**APPLIED BIOTECHNOLOGY, M.S.**

Every day, biotechnology is working to solve some of the world’s most pressing problems—infected and hereditary disease, food security, and sustainable alternatives to fossil fuels—and moving forward with revolutionary solutions. Whether your experience is based in healthcare, agriculture, or industry—the online, 11-course, 31-credit University of Wisconsin Master of Science in Applied Biotechnology program will teach you how to bring the best of biotechnology innovation to the market, where it can do the most good. You’ll graduate with an understanding of the principles and techniques of biotechnology, ethical, safety, and privacy concerns, funding, intellectual property and patents, professional and technical communication, experimental design and analysis, and organizational leadership—all within the scope of the global biotechnology industry. Focus your learning within one or more specialization tracks: Quality Assurance and Compliance, Business Management, or Research and Development. And you’ll earn a degree from the University of Wisconsin, one of the largest and most widely respected public higher education systems in the country. The multi-campus partnership means you’ll learn from expert faculty from across the UW System with strong connections to the industry and the online format offers working adults like you a flexible, convenient way to pursue an advanced degree.

**ADMISSIONS**

Please consult the table below for key information about this degree program’s admissions requirements. The program may have more detailed admissions requirements, which can be found below the table or on the program’s website. Graduate admissions is a two-step process between academic programs and the Graduate School. **Applicants must meet the minimum requirements** (https://grad.wisc.edu/apply/requirements) of the Graduate School as well as the program(s).

Once you have researched the graduate program(s) you are interested in, apply online (https://grad.wisc.edu/apply).

<table>
<thead>
<tr>
<th>Requirements</th>
<th>Detail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall Deadline</td>
<td>July 15</td>
</tr>
<tr>
<td>Spring Deadline</td>
<td>December 15</td>
</tr>
<tr>
<td>Summer Deadline</td>
<td>April 15</td>
</tr>
<tr>
<td>GRE (Graduate Record Examinations)</td>
<td>Not required.</td>
</tr>
<tr>
<td>English Proficiency Test</td>
<td>Every applicant whose native language is not English or whose undergraduate instruction was not in English must provide an English proficiency test score and meet the Graduate School minimum requirements (<a href="https://grad.wisc.edu/apply/requirements/#english-proficiency">https://grad.wisc.edu/apply/requirements/#english-proficiency</a>).</td>
</tr>
<tr>
<td>Other Test(s) (e.g., GMAT, MCAT)</td>
<td>n/a</td>
</tr>
<tr>
<td>Letters of Recommendation Required</td>
<td>2</td>
</tr>
</tbody>
</table>

**APPLY TO THE GRADUATE SCHOOL**

Applications are submitted online only; paper copy applications are not available. Apply to the Graduate School online and select the "Applied Biotechnology MS" program option:

**THE GRADUATE SCHOOL'S ONLINE APPLICATION (HTTPS://APPLY.GRAD.WISC.EDU)**

The online application and $75 application fee must be submitted electronically to the Graduate School before you can be considered for admission.

The following materials must be uploaded to your Graduate School online application:

- Professional resume
- Two letters of recommendation (can be initiated and processed online via the Graduate School online application)
- A one- or two-page statement of purpose (uploaded via the Graduate School online application) that provides the following: A brief summary of your professional and academic background, a clear explanation of your short- and long-term professional goals, and a clear explanation of how the online M.S. in Applied Biotechnology degree will help you meet your goals. (Please be specific to the M.S. in Applied Biotechnology online degree.)

Additional Graduate School resources:

- Graduate School Admission Frequently Asked Questions (https://grad.wisc.edu/apply/#FAQ)
- Graduate School Admission Requirements (https://grad.wisc.edu/admissions/requirements)

If you have any questions about how to apply or about the status of your application, you should contact Bryan Husk (https://www.ms-biotech.wisc.edu/admissions.cfm#bryan).

**APPLICATION DEADLINE**

Applications are accepted year round for the online M.S. in Applied Biotechnology Program. Students can begin in Fall, Spring or Summer term. To guarantee consideration for a particular term, applications should be completed by July 15 for Fall, December 15 for Spring, and April 15 for Summer.

**FUNDING**

**GRADUATE SCHOOL RESOURCES**

Resources to help you afford graduate study might include assistantships, fellowships, traineeships, and financial aid. Further funding information (https://grad.wisc.edu/funding) is available from the Graduate School. Be sure to check with your program for individual policies and processes related to funding.

**PROGRAM RESOURCES**

The M.S. in Applied Biotechnology Program does not offer any financial aid, and graduate students are not permitted to accept any research, project, or teaching assistantship positions that would waive tuition. However, students may contact the Office of Student Financial Aid.
(https://financialaid.wisc.edu) to discuss federal loan programs and other lending opportunities.

**REQUIREMENTS**

**MINIMUM GRADUATE SCHOOL REQUIREMENTS**

Review the Graduate School minimum academic progress and degree requirements (http://guide.wisc.edu/graduate/#policiesandrequirementstext), in addition to the program requirements listed below.

**MAJOR REQUIREMENTS**

**MODE OF INSTRUCTION**

<table>
<thead>
<tr>
<th>Mode to Face</th>
<th>Evening/Weekend</th>
<th>Online</th>
<th>Hybrid</th>
<th>Accelerated</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

**Evening/Weekend:** These programs are offered in an evening and/or weekend format to accommodate working schedules. Enjoy the advantages of on-campus courses and personal connections, while keeping your day job. For more information about the meeting schedule of a specific program, contact the program.

**Online:** These programs are offered primarily online. Many available online programs can be completed almost entirely online with all online programs offering at least 50 percent or more of the program work online. Some online programs have an on-campus component that is often designed to accommodate working schedules. Take advantage of the convenience of online learning while participating in a rich, interactive learning environment. For more information about the online nature of a specific program, contact the program.

**Hybrid:** These programs have innovative curricula that combine on-campus and online formats. Most hybrid programs are completed on-campus with a partial or completely online semester. For more information about the hybrid schedule of a specific program, contact the program.

**Accelerated:** These on-campus programs are offered in an accelerated format that allows you to complete your program in a condensed time-frame. Enjoy the advantages of on-campus courses with minimal disruption to your career. For more information about the accelerated nature of a specific program, contact the program.

**CURRICULAR REQUIREMENTS**

**Requirements Detail**

<table>
<thead>
<tr>
<th>Requirements</th>
<th>Detail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum Credit Requirement</td>
<td>31 Credits</td>
</tr>
<tr>
<td>Minimum Residence Credit</td>
<td>31 Credits</td>
</tr>
<tr>
<td>Minimum Graduate Coursework Requirement</td>
<td>At least 50% of credits applied toward the graduate degree credit requirement must be completed in graduate-level coursework; courses with the Graduate Level Coursework attribute are identified and searchable in the university’s Course Guide (<a href="http://registrar.wisc.edu/course-guide/">http://registrar.wisc.edu/course-guide/</a>).</td>
</tr>
<tr>
<td>Overall Graduate GPA Requirement</td>
<td>3.00 GPA required.</td>
</tr>
</tbody>
</table>

**Other Grade Requirements**

The Graduate School requires an average grade of B or better in all coursework (300 or above, not including research credits) taken as a graduate student unless conditions for probationary status require higher grades. Grades of Incomplete are considered to be unsatisfactory if they are not removed during the next enrolled semester.

**Assessments and Examinations**

Contact the program for information on required assessments and examinations.

**Language Requirements**

Contact the program for information on any language requirements.

**COURSE REQUIREMENTS**

The following core courses are required (22 credits):

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABT 700</td>
<td>Principles of Biotechnology</td>
<td>3</td>
</tr>
<tr>
<td>ABT 705</td>
<td>Ethics, Safety, and Regulatory Environments in Biotechnology</td>
<td>3</td>
</tr>
<tr>
<td>ABT 710</td>
<td>Professional and Technical Communication in Biotechnology</td>
<td>3</td>
</tr>
<tr>
<td>ABT 715</td>
<td>Techniques in Biotechnology</td>
<td>3</td>
</tr>
<tr>
<td>ABT 720</td>
<td>Experimental Design and Analysis in Biotechnology</td>
<td>3</td>
</tr>
<tr>
<td>ABT 725</td>
<td>Leadership in Organizations</td>
<td>3</td>
</tr>
<tr>
<td>ABT 789</td>
<td>Pre-Capstone</td>
<td>1</td>
</tr>
<tr>
<td>ABT 790</td>
<td>Capstone</td>
<td>3</td>
</tr>
</tbody>
</table>

Select a minimum of three classes (9 credits) from one or more of the following elective areas:

**Area 1: Quality Control and Validation**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
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</thead>
<tbody>
<tr>
<td>ABT 735</td>
<td>Quality Control and Validation</td>
</tr>
<tr>
<td>ABT 740</td>
<td>Regulatory Practice and Compliance</td>
</tr>
<tr>
<td>ABT 745</td>
<td>Industrial Applications in Regulatory Affairs</td>
</tr>
</tbody>
</table>

**Area 2: Business and Management**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABT 750</td>
<td>Biotechnology Marketing and Entrepreneurship</td>
</tr>
<tr>
<td>ABT 755</td>
<td>Global Operations and Supply Chain Management</td>
</tr>
<tr>
<td>ABT 760</td>
<td>Quality and Project Management</td>
</tr>
</tbody>
</table>

**Area 3: Research and Development**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
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<tbody>
<tr>
<td>ABT 765</td>
<td>Assessing Innovation in Biotechnology</td>
</tr>
<tr>
<td>ABT 770</td>
<td>Product Development</td>
</tr>
<tr>
<td>ABT 775</td>
<td>Tools for Data Analysis</td>
</tr>
</tbody>
</table>

Total Credits 31

**POLICIES**

**GRADUATE SCHOOL POLICIES**

The Graduate School’s Academic Policies and Procedures (https://grad.wisc.edu/acadpolicy) provide essential information regarding general university policies. Program authority to set degree policies
beyond the minimum required by the Graduate School lies with the degree program faculty. Policies set by the academic degree program can be found below.

**MAJOR-SPECIFIC POLICIES**

**PRIOR COURSEWORK**

**Graduate Work from Other Institutions**
No prior coursework from other institutions may be applied toward program requirements.

**UW–Madison Undergraduate**
No prior coursework from UW–Madison undergraduate career may be applied toward program requirements.

**UW–Madison University Special**
No prior coursework taken as a UW–Madison University Special student may be applied toward program requirements.

**PROBATION**
The Graduate School regularly reviews the record of any student who earned grades of BC, C, D, F, or Incomplete in a graduate course (300 or above), or grade of U in research credits. This review could result in academic probation with a hold on future enrollment or in being suspended from the Graduate School.

**ADVISOR / COMMITTEE**
Every graduate student is required to have an advisor. To ensure that students are making satisfactory progress toward a degree, the Graduate School expects them to meet with their advisor on a regular basis.

**CREDITS PER TERM ALLOWED**
15 credits

**TIME CONSTRAINTS**
Master’s degree students who have been absent for five or more consecutive years lose all credits that they have earned before their absence. Individual programs may count the coursework students completed prior to their absence for meeting program requirements; that coursework may not count toward Graduate School credit requirements.

**OTHER**
The M.S. in Applied Biotechnology Program does not offer any financial aid, and graduate students are not permitted to accept any research, project, or teaching assistantship positions that would waive tuition.

**PROFESSIONAL DEVELOPMENT**

**GRADUATE SCHOOL RESOURCES**
Take advantage of the Graduate School’s professional development resources (https://grad.wisc.edu/pd) to build skills, thrive academically, and launch your career.

**LEARNING OUTCOMES**
1. Demonstrate professional and scientific communication appropriate for biotechnology settings
2. Demonstrate comprehensive understanding of organizational processes and product development pipelines
3. Distinguish among diverse methods and technologies and their applications in biotechnology
4. Demonstrate strategic leadership and decision-making skills necessary in biotechnology
5. Appraise the current regulatory, quality control, and legal frameworks that impact biotechnology
6. Demonstrate professional and ethical behaviors that foster positive and productive interactions in diverse biotechnology settings

**PEOPLE**
The UW Applied Biotechnology curriculum is designed and taught in collaboration of faculty from seven University of Wisconsin campuses: UW-Green Bay, UW-Madison, UW-Oshkosh, UW-Parkside, UW-Platteville, UW-Stevens Point, and UW-Whitewater. However, by selecting UW-Madison as your campus, your degree will come from UW-Madison.

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- Executive Director for the Biotechnology and Applied Biotechnology Programs
- Professor, School of Medicine and Public Health

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