The Illinois Professional Science Master’s (PSM) program in bioprocessing & bioenergy is perfect if you want to:

- find yourself on the cutting edge of multidisciplinary technology in the emerging and rapidly changing field of industrial biotechnology;
- learn from world-renowned scientists and researchers working to develop new technologies;
- build upon decades of research and genetic improvements to agricultural crops and microbes to develop comprehensive bioprocesses;
- gain an understanding of the environmental, ecological, political, and societal implications of bioprocessing and bioenergy; and
- harness the potential of bio-based products and energy (biofuels, electricity, biogas, etc.) to create new technologies and effect change.

The science core in bioprocessing and bioenergy is complemented by a business curriculum that includes technology management, marketing, entrepreneurship, process management, regulatory policy, and more. A cross-disciplinary industry seminar series offers opportunities to interact with industry and government leaders.

The program can be completed in 18-months of full-time study on the Urbana-Champaign campus. Summer enrollment is required while completing the internship. A thesis is not required.

Applications may be submitted online. For additional information, visit the University of Illinois PSM website at psm.illinois.edu or email PSMdegree@illinois.edu.

**Career Opportunities**

- Bioprocessing feedstock development (e.g., grains, biomass, algae, wastewater)
- Research and development
- Product and process analysis
- Technical sales
- Biorefinery management
- Value-added co-product marketing
- Green chemical development
- Business Analysis
- Analysis for policy or law
- Marketing specialist

**Program Advisor**

Dr. Beth Conerty
Integrated Bioprocessing Research Lab
bconerty@illinois.edu
(217) 300 - 4543

Coordinated by the University of Illinois Integrated Bioprocessing Research Laboratory (IBRL) and Department of Agricultural and Biological Engineering, in cooperation with the Graduate College.
### ADMISSION REQUIREMENTS

- Bachelor’s degree from a regionally accredited U.S. Institution or a comparable degree from a recognized institution abroad,
- Grade point average of 3.0 or higher (4.0 scale) for the last 60 hours of undergraduate work and for any graduate work,
- Graduate Record Examination (GRE),
- Test of English as a Foreign Language (TOEFL) for non-native speakers of English, and
- Three (3) letters of recommendation.

### SAMPLE PROGRAM OF STUDY

#### Year 1: Fall

<table>
<thead>
<tr>
<th>Science Curriculum</th>
<th>Business Curriculum</th>
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<tbody>
<tr>
<td>ABE 488</td>
<td>Industry Seminar I</td>
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<td>ACES 409/509</td>
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<td>CPSC 415</td>
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<td>ABE 488 Bioprocessing Biomass for Fuel</td>
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<td>ACES 409/509 Bioenergy Systems</td>
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<td>CPSC 415 Bioenergy Crops</td>
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**Business Curriculum**

Two 2-hour courses in
- Business Fundamentals, and
- Management and Marketing
PSM 501 Industry Seminar I

#### Year 1: Spring

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<td>TSM 486</td>
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<td>ACE 516 Environmental Economics</td>
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<td>ACES 501 Advanced Bioenergy Topics</td>
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<td>CHBE 594 Bioenergy Technology</td>
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<td>TSM 486 Grain Bioprocessing Coproducts</td>
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**Business Curriculum**

Two 2-hour courses in
- Project Management, and
- Finance
PSM 502 Industry Seminar II

**Summer Internship**

PSM 555 PSM Internship

#### Year 2: Fall

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<tr>
<td>ABE 498</td>
<td>Industry Seminar I</td>
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<td>ACE 501</td>
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<td>TSM 438</td>
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<td>ABE 498 Sustainable Biosystems Lab</td>
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<td>ACE 501 Risk and Info: Theory and Application</td>
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<tr>
<td>TSM 438 Renewable Energy Applications</td>
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</table>

**Business Curriculum**

One 2-hour course in Science and Regulatory Policy
PSM 503 Industry Seminar III

**December Graduation**

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This is a sample curriculum; your courses will depend upon your individual interests and career plans. For additional course offerings, visit: https://psm.illinois.edu/bioprocessing-bioenergy

Students have interned at:
- Abengoa,
- BP Biofuels, LLC,
- Clean Energy Trust,
- Dow AgroSciences,
- Illinois EPA,
- Illinois Green Business Assoc.,
- U.S. Dept. of Agriculture,
- U.S. EPA,
- and others.

Graduates have been hired by:
- Archer Daniels Midland (ADM),
- BCS, Incorporated,
- Cleantech Group,
- DuPont,
- Greenaltech,
- Ingredion,
- Oak Ridge National Laboratory,
- Pacific Gas & Electric,
- and others.