STATE UNIVERSITY of NEW YORK

PSM PROFESSIONAL SCIENCE MASTER'S

Developing Professional Science Master's Degree Programs

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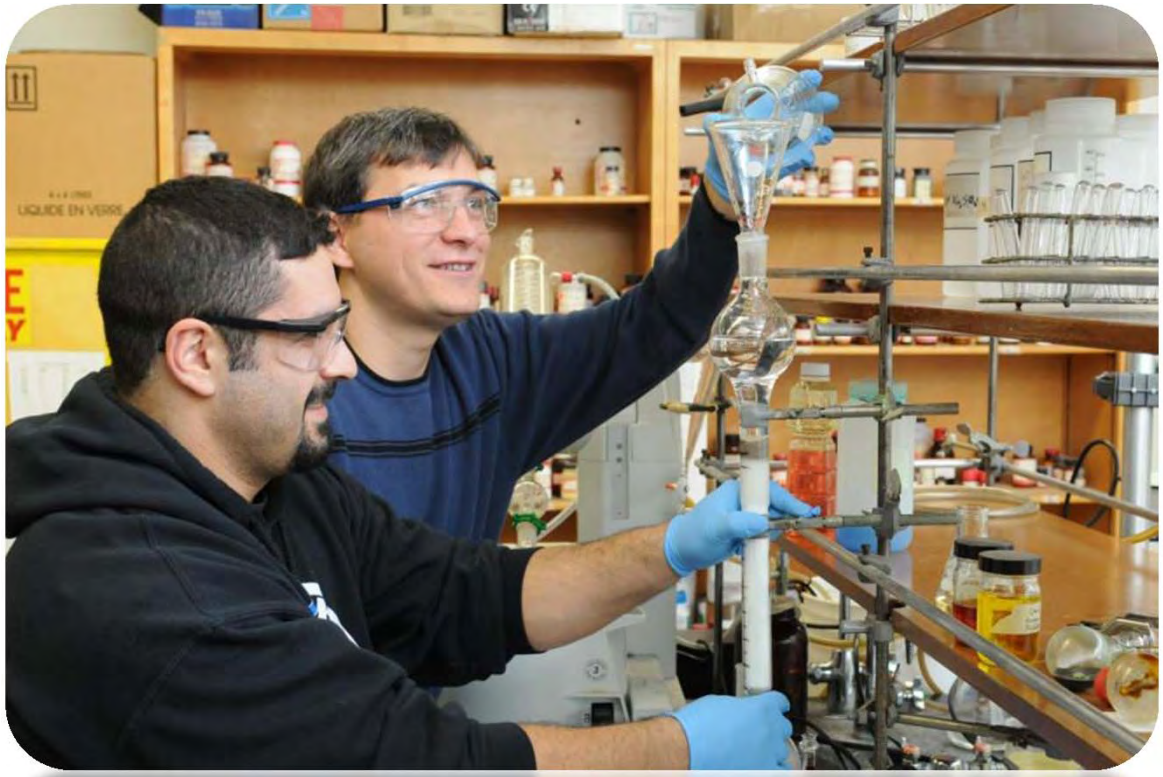
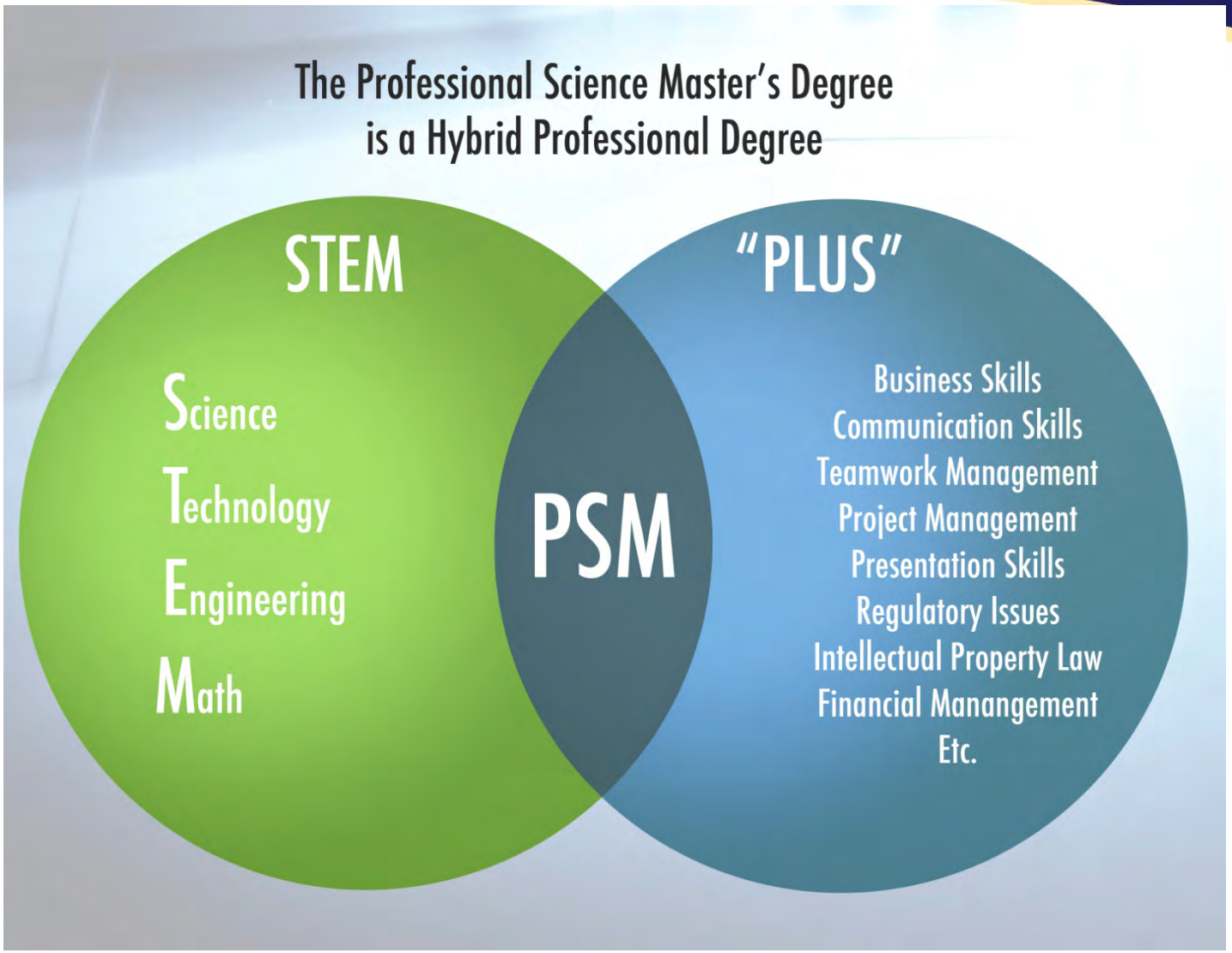
What is unique about the PSM?




The Professional Science Master's Degree
is a Hybrid Professional Degree
STEM
Science
Technology
Engineering
Math
PSM
"PLUS"
Business Skills
Communication Skills
Teamwork Management
Project Management
Presentation Skills
Regulatory Issues
Intellectual Property Law
Financial Manangement
Etc.

Value of the PSM Degree

- Helps retain talented graduates in state/region
- Builds partnerships between campuses/faculty and business/industry
- Requires Business Advisory Committee for PSM program development and implementation
- PSM is a unique hybrid degree (science + business)
- "PLUS" courses are a unique component: business and communication skills
- Provides professional "STEM" alternative to doctoral degree
- Requires internship or co-op real world job experience for all PSM students
- PSMs are one key to the 21st century innovation economy

Added Benefits of the PSM Degree

- Prepares skilled, cross-trained employees for technology oriented business
- Supports greater responsiveness to employer needs
- Promotes university/business partnerships
- Enhances economic and workforce development
- Encourages faculty to engage regional business leaders
- Stimulates technology transfer

The PSM Initiative: Purpose/Goals

- Strengthens master's level education
- Helps to address the national shortage of domestic students in graduate programs in STEM fields
- Creates another distinctive professional emphasis for master's degree programs
- Refocuses the mission of the master's degrees in STEM fields
- Develops new professional career options for students who do not wish to pursue a research doctorate

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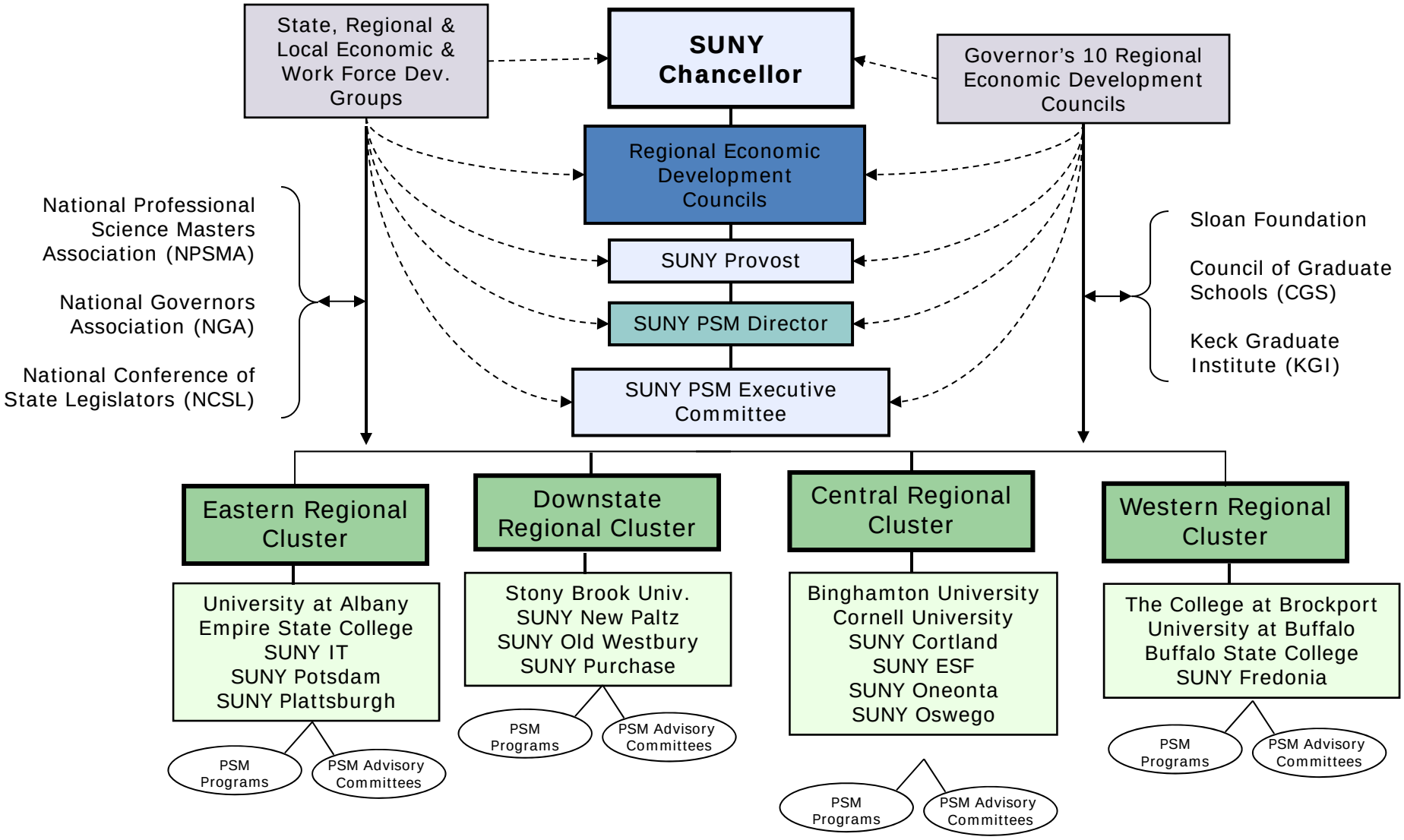
A System Model: The SUNY PSM Consortium

SUNY Professional Science Master's Program Organizational Chart



SUNY PSM Brochure & Website

SUNY PSM Consortium Campuses

University at Albany
Forensic Biology – enrolling students
Biodiversity, Conservation & Policy – enrolling students
Computer Science – enrolling students

Binghamton University
Geographic Information Systems – enrolling students
Material Science & Engineering – enrolling students
Biomedical Anthropology – enrolling students
Integrated Watershed Studies – in development

The College at Brockport
Biology – enrolling students

University at Buffalo
Biophysics – enrolling students
Natural & Biomedical Sciences – enrolling students
Computational Chemistry – enrolling students
Molecular Chemical Biology – enrolling students
Environmental Geographic Information Systems – enrolling students

Buffalo State College
Professional Applied and Computational Mathematics – enrolling students
Great Lakes Ecosystems Science – in development

Cornell University Graduate School
Applied Statistics – enrolling students
Food Science and Technology – in development

SUNY Cortland
Sustainable Energy Systems – in development
Biomedical Sciences – in development
Advanced Materials – in development
Environmental Biology – in development

Empire State College
"Plus" Certificate in Technology Transfer – in development
*"Plus" coursework online including Certificates in Project Management and Healthcare Management

SUNY PSM Consortium Campuses

SUNY College of Environmental Science & Forestry
Sustainable Engineering Management – in development
Bioprocess Engineering (track) – enrolling students
Paper Engineering (track) – enrolling students

SUNY Fredonia
Green Business – in development

SUNY Institute of Technology
Applied Mathematics – in development
Health Information Systems – in development

SUNY New Paltz
Computer Science/Data Analytics – in development

SUNY Old Westbury
Program(s) to be identified

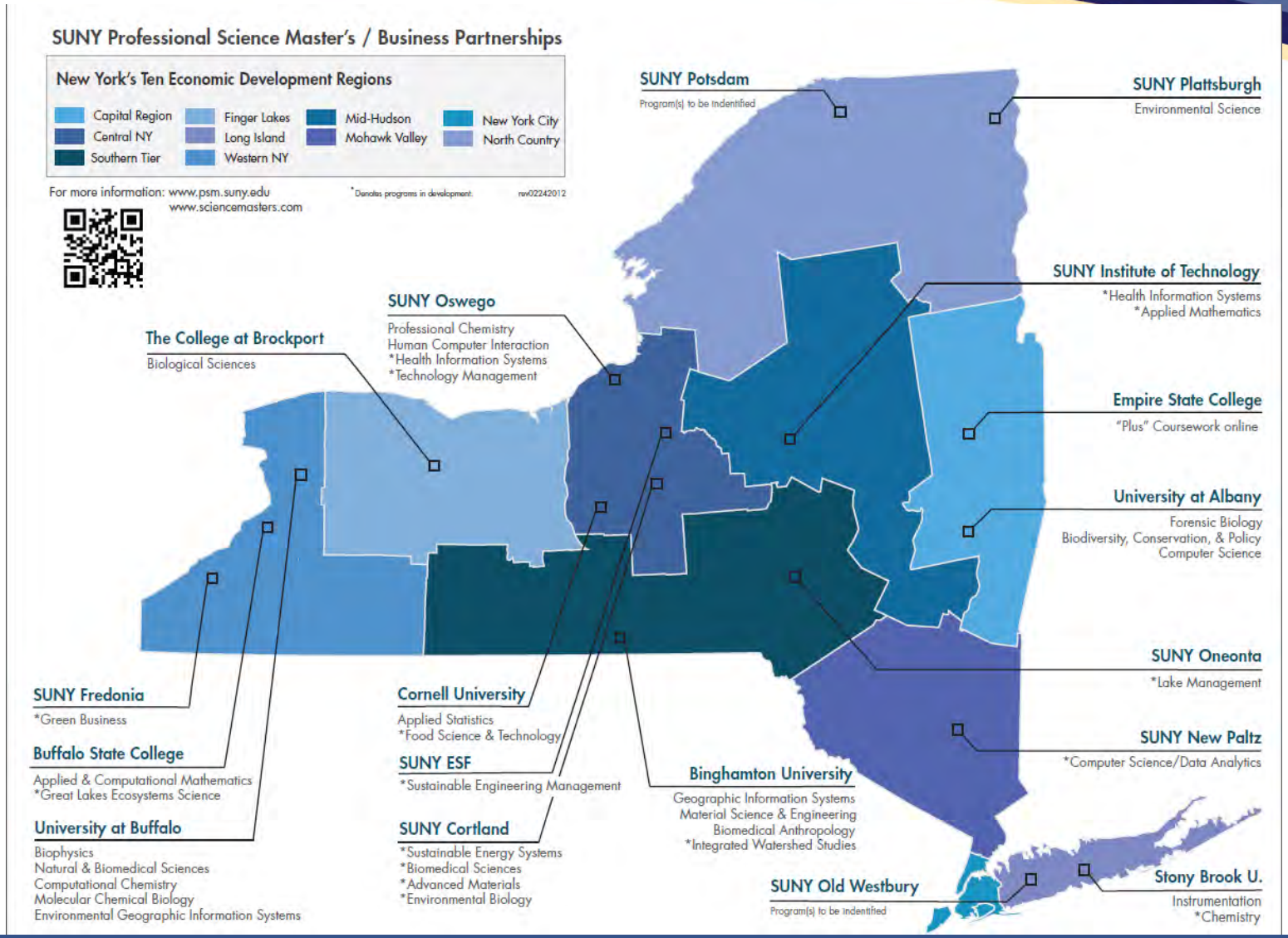
SUNY Oneonta
Lake Management – in development

SUNY Oswego
Professional Chemistry – enrolling students
Human Computer Interaction – enrolling students
Health Information Systems – in development
Technology Management – in development

SUNY Plattsburgh
Environmental Policy – enrolling students

SUNY Potsdam
Program(s) to be identified

Stony Brook University
Instrumentation – enrolling students
Chemistry – in development


SUNY Professional Science Master's / Business Partnerships
New York's Ten Economic Development Regions
Capital Region
Central NY
Southern Tier
Finger Lakes
Long Island
Western NY
Mid-Hudson
Mohawk Valley
New York City
North Country
For more information: www.psm.suny.edu
www.sciencemasters.com
*Denotes programs in development
rev02242012
SUNY Potsdam
Program(s) to be indentified
SUNY Plattsburgh
Environmental Science
SUNY Institute of Technology
*Health Information Systems
*Applied Mathematics
SUNY Oswego
Professional Chemistry
Human Computer Interaction
*Health Information Systems
*Technology Management
The College at Brockport
Biological Sciences
Empire State College
"Plus" Coursework online
University at Albany
Forensic Biology
Biodiversity, Conservation, & Policy
Computer Science
SUNY Oneonta
*Lake Management
SUNY New Paltz
*Computer Science/Data Analytics
SUNY Fredonia
*Green Business
Buffalo State College
Applied & Computational Mathematics
*Great Lakes Ecosystems Science
University at Buffalo
Biophysics
Natural & Biomedical Sciences
Computational Chemistry
Molecular Chemical Biology
Environmental Geographic Information Systems
Cornell University
Applied Statistics
*Food Science & Technology
SUNY ESF
*Sustainable Engineering Management
SUNY Cortland
*Sustainable Energy Systems
*Biomedical Sciences
*Advanced Materials
*Environmental Biology
Binghamton University
Geographic Information Systems
Material Science & Engineering
Biomedical Anthropology
*Integrated Watershed Studies
SUNY Old Westbury
Program(s) to be indentified
Stony Brook U.
Instrumentation
*Chemistry

What are best practices for PSM program development?

PSM Program Development – Best Practices

- Do a market study regarding workforce needs and encourage faculty to “listen” to business partners.
- Organize a Business Advisory Board to collaborate with your PSM program faculty in designing the PSM curriculum, particularly the “PLUS” component.
- Focus on adapting existing STEM degree programs for the development of PSM tracks.
- Encourage campuses to build official PSM affiliation (through KGI-PSM office) into program design.
- Establish a timeline for PSM development and create metrics to benchmark progress.

PSM Program Development – Best Practices (cont.)

- Build a "sustainable" infrastructure to maintain PSM programs for the long term.
- Identify a "point person" or coordinator to develop and lead each PSM program.
- Emphasize the PSM brand by highlighting placements of graduates, employment opportunities, and success stories.
- Seek external funding to promote PSM development, scholarships, etc.
- Develop an assessment regime to monitor program outcomes.
- Solicit internship or co-op placements from employers.
- Facilitate job placement and track the progress of PSM graduates.

PSM Program Development – Best Practices (cont.)

Vertical Coordination & Support: PSM program infrastructure must be built from the top down and the bottom up. "Buy in" must come from the program faculty and the administration.

Communication: Develop clear lines of communication by establishing a PSM specific website, a program brochure, and a recruiting / marketing / branding campaign.

Infrastructure: Lessen bureaucratic tensions and "turf issues" by naming a PSM program director, identifying mentors for students, establishing a Business Advisory Board, and encouraging business leaders to be advocates for the PSM initiative.

Buy-In: Ensure success by soliciting faculty "buy in" early, identifying business collaborators and engaging business/industry leaders from the start.

Implementation: Utilize the extensive resources of the National Professional Science Masters organization and website, as well as the sciencemasters.com website maintained by KGI-PSM National Affiliation Office.

Possible Impediments to PSM Program Development

Bureaucracy: Complex bureaucratic structures and poor communication lines may result in loss of stakeholder support.

Resources: The scarcity of institutional resources and competition among various initiatives can place the PSM on the "backburner".

Expediting: Poor communication or coordination can result in severe delays in PSM program development at the campus level.

Pushback: Potential for "pushback" from traditional science and MBA faculty.

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How to build relationships with business and industry.

Reaching Out to the Business Community

•Consult with Regional Economic Development agencies, local Chambers of Commerce, and other business or industry organizations about your interest in developing a PSM program

•Conduct a market survey to identify the skill needs of employers

•Seek assistance from your campus President to access leadership networks in your community

•Stress that the PSM is an economic driver in economic development regions across the country where PSM programs have been established

•Focusing on economic and workforce development across your region could provide substantial opportunities to expand PSM programs to provide the regional workforce with high-quality, diversely skilled professional employees

Creating a PSM Business Advisory Board

Diversify Perspectives: Selecting an advisory board with broad representation and utilizing representatives from several sectors provides the best array of input.

H.R. Role: Representatives from human resources or upper level management have the most knowledge of the skills graduates need to succeed in their respective industries.

Constituencies: Candidates for Advisory Boards can be identified through a variety of sources including alumni in nonacademic sectors, employers, regional/state economic development officers, community leaders, etc.

The Role of Business Advisory Boards

Changing Role: The role of business advisory boards changes as the program moves from the planning phase, to the implementation phase, to the operational and assessment phase.

Collaboration on Curriculum: In the planning phase business advisory boards should map out the skills they are looking for and assist in identifying courses that might teach these skills.

PSM Registration: In order for a PSM program to be recognized, it must have a Business Advisory Board.

Enhancing Goals: After the program has enrolled students, the role of the business advisory board is to fine-tune the program so that it produces the desired results in its graduates.

Internships & Employment: Ultimately, the Boards can assist in finding internship placements and identifying employment opportunities.

Engaging Your Business Advisory Board

Communication: Maintaining regular contact with your business advisory board helps ensure the success of your PSM program and your students.

Adaptability: Programs should be constantly evolving to adapt to the changing business environment. Your board will be the best resource for bridging business and academia to keep programs current and relevant.

Expectations: Since business advisory boards may consist of future employers for your graduates, it is important that the students graduating from your program meet employers expectations.

Substance: Meetings with your business advisory board should be planned to target specific areas that need attention. These meetings should occur at least once a year and always have a substantive agenda.

PLUS

Courses make the PSM degree a unique STEM degree.

Role of "PLUS" Courses

- "PLUS" Courses distinctive component of STEM PSM degrees
- True hybrid professional degree
- Designed primarily to provide STEM graduates with job-related skills to prepare them for supervisory or management positions
- Collaboration between PSM faculty and PSM Business Advisory Boards critical to identifying appropriate "PLUS" Courses for each program
- "PLUS" Courses are typically graduate level foundation courses drawn from business and communication curriculums or specifically designed for PSM degree programs
- Employer input crucial to wise "PLUS" Course selection
- "PLUS" Course selection should be flexible to variable career paths and site placement expectations

Examples of "PLUS" Courses Skill Sets

- Accounting
- Communication Skills
- Critical Thinking & Decision Making
- Economics
- Entrepreneurship
- Ethics
- Finance, Risk Management, & Insurance
- Global Understanding
- Health Care Administration
- Human Resource Management
- Law
- Presentation Skills
- Collaboration Models
- Leadership Training
- Marketing
- Media & Design
- Negotiation/Consensus Building
- Organization Management
- Project Management
- Public Policy
- Running Clinical Trials
- Statistics
- Team Management
- Technology Transfer

Utilizing "PLUS" Courses

- Design a PLUS Course survey with employers that identifies relevant skill sets that might be incorporated in the curriculum of each PSM program.
- Consider utilizing flexible instructional modes, including online and hybrid PLUS Courses. These PLUS Courses have value to other PSM programs and online delivery promotes collaboration among universities to ensure enrollments are optimized and costs are stabilized.
- Seek guidance from external consultants and those with established PSM programs. The results of these meetings may be useful in identifying skills sets that should be addressed within PLUS Courses

Major Challenges for Delivering "PLUS" Courses

- Specialized PLUS Courses difficult to support on small campuses or institutions that lack business or communication programs
- Sharing PLUS Courses among campuses and universities makes a more cost-efficient model
- Challenge to aggregate enrollment to create a fiscally sustainable critical mass of graduate students
- Particularly true for specialized courses such as regulatory affairs with content that varies widely among different industries and businesses
- Many campuses cannot support such specialized expertise
- Consequently, a goal of National PSM System Directors is to build an on-line inventory of PLUS Courses to serve the needs of many PSM programs
- SUNY system (for example) is building an on-line inventory of "PLUS" courses through the SUNY Learning Network. California State University system is also doing this.

Developing Online "PLUS" / PSM Courses

- Help to create critical mass of enrollment for very specialized "Plus" courses
- Online courses expand access to "Plus" courses and PSM degree programs
- Maximize the economies of scale by pooling "plus" course expertise for other programs to access
- Contribute to the growing national network of PSM online programs
- Provide access to the services of trained instructional designers to assist in online course development
- Build an inventory of "best practices" and shared expertise
- Provide access to PSM degrees for military personnel and other transient potential students

SUNY PLUS Course Inventory

SUNY "PLUS" Course Survey					
Skill Set:	**Equivalent Course Name**	**Course Number**	**Credit Hours**	**Online (Y/N)**	**Potential for online (Y/N)**
Negotiation/Consensus Building					
SUNY Albany	Human Resource Management	MGT 514	3	N	Y
SUNY Brockport	Negotiation and Conflict Management	PAD 612	3	N	N/A
Buffalo State College	Management Practices and Techniques	EDF 715	3	Y	
SUNY Oswego	Collective Bargaining	MBA 533	3	N	Y
SUNY Plattsburgh	Brokering Alliances and Networks	MLS 538	3	N*	Y
Financial Management					
SUNY Albany	Intro. to Accounting	ACC 518	3	N	Y
Binghamton University	Budget & Financial Planning for Scientists	GRD 5**	4	TBD	TBD
SUNY Buffalo	Intro. to Business 1 & 2	MGG 501/502	3	N	N
Buffalo State College	Cost Benefit Analysis	ECO 660	3	N	
SUNY Oswego	Managerial Finance	MBA513	3	N	N
SUNY Plattsburgh	Financial Management	MLS 530	3	N	N/A
Marketing Management					
SUNY Albany	Organizational Behavior	MGT 513	3	N	Y
Binghamton University	Marketing Research	MKTG 540	4	N	TBD
	Marketing Strategy	MKTG 545	4	N	TBD
SUNY Buffalo	Intro. to Business 1	MGG 501	3	N	N
SUNY Oswego	Marketing Management	MBA 514	3	N	N
Managerial Accounting					
SUNY Albany	Intro. to Accounting	ACC 518	3	N	Y
Binghamton University	Financial Accounting Theory	ACCT 520	4	N	TBD
Binghamton University	Government and Nonprofit Accounting	ACCT 540	4	N	TBD
SUNY Buffalo	Intro. to Business 1 & 2	MGG 501/502	3	N	N
Buffalo State College	Basic Accounting for Business/Non-Business Orgs.	BUS 545	3	N	N
SUNY Oswego	Managerial Accounting	MBA539	3	N	N
SUNY Plattsburgh	Accounting for Management	MLS 502	3	N	N/A
Organizational Communication Skills					
SUNY Albany	Presentation Skills	BUS 523	1	N	Y
SUNY Buffalo	Intro. to Business 1 & 2	MGG 501/502	3	N	N
Buffalo State College	Communication for Leaders and Managers	COM 519	3	N	
SUNY Oswego	Organization and Management: a Global Perspective	MBA517	3	N	N
SUNY Plattsburgh	Studies in Leadership Communication	MLS 510	3	N*	N/A
Writing and Public Speaking					
SUNY Albany	Presentation Skills	BUS 523	1	N	Y
Principles of Micro and Macro Economics					
Binghamton University	Microeconomic Theory	ECON 500	4	N	TBD
Binghamton University	Macroeconomic Theory	ECON 501	4	N	TBD
Buffalo State College	Applied Macroeconomic/Microeconomic Theory	ECO507/508	3	N	
SUNY Oswego	Principles of Economics	MBA502	3	Y	Y

SUNY PLUS Course Inventory

SUNY "PLUS" Course Survey					
Skill Set:	**Equivalent Course Name**	**Course Number**	**Credit Hours**	**Online (Y/N)**	**Potential for online (Y/N)**
The Legal Environment of Business					
SUNY Buffalo	Intro. to Business 1	MGG 501	3	N	N
Binghamton University	Administrative Law	PAF 534	4		
SUNY Oswego	The Legal Environment of Business	MBA506	3	N	N
Project Management					
SUNY Albany	Human Resource Management	MGT 514	3	N	Y
Binghamton University	Managerial Skills for Scientists	GRD 520X	4	Hybrid	Y
SUNY Oswego	Project Management	MBA568	3	N	y
Team Management					
SUNY Albany	Human Resource Management	MGT 514	3	N	Y
Binghamton University	Leadership in Groups and Teams	LEAD 552	4	N	?
SUNY Buffalo	Leadership PACE	MGB 666	3	N	N
Presentation Skills					
SUNY Albany	Presentation Skills	BUS 523	1	N	Y
SUNY Buffalo	Leadership PACE	MGB 666	3	N	N
Intellectual Property Law					
SUNY Buffalo	Graduate Research Ethics	PHI 640	3	N	Y
Copyright Law					
Health Care Administration					
Running Clinical Trials					
Web Design					
Graphics / Publications					
SUNY Albany	Advanced Excel w/Visual Basic Applications	ITM 510	1	N	Y
Regulatory Issues					
SUNY Albany	Human Resource Management	MGT 514	3	N	Y
SUNY Buffalo	Graduate Research Ethics	PHI 640	3	N	Y
SUNY Oswego	Cyber Law/ Employment Law	MBA525/MBA530	3	N	N
Entrepreneurship					
SUNY Albany	Organizational Behavior	MGT 513	3	N	Y
SUNY Oswego	Entrepreneurship	MBA580	3	N	N
Leadership Training					
SUNY Albany	Human Resource Management	MGT 514	3	N	Y
Binghamton University	Foundation of Leadership	LEAD 551	4	N	TBD
Binghamton University	Leadership in Organizations	LEAD 553	4	N	TBD
Buffalo State College	Leadership in Organizations	EDF 688	3	Y	
SUNY Plattsburgh	Leadership Analysis, Thinking, and Planning	MLS 515	3	N*	N/A
SUNY Plattsburgh	System Change and Dynamics	MLS 511	3	N	N/A
SUNY Plattsburgh	Proseminar in Organizational Leadership	MLS 501	3	N*	N/A
The Legal Environment of Business					
SUNY Buffalo	Intro. to Business 1	MGG 501	3	N	N
Binghamton University	Administrative Law	PAF 534	4		
SUNY Oswego	The Legal Environment of Business	MBA506	3	N	N

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SUNY PLUS Course Inventory

SUNY "PLUS" Course Survey					
Skill Set:	**Equivalent Course Name**	**Course Number**	**Credit Hours**	**Online (Y/N)**	**Potential for online (Y/N)**
Statistics					
Binghamton University	Statistics Seminar	MATH 601	4	N	N
Ethics					
SUNY Albany	Human Resource Management	MGT 514	3	N	Y
Binghamton University	Business Ethics		4	N	N
Binghamton University	Medical Ethics		4	N	N
SUNY Plattsburgh	Ethics and Administration	MLS 581	3	N*	N/A
Technology Transfer					
SUNY Albany	Organizational Behavior	MGT 513	3	N	Y
Binghamton University	Database Management Systems	MIS 533	4	N	TBD
Binghamton University	Information Systems Development Project	MIS 573	4	N	TBD
Global Understanding					
SUNY Albany	Organizational Behavior	MGT 513	3	N	Y
Binghamton University	International Marketing	MKTG 570	4	N	TBD
SUNY Oswego	International Business	MBA516	3	Y	Y
Critical Thinking / Decision Making					
SUNY Albany	Organizational Behavior	MGT 513	3	N	Y
Binghamton University	Decision Modeling & Risk Analysis	OPM 560	4	N	TBD
SUNY Plattsburgh	Problem Solving Procedures	MLS 536	3	Y	
Other Possible Plus Courses					
SUNY Plattsburgh	Program Evaluation and Grant Writing	MLS 552	3	N*	N/A
Binghamton University	Proposal Prep. & Grant Mgmt.	PAFF 514	4		
Binghamton University	Public Mgmt. / Public Admin.	PAFF 521	4		
Binghamton University	Budgeting for Public & Non-for-Profit	PAFF 531	4		
Binghamton University	Personnel Administration	PAFF 534	4		
Binghamton University	Organizational Behavior	PAFF 551	4		
Binghamton University	Intro to Mgmt. & Leadership in non-profits	PAF 552			
Binghamton University	Issues in Non-Profit Administration	PAFF 558X	4		
Binghamton University	Workshop in Non-Profit Mgmt.	PAFF 559	4		
Buffalo State College	Management: Administrative Behavior	EDF 602	3	Y	
SUNY Oswego	Risk Management	MBA 590	3	Y	Y
SUNY Oswego	Marketing Management	MBA514	3	N	N
SUNY Oswego	Managerial Accounting	MBA539	3	N	N
Symbols:	N*= Available through teleconference technology				
Statistics					
Binghamton University	Statistics Seminar	MATH 601	4	N	N
Ethics					
SUNY Albany	Human Resource Management	MGT 514	3	N	Y
Binghamton University	Business Ethics		4	N	N
Binghamton University	Medical Ethics		4	N	N
SUNY Plattsburgh	Ethics and Administration	MLS 581	3	N*	N/A

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The importance of the PSM internship experience.

PSM Internships Are Vital to Sustaining PSM Programs

- Internships provide benefits to each of the parties involved.
- First, **COMPANIES** get to "test drive" some of the highest caliber students available for possible future employment.
- Second, **STUDENTS** get to receive real world, hands-on experience in a career field related to their specific program to get an idea of what types of responsibilities and duties will be expected of them upon graduation.
- Third, the **INSTITUTION** and **PROGRAM** have a great opportunity to highlight the best and brightest of their students and create collaboration opportunities.
- Fourth, the **REGION** is provided an economic boost.

Benefitting Employers

Talent Search: Internships have long been seen as a trial period for companies to recruit talent before they enter the job market.

Flexibility: Internships in PSM programs are helpful in that they can serve multiple functions from either the STEM or business side of the company.

Recruiting: Internships are a more cost-effective way for companies to staff their departments/projects than hiring full-time employees, especially if those full-time employees don't have the skills possessed by a PSM student.

Teamwork: PSM internships are typically project-oriented and often require collaboration with a team.

Benefitting Students

Reality Check: Students are given an opportunity to explore the field for which they are preparing. This gives the student a reality check about their chosen career path.

Theory → Practice: Students are able to put what they've learned into action. Since the PSM is a hybrid degree, providing a broad range of skill sets, the student can experience the full potential of their degree.

Compensation: A paid internship will also benefit the student by helping to defray the costs of continuing their education. Not all PSM internships are paid.

Academic Credit: Whether paid or unpaid, most internships can be configured for students to earn academic credit.

Benefitting PSM Institutions and Programs

PSM Branding: Some employers aren't aware of PSM degrees. PSM programs help academic institutions build a reputation in the business community.

Partnerships: Internships, co-ops, or other collaborative opportunities exist in partnerships between business and educational institutions that can contribute to long-term successes for both partners.

PSM Curriculum: PSM programs can also recruit individuals from regional companies to serve on PSM advisory boards to help ensure that the skills needed in their field are being provided by the PSM curriculum.

Benefitting Regions

Educated Workforce: PSM internships and degree programs provide the region as a whole with a more educated, engaged, and prepared labor force.

Community Building: By increasing cooperation between businesses and higher education, internships help to build partnerships in the region, that promote economic development.

Increased Retention: Internships increase the likelihood of interns staying in the state/region after graduation.

Attract New Business: Successful internship programs attract new businesses to the area where they can draw from highly skilled talent.

Engaged Citizens: Studies show that students engaged in internships early and often will develop a greater sense of community engagement.

Steps in Developing an Internship

- Planning
  - Site Selection
  - Eligibility and Preparation
  - Financial Aid or Compensation
  - Job Specificity
  - Learning Agreement
- Implementation
  - Supervision
  - Mentoring
  - Communication
  - Reporting
  - Evaluation
- Assessment

Internship Planning

Site Selection: Choose a site that provides the student with practical experience in the area of concentration. The site should have personnel who will provide mentoring throughout the internship.

Student Eligibility and Preparation: Determine the criteria to qualify for an internship. Students should prepare materials such as resume and cover letter, and should be advised about the credit and evaluation methods used to determine a grade.

Internship Planning (cont.)

Financial Aid: Students should check with their financial aid advisors to determine if they are eligible to receive assistance towards tuition and other expenses. Students should also confirm that their health insurance won't be affected by the internship. Some internships are compensated by the employer.

Job Specificity: It is important that students know specifically what is expected of them and what they can expect from the experience. Develop milestones or other goals for students to work towards.

Internship Planning (cont.)

Learning Agreement: An agreement should be formed between the college, the student, and the field site to identify the specific learning objectives to be attained through the internship. If the internship is to offer academic credit, have this finalized with the college.

Internship Implementation

Supervision: Appropriate full-time faculty should be assigned to ensure that learning objectives are met and grading policies are followed.

Mentoring: Mentors should spend adequate time with the intern each week to address his/her questions or concerns and to provide guidance.

Communication: Throughout the internship, the student and his/her site supervisor should maintain regular contact through any form of media to ensure learning objectives are being met.

Reporting: Reports should be delivered to the university from both the site representative and the student. This ensures that expectations are communicated between all related parties.

Evaluation: Grading should be based on satisfactory completion of requirements and assignments and the degree to which the learning objectives have been achieved.

Internship Assessment

Continuous Improvement: The PSM program coordinator should implement regular, periodic assessments to determine the program's effectiveness in meeting learning objectives and to ensure continuous improvement.

Summative Evaluation:

- The **student** should submit reports regularly to represent the overall value of the internship experience. Upon completion, the student should submit a comprehensive evaluation of the internship experience.
- The **mentor/site supervisor** at the work site should also provide an assessment of the PSM intern's performance in meeting the goals of the learning agreement.
- The **faculty advisor** should aggregate all evaluative reports from the student and the site supervisor and determine a final evaluation based on published criteria and the goals of the student learning contract.

Top Concerns of an Intern

Give Me Real Work: Interns are excited to work and learn. Don't be afraid to give them "real work".

Do What You Say, Say What You Do: Be open and honest with your interns so they know what to expected and what is to be expected of them.

I Like Feedback: Use mistakes as opportunities to teach. Provide support and guidance for how an intern can handle situations differently.

I Want to Be Included: Include interns in office events such as staff meetings, projects meetings, office lunches, and socials.

Please Explain: Take the extra few minutes at the beginning of a project or assignment to give a detailed explanation of the work. This will allow the intern to work independently and will pay off dividends as the work grows.

The option of a PSM co-op experience.

What is a co-op placement?

Cooperative Education Programs are educational programs where students can get **HANDS-ON EXPERIENCE** in their field of study through working in a professional environment

In Co-op, students enter a **PARTNERSHIP** with the school and an employer to gain practical experience relevant to their major

Full-time, **PAID EMPLOYMENT** lasting as long as **SIX MONTHS**

Non-credit bearing educational program; students pay no tuition

Students' participation in Co-op is an **INTEGRATED LEARNING EXPERIENCE** that enhances both their studies and career development.

Co-op programs support the students' endeavor with a **VARIETY OF RESOURCES** preparing them for interviews, showing them what to expect on the job, and drawing on their workplace and classroom experience to achieve their goals.

Benefits of Co-Op

LEARN to integrate classroom study with real-world experience.

EXPERIENCE professional job opportunities in your major in a six month period.

DEVELOP your resume, etiquette techniques, and interview skills.

EARN a competitive wage as determined by the Co-op employer.

SAVE more and borrow less toward your college education.

ACHIEVE employment offering in your field of study after graduation.

Co-Op vs. Internship

Co-Op

- Work two or more terms (alternate with school term), each as long as 6 months
- Full-time, paid, non-credit bearing, no tuition
- Work on projects more intensively
- Students frequently start with higher salaries and with higher levels of responsibility (compared to internships)
- Higher percent of job offers after graduation

Internship

- Typically one work term related to a student's major or career goal
- Lasts about 10-12 weeks during spring, fall or summer semesters
- Credit bearing, scheduled with classes
- Can be full-time or part-time
- Can be paid or unpaid.

How Do Co-Ops Benefit Students?

- Longer work experience
- Explore and confirm your major and career options early
- Develop job search and interview skills
- Develop a network of professional contacts
- Get great job experience for your resume
- Increase your job prospects

How Do Co-Ops Benefit Employers?

- Co-op students are among the brightest and best prepared
- Helps employers find the best qualified employees
- Many employers do their primary hiring from co-ops
- Facilitates Human Resource needs for employers
- Reduces the cost of hiring and training
- Provides longer work term than typical internship
- Helps to retrain talent in the region

STATE UNIVERSITY of NEW YORK

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Main PSM Site

http://www.sciencemasters.com

National PSM Association

http://www.npsma.org/

SUNY PSM

http://www.psm.suny.edu

Council of Graduate Schools

http://cgsnet.org

Keck Graduate Institute

http://www.kgi.edu

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