United Kingdom, and Australia.

- The number of PSM programs has grown 65% since 2010.

- A 2008 National Academies report recommended “concerted action to accelerate the development nationally of professional science master’s education” and funding for PSM students and programs by all federal science agencies.

- A $15 million National Science Foundation (NSF) grant program to develop PSMs was authorized by the America COMPETES Act and funded by the American Recovery and Reinvestment Act of 2009, with awards to 23 institutions to develop or expand PSMs.

For more information: www.sciencemasters.com