Human Toxicology, Ph.D.

Requirements

The Doctor of Philosophy program in human toxicology requires a minimum of 72 s.h. of graduate credit. The program is designed for students with backgrounds in the biological, engineering, and physical sciences. Entering students should have solid training in science, including courses in introductory chemistry and biology, and organic chemistry; knowledge of biochemistry and molecular biology is also useful. Students may remedy deficiencies by taking appropriate courses during their first year of graduate study.

Students begin the program with three two-month rotations in the laboratories of participating faculty members, in order to identify a mentor. After the first year, the mentor assumes financial responsibility for the student. With advice from the mentor, each student chooses an advisory committee, which meets at least once a semester to help the student explore the student's research interests. The committee also provides consultation on course work and research activities and serves as the committee for the comprehensive examination and the final examination (dissertation defense).

The Human Toxicology Program is flexible. Students work with their advisory committees to plan a course of study tailored to their individual interests and goals within the field of toxicology.

Ph.D. students with a major in human toxicology must successfully complete the following course work as part of their course of study.

This course:
OEH:5710 Environmental Toxicology 3

Or these three courses:
PHAR:6501 Principles and Mechanisms of Chemical Toxicology 1
PHAR:6502 Toxic Agents and Concepts in Toxicology 1
PHAR:6503 Target-Organ Toxicity 1

And all of these:
BMED:7270 Scholarly Integrity/Responsible Conduct of Research I (must be completed within first two years of graduate study) 0

OEH:6720 Advanced Toxicology 4
TOX:7180 Toxicology Research Seminar (enrollment is required each semester) 0-1

After successfully completing the comprehensive examination, usually at the end of the second year of graduate study, the student advances to Ph.D. candidacy. Students devote all of their time to dissertation research and writing. Upon successful completion of all requirements, including the dissertation and its oral defense, students are awarded the Doctor of Philosophy degree.

Associated Courses

For course descriptions and prerequisite information, see the course listings in the College of Pharmacy and Department of Occupational and Environmental Health sections of the Catalog.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>OEH:5710</td>
<td>Environmental Toxicology</td>
<td>3</td>
</tr>
<tr>
<td>OEH:6720</td>
<td>Advanced Toxicology</td>
<td>4</td>
</tr>
<tr>
<td>PHAR:6501</td>
<td>Principles and Mechanisms of Chemical Toxicology</td>
<td>1</td>
</tr>
<tr>
<td>PHAR:6502</td>
<td>Toxic Agents and Concepts in Toxicology</td>
<td>1</td>
</tr>
<tr>
<td>PHAR:6503</td>
<td>Target-Organ Toxicity</td>
<td>1</td>
</tr>
</tbody>
</table>

Admission

Prospective students may apply to the program via a centralized application system; see Admission on the Human Toxicology Program website.

Completed applications are encouraged to be submitted by January 1, but applications after that date are given full consideration. Applications submitted after March 1 are reviewed when received and are considered for any remaining openings.

Applicants must meet the admission requirements of the Graduate College; see the Manual of Rules and Regulations of the Graduate College.

Financial Support

Doctoral students in human toxicology receive stipends and tuition support from University of Iowa sources, including internal fellowships and graduate research assistantships, and from non-University sources, such as training grants from the National Institutes of Health.