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.

• First, gain additional 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.
• Then focus your learning within one or more specialization tracks: Quality Assurance and Compliance, Business Management, or Research and Development.
• Finally, upon completing your capstone project, you will 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.

The M.S. in Applied Biotechnology Program is a FULLY ONLINE graduate degree program. If you are seeking the FACE-TO-FACE program, please see the M.S. in Biotechnology program. You can also apply to both under one application fee.

Not sure which program best fits your needs? Contact us to talk more. Call 608-262-9753 or email Bryan (bthusk@wisc.edu) or Michele (michele.smith@wisc.edu).

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 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>
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<tr>
<td>GRE (Graduate Record Examinations)</td>
<td>Not required.</td>
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<tr>
<th>Test</th>
<th>Details</th>
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<tbody>
<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>
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<tr>
<td>Other Test(s) (e.g., GMAT, MCAT)</td>
<td>n/a</td>
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<td>Letters of Recommendation Required</td>
<td>2</td>
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APPLY TO THE GRADUATE SCHOOL

Applications are submitted online; paper copy applications are not available. Apply to the Graduate School online and select the ‘Applied Biotechnology MS’ program. This is the online-only degree program, see ‘Biotechnology, MS’ program for the face-to-face degree.

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. You are able to apply for up to three programs for the $75 application fee.

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

• Professional resume or CV
• Unofficial transcripts
• Two letters of recommendation (can be initiated and processed online via the Graduate School online application)
• A one- or two-page statement of purpose that is specific to the M.S. in Applied Biotechnology online degree (uploaded via the Graduate School online application) that provides the following:
  • Summary of your professional and academic background
  • Concise description of your short- and long-term professional goals
  • Clear explanation of how the online M.S. in Applied Biotechnology degree will help you meet your goals.

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.
ONLINE VERSUS FACE TO FACE

The 'Applied Biotechnology MS' program is a fully online program. The 'Biotechnology MS (http://guide.wisc.edu/graduate/cell-regenerative-biology/biotechnology-ms/) program is face to face. Not sure which Biotechnology program works best for you? Contact the program (608.262.9753) for more information. You can also apply to both for one application fee.

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 restrictions related to funding.

PROGRAM RESOURCES

The M.S. in Applied Biotechnology Program does not offer any scholarships or financial aid. Graduate students are not permitted to accept any research, project, or teaching assistantship positions that would waive tuition or provide tuition remission. 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></th>
<th>Evening/Weekend</th>
<th>Online</th>
<th>Hybrid</th>
<th>Accelerated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Face to Face</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
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<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

| Minimum Credit Requirement | 31 credits |
| Minimum Residence Credit | 31 credits |
| Minimum Graduate Coursework Requirement | 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 (http://registrar.wisc.edu/course-guide/) |
| Overall Graduate GPA Requirement | 3.00 GPA required |
| 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 | n/a |
| Language Requirements | n/a |

COURSE REQUIREMENTS

The following core courses are required:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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<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 |
| ABT 735 | Quality Control and Validation |
| ABT 740 | Regulatory Practice and Compliance |
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. Students will be advised by M.S. in Applied Biotechnology Program staff.

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.

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
The M.S. in Applied Biotechnology Program may approve UW-Madison University Special students to enroll in specific M.S. in Applied Biotechnology courses. Only coursework specific to the M.S. in Applied Biotechnology Program may be applied toward program requirements. Special students must meet Graduate School requirements if they wish to apply to the M.S. in Applied Biotechnology Program and understand that all credits taken as a special student may be subject to a graduate tuition rate increase upon transfer into the graduate school and used toward degree completion.

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. Any incomplete work is expected to be completed and submitted within the next term even if the student is not taking additional classes for that term.

Any incomplete work is expected to be completed and submitted within the next term even if the student is not taking additional classes for that term.
may contact the Office of Student Financial Aid to discuss federal loan programs and other lending opportunities.

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 by 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.

James Keck, Ph.D.

- Associate Dean for Basic Sciences
- Professor, School of Medicine and Public Health

Natalie Betz, Ph.D.

- Academic director for the UW–Madison Applied Biotechnology program
- Associate Director for the M.S. in Biotechnology Program
- Faculty Instructor, School of Medicine and Public Health

Bryan Husk, M.A.

- Assistant Directory of the M.S. in Biotechnology and Applied Biotechnology programs
- Academic Staff, School of Medicine and Public Health
- bthusk@wisc.edu
- 608-265-0773 office • 608-577-9182 cell

Michele Smith, M.S., SCT(ASCP)

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