

PROFESSIONAL SCIENCE MASTER'S IN NATURAL SCIENCES, MICROSCOPE IMAGING TECHNOLOGY SPECIALIZATION

The Professional Science Master's (PSM) in Natural Sciences, Microscope Imaging Technology Specialization program prepares graduate students for employment as microscopists or managers of light microscope cores in academic, government or private sector businesses, or in research laboratories. Students gain the scientific, business, and communication skills required to be competitive for management jobs in these positions. Students learn how to analyze images, automate data collection and analysis, deal with large data sets, and interface between bioscientists and engineers for experimental design, selecting the optimal imaging system, and in data acquisition and interpretation. Students also obtain skills for business management and operation.

The PSM in Natural Sciences, Microscope Imaging Technology Specialization is an affiliated Professional Science Master's (PSM) degree. Affiliation is administered by the Commission on Affiliation of PSM Programs (<https://www.professionalsciencemasters.org/>) (formerly named PSM National Office) to ensure a strong and distinctive PSM brand. The PSM is designed for students who are seeking a graduate degree in science or mathematics and understand the need for developing workplace skills valued by top employers.



Requirements Effective Fall 2019

Students may need to take additional coursework in Biochemistry, Biology, Chemistry, Computer Science, Mathematics, Physics, or Statistics.

Code	Title	Credits
BC 565	Molecular Regulation of Cell Function	4
BC 665A	Advanced Topics in Cell Regulation: Microscopic Methods	2
GRAD 510	Fundamentals of High Performance Computing	3
GRAD 544	Ethical Conduct of Research	1

GRAD 550	STEM Communication	1
MGT 340	Fundamentals of Entrepreneurship	3
NSCI 677	Microscopic Image Collection & Processing	2
NSCI 687D	Internship: Microscopy (4 x 10 weeks; var. Cr)	8
NSCI 693D	Graduate Seminar: Microscopy	1
NSCI 696D	Group Study: Microscopy Proposal	6
Select one of the following Business/Marketing electives:		2-3
BUS 500	Foundations for Business Impact	
BUS 501	Business Communication–Multicultural Audience	
MGT 430	Leadership and Social Responsibility	
MGT 440	New Venture Management	
Select one:		2
BC 404	Comprehensive Biochemistry Laboratory	
CM 502/NB 502	Techniques in Molecular & Cellular Biology	

Program Total Credits: 35-36

A minimum of 35 credits are required to complete this program.