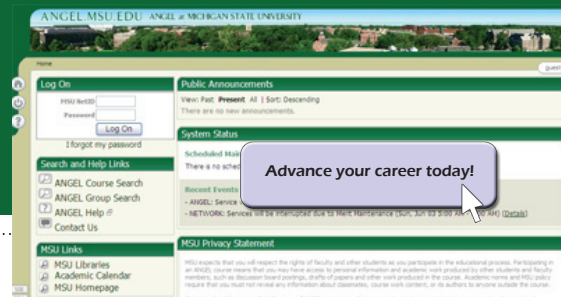




Online Professional Master of Science Degree Integrative Pharmacology @ Michigan State University



Expand your science background

- Study the chemical effects on intact tissues, organs, and organ systems -- in addition to the cellular level effects.
- Tailor your coursework based on your current work and your personal interests.
- Interact with online content, graphics, and animations to learn complex interactions between molecules, cells, and tissues.
- Get hands-on experience in whole animal and organ systems-level pharmacology, a critical component of the discipline.

Develop business and management skills

- Learn all phases of biomedical and pharmaceutical research and development, building your ability to communicate with cross-disciplinary teams.
- Develop valuable business acumen that gives you a competitive edge for management positions.
- Prepare for leadership roles in academic, government and industrial laboratories.

Learn in a way that fits your lifestyle and goals

Online courses offer the convenience of learning at a pace that fits with your lifestyle.

With the assistance of a dedicated academic adviser, your program of study is tailored to meet your unique interests and professional goals. You will build upon your current research endeavors, as well as explore new techniques and delve into new topics to expand your expertise.

The Master's in Integrative Pharmacology is perfect for mid-career employees who are ready to take a step up. It also provides an edge for those undergraduates who have not yet entered the workforce.

Program Overview

The Professional Master of Science degree in Integrative Pharmacology is an online program designed to train individuals in whole animal and organ systems-level pharmacology and develop skills in business acumen.

The demand for skilled scientists is increasing rapidly. Both innovative and challenging, the program is designed for those who have a desire to excel in their field but who do not wish to pursue a doctoral degree. This program allows students to continue working while preparing for their next career move.

The program provides advanced science knowledge and practical skills in integrative pharmacology and is designed for individuals who seek career advancement and leadership roles in academic, government, or industrial laboratories.

Courses are offered almost exclusively online to allow flexibility for students regardless of their geographic location, work schedules, or family responsibilities.

Integrative Pharmacology Online @ Michigan State University

<http://www.phmtox.msu.edu>

Increase earning potential with a highly respected degree

The program results in a 31-credit Master of Science degree, an on-the-job capstone research project, and paper suitable for publishing. Additional professional certificates are possible depending upon your interests.

Michigan State University's Department of Pharmacology & Toxicology is uniquely situated, allowing students access to faculty from the Colleges of Veterinary, Human, and Osteopathic Medicine.

Students receive instruction from faculty who are top researchers and experienced instructors. Although the online master's in Integrative Pharmacology is especially suited to those with some level of professional experience in laboratory research, all biology and chemistry graduates will benefit from this enriching course of study.

Students enjoy the benefits of the MSU Career Services and Placement Center, which provides professional career advising and access to recruiters from biotech firms in the U.S. and abroad.

Admission

Acceptance into the program is competitive. Applicants must have completed a bachelor's degree from an accredited college or university, with at least 3 credits in chemistry and 3 credits in a biological science. The GRE is not required.

A letter of intent and two letters of recommendation are required for consideration for admission. Preference will be given to applicants with undergraduate degrees in biology, chemistry or related sciences and who are currently employed in an academic, government, or industrial laboratory.

For more information, visit www.phmtox.msu.edu.

Program curriculum

Courses are entirely online with the exception of PHM 832, which is a week-long, on-campus lab. Students will learn surgical techniques, organ tissue experiments, and animal handling practices.

To satisfy the PHM 895 requirement, students will complete a significant project addressing a research or applied problem in whole animal or organ level pharmacology culminating in a written report suitable for publication.

Required courses

- PHM 819 - Principles of Drug-Tissue interactions
- PHM 830 - Experimental Design & Data Analysis
- PHM 832 - Applied Integrative Pharmacology Lab (seven-day on-campus experience)
- PHM 895 - Applied Project in Integrative Pharmacology

Science electives (12 credits or more)

- PHM 813 - Cardiovascular Pharmacology
- PHM 829 - Neuropharmacology
- PHM 831 - Endocrine Pharmacology
- PHM 833 - Gastrointestinal & Liver Pharmacology
- PHM 834 - Respiratory Pharmacology
- PHM 350 - Introduction to Human Pharmacology
- PHM 450 - Introduction to Toxicology
- MT 830 - Concepts in Molecular Biology
- VM 812 - Food Safety Toxicology

Professional electives (six credits or more)

- PHM 851 - Intellectual Property & Patent Law
- PHM 854 - Leadership & Team-Building for Researchers
- PHM 857 - Introduction to Project Management
- PHM 858 - Project Management & Drug Development
- MT 842 - Managing Biomedical Laboratory Operations

How to apply...

Applications may be submitted online at <https://admissions.msu.edu/Apply.asp>.

Application deadlines:

- June 30 for the following fall semester
- Oct. 30 for the following spring semester
- Feb. 28 for the following summer semester

Students who have not been formally accepted into the program may enroll in individual courses as Lifelong Education students (up to 10 credits). For more information on Lifelong Education at MSU, please visit the admissions web site at www.admissions.msu.edu/admission/guest_lifelong.asp.