Have a Bright Idea?

University of North Texas
Master of Science in Environmental Science
Professional Science Master's Degree
MS Environmental Science

MS in Environmental Science - Proposed Professional Science Degree in Environmental Science
The MS degree in Environmental Science proposed as a Professional Science Master’s Degree is an interdisciplinary degree with no thesis requirement. It includes rigorous advanced training in Environmental Science and the development of workplace skills valued by industry, business, government and non-profit sectors. The degree requires 10 hours of required core courses in Environmental Sciences (Category I below), 12 hours of elective courses in Environmental Science chosen in consultation with Environmental faculty advisors from an approved list of science related courses, 12 hours of professional skills-based or “plus” courses in business, writing, communication, public administration or environmental ethics and a 4 hours internship.

Core Requirements, Professional Science Masters in Environmental Science (10 hours)
BIOL5030: Foundations of Environmental Science (1 hour)
BIOL 5120: Environmental Contaminants (3 hours)
BIOL 5005: Contemporary Topics in Biology: Biostatistics I (3 hours)
BIOL 5100: Introduction to Environmental Impact Assessment (3 hours)
BIOL 6400: Ecological Risk Assessment (3 hours)

Elective Courses in Environmental Science (12 hours)
Courses chosen in consultation with environmental faculty advisor from an approved list of science related courses.
Have a Bright Idea?

University of North Texas
Master of Science in Industrial Chemistry
Professional Science Master’s Degree
MS Industrial Chemistry

MS in Industrial Chemistry - Proposed Professional Science Degree in Industrial Chemistry
The MS degree in Industrial Chemistry as a Professional Science Master’s Degree prepares students for careers in the chemical industry. The degree requires 36 semester credit hours of course work including 6 credit hours of an internship. Candidates are required to complete a curriculum composed of 18 credit hours in chemistry, plus an additional 12 hours of professional skills-based or “plus” courses selected from a list of courses from business, public administration, communication, environmental science, computer science, professional writing, or other approved courses. Satisfactory completion of a written comprehensive research paper with an oral presentation is required of all candidates.

Required Chemistry Proficiency Courses (9 hours)
CHEM 5200: Physical Chemistry (3 hours)
CHEM 5380: Organic Chemistry (3 hours)
CHEM 5460: Analytical Chemistry (3 hours) (offered online)
CHEM 5560: Inorganic Chemistry (3 hours)

Elective Chemistry Related Courses (9 hours)*
CHEM 5210: Advanced Physical Chemistry (3 hours)
CHEM 5500: Physical Organic Chemistry (3 hours)
CHEM 5570: Advanced Analytical Chemistry (3 hours)
CHEM 5710: Advanced Inorganic Chemistry (3 hours)
Have a Bright Idea?

University of North Texas
Master of Science Biotechnology
Professional Science Master's Degree
MS Biotechnology

MS in Biotechnology-Proposed Professional Science Degree

The MS degree in Molecular Biology uses the internship option rather than the thesis option and prepares students interested in biotechnology focused careers in industry. The degree requires 36 semester credit hours (SCH) of organized course work including a 4 SCH internship. Candidates are required to complete a curriculum composed of 14 SCH in core biotechnology related courses and 6 SCH of elective biotechnology courses selected with the guidance of a graduate advisory committee, plus an additional 12 SCH of non-science “plus” courses selected from a list of courses in business, public administration, communication, philosophy, and writing. Satisfactory completion of a written comprehensive exit exam is required of all candidates.

Core Science Related Courses (14 hours)
BIOC/BIOL 5340: Molecular Biology (3 hours)
or BIOC/BIOL 6600: Advanced Molecular Biology (3 hours)
BIOC 5560: Biochemistry Laboratory (2 hours)
BIOC/BIOL 5580: Molecular Biology and Biotechnology Laboratory (2 hours)
BIOC 6630: Protein Structure and Function (3 hours)
BIOL 6200: Bioinstrumentation and Analytical Techniques (4 hours)

Elective Science Related Courses (6 hours)
BIOL 5150: Pharmacology: The Biological Bases of Drug Action (3 hours)
or BIOL 6080: Current Advances in Pharmacology (3 hours)
BIOL 5420: Industrial Microbiology (3 hours)
BIOL 5701: Biotechnology and Society (3 hours)
BIOL 5800: Microbial Genetics (3 hours)
or BIOL 5830: Advanced Genetics (3 hours)
BIOC 6610: Advanced Metabolism (3 hours)
BIOC 6680: Advanced Techniques in Biochemistry (1-3 hours)
BIOC 6640: Biochemical Regulation and Signal Transduction (3 hours)