

# Industry and the Professional Science Master's Program

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# Why the PSM?

- Employers want personnel with advanced science skills but not necessarily a PhD.
- PLUS, PSMs provide unique skills that employers need:
  - Interdisciplinary teamwork, flexibility, and leadership
  - Project management
  - Computational skills
  - Communication ability
  - Basic business skills
  - Ethics
  - Legal and Regulatory issues

## How is the PSM Different?

- Emphasizes the written and verbal communication skills, leadership, and team-building required in professional settings.
- More science (and math) than MBA; more professional skills than a traditional science master's degree.
- Includes project or team experience vs. thesis: real world experience.
- Provides connections to potential employers through internships and employer/industry advisory boards.

# Program Examples

**PSM programs are interdisciplinary in fields such as:**

- Biotechnology
- Forensic Science
- Financial Mathematics
- Nanoscience
- Environmental Science
- Biosecurity
- Bioinformatics
- Analytical Chemistry
- Applied Systematics Science
- Entrepreneurship
- Genetic Counseling
- Bioenergy

## What Can PSMs Provide

- Productive employees on day one.
- Cross-disciplinary education
  - Science, Math, Computation, and Business
  - Project Management
  - Team Building.
- Flexibility to changing industry demands.
- Career advancement for existing workforce.
- Technically trained cadre of workers for local and regional industry.

## **Industry motivated to participate**

- Curriculum development
- Provision of Case Studies
- Adjunct Faculty
- Advisory Board Participation
- Internships
- Employee continuing education
- Material support

## **Why Industry Supports PSM Programs**

- Industry has the opportunity to shape curriculum to meet specific and immediate workforce needs.
- Graduates contribute to workforce development through their ability to manage and grow science and technology based industries.
- Vital for U.S. competitiveness.