

Duluth Campus

Toxicology Minor

Duluth School of Medicine - Adm

Medical School - Duluth Campus

Link to a [list of faculty](#) for this program.

- **Students will no longer be accepted into this program after Spring 2013. Program requirements below are for current students only.**
- **Students will no longer be accepted into this program after Spring 2012. Program requirements below are for current students only.**

Contact Information:

Toxicology Graduate Program, Medical School Duluth, 162 SMed, 1035 University Drive, Duluth, MN 55812 (218-726-6354; fax: 218-726-8014)

Email: toxgrad@d.umn.edu

Website: <http://www.ahc.umn.edu/toxicology>

- Program Type: Graduate minor related to major
- Requirements for this program are current for Fall 2016
- Length of program in credits (Masters): 12
- Length of program in credits (Doctorate): 12
- This program requires summer semesters for timely completion.

Along with the program-specific requirements listed below, please read the [General Information](#) section of the catalog website for requirements that apply to all major fields.

This University-wide program provides comprehensive training in the broad scope of toxicology. Toxicology, the science of poisons, is devoted to identifying and quantifying potential noxious agents in our environment. Although most chemical agents at sufficiently large doses may be toxic, not all present a significant risk to human health or to environmental organisms or ecosystems. Accordingly, the essence of the science of toxicology is defining the fine line that distinguishes a risk from a residue. To accomplish this requires scientific expertise in such areas as analytical and environmental chemistry, biology, and mathematics. Advanced courses and research are also available in such subdisciplines as human health risk assessment, epidemiology, environmental chemistry and engineering, ecotoxicology, food additives and nutritional toxicology, biochemical and physiological mechanisms, histopathology, diagnostic and analytical toxicology, drug metabolism, chemical carcinogenesis, behavioral toxicology, and the toxicity of noxious agents to various organ systems (e.g., nervous, heart, liver, kidneys).

Program Delivery

This program is available:

- via classroom (the majority of instruction is face-to-face)

Prerequisites for Admission

The preferred undergraduate GPA for admittance to the program is 3.00.

Applicants must have a bachelor's degree or its foreign equivalent from a recognized college or university.

Other requirements to be completed before admission:

At least a full year each of biology, organic chemistry, and physics as well as mathematics through calculus are expected.

Applicants must submit their test score(s) from the following:

- GRE

International applicants must submit score(s) from one of the following tests:

- TOEFL

Key to [test abbreviations](#) (GRE, TOEFL).

For an online application or for more information about graduate education admissions, see the [General Information](#) section of the catalog website.



Program Requirements

Use of 4xxx courses towards program requirements is not permitted.

A minor is available at the doctoral level and requires 12 credits--8 credits of core courses and 4 credits of advanced toxicology courses.