Doctor of Pharmacy, PharmD

Requirements

The Doctor of Pharmacy (PharmD) program provides professional education in a number of areas, including pharmaceutical technology, biopharmaceutics, medicinal socioeconomics, pharmacotherapy, patient care, clinical and hospital pharmacy, and aspects of biotechnology. Graduates of the program are qualified to take examinations required for licensure as a pharmacist.

The program requires four years of full-time pharmacy study preceded by at least two years of pre-pharmacy study in the College of Liberal Arts and Sciences at the University of Iowa or an accredited community or liberal arts college in the United States or Canada. During pre-pharmacy study, students complete the prerequisites for admission to the PharmD program (see Admission in this section of the catalog for a list of prerequisite coursework). If possible, students should complete all 24 s.h. of their liberal arts/UI GE CLAS Core electives before they enter the PharmD program. Courses in moral reasoning or ethics, communication, computer science, business, behavioral and social sciences, and the humanities are recommended. Courses in physical education skills, applied music, and studio art do not count toward the general education electives requirement. Students must maintain a pharmacy and cumulative grade-point average of at least 2.00.

For rules and regulations concerning academic probation, pass/nonpass, credit by examination, maximum schedule, second-grade-only option, waiver or substitution of courses, cancellation of registration, and drop date, see the Student Handbook on the PharmD Student Resources page of the College of Pharmacy website.

The College of Pharmacy provides students with high-quality professional practice experiences. Faculty and adjunct faculty serve as preceptors, providing introductory and advanced practice experience at institutions and pharmacies in Iowa, nationwide, and around the world.

Professional Curriculum

The PharmD degree requires the following coursework, including at least 10 s.h. of professional electives. In addition, students must complete all prerequisites for admission to the PharmD program, including a minimum of 16 s.h. of general education courses chosen from behavioral, social, humanistic, and business disciplines (see Admission in this section of the catalog). An additional 8 s.h. of general education coursework must be completed either before or after admission to the PharmD program.

First Year, Fall

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHAR:8130</td>
<td>Foundations of Pharmacy Practice I</td>
<td>4</td>
</tr>
<tr>
<td>PHAR:8131</td>
<td>Engagement: Professional Skills and Values</td>
<td>1</td>
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First Year, Spring

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>PHAR:8133</td>
<td>Introductory Pharmacy Practice Experience Career Exploration (fall or spring)</td>
<td>1</td>
</tr>
<tr>
<td>PHAR:8134</td>
<td>Foundations of Health Services</td>
<td>3</td>
</tr>
<tr>
<td>PHAR:8135</td>
<td>Health Information Retrieval and Informatics</td>
<td>3</td>
</tr>
<tr>
<td>PHAR:8136</td>
<td>Foundations of Pharmaceutical Sciences</td>
<td>6</td>
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<tr>
<td>PHAR:8152</td>
<td>Fundamentals of Compounding</td>
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Second Professional Year, Fall

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>PHAR:8207</td>
<td>Introductory Pharmacy Practice Experiences Community (may be taken in a different semester)</td>
<td>3</td>
</tr>
<tr>
<td>PHAR:8209</td>
<td>Introductory Pharmacy Practice Experiences Hospital (may be taken in different semester)</td>
<td>3</td>
</tr>
<tr>
<td>PHAR:8250</td>
<td>Applications of Pharmacy Practice I</td>
<td>2</td>
</tr>
<tr>
<td>PHAR:8254</td>
<td>Integrated Pharmacotherapy: Endocrine</td>
<td>3</td>
</tr>
<tr>
<td>PHAR:8256</td>
<td>Integrated Pharmacotherapy: Renal, Fluids, and Electrolytes</td>
<td>2</td>
</tr>
<tr>
<td>PHAR:8260</td>
<td>Integrated Pharmacotherapy: Cardiovascular</td>
<td>4</td>
</tr>
<tr>
<td>PHAR:8276</td>
<td>Clinical Investigation II: Advanced Methods and Literature Interpretation</td>
<td>2</td>
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</table>

Second Professional Year, Spring

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>PHAR:8207</td>
<td>Introductory Pharmacy Practice Experiences Community (may be taken in a different semester)</td>
<td>3</td>
</tr>
</tbody>
</table>
PHAR:8209 Introductory Pharmacy Practice Experiences Hospital (may be taken in a different semester) 3

PHAR:8261 Integrated Pharmacotherapy: Neurology and Psychiatry 4

PHAR:8263 Integrated Pharmacotherapy: Infectious Diseases 4

PHAR:8265 Applications of Pharmacy Practice II 2

PHAR:8275 Advanced Health Services 2

**Third Professional Year, Fall**

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHAR:8301</td>
<td>Introductory Pharmacy Practice Experience Clinical</td>
<td>1</td>
</tr>
<tr>
<td>PHAR:8352</td>
<td>Integrated Pharmacotherapy: Musculoskeletal</td>
<td>4</td>
</tr>
<tr>
<td>PHAR:8370</td>
<td>Integrated Pharmacotherapy: Respiratory and Allergy</td>
<td>2</td>
</tr>
<tr>
<td>PHAR:8372</td>
<td>Integrated Pharmacotherapy: Gastroenterology and Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>PHAR:8374</td>
<td>Applications of Pharmacy Practice III</td>
<td>2</td>
</tr>
<tr>
<td>PHAR:8376</td>
<td>Discovery IV: Presentation of Results</td>
<td>1</td>
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</table>

**Third Professional Year, Spring**

In addition to the 8 s.h. of required courses outlined in the following list, students must enroll in a minimum of an additional 4 s.h. of professional elective courses or an early advanced pharmacy practice experience.

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>PHAR:8132</td>
<td>Continuing Professional Development</td>
<td>1</td>
</tr>
<tr>
<td>PHAR:8353</td>
<td>Integrated Pharmacotherapy: Genitourinary and Reproductive</td>
<td>2</td>
</tr>
<tr>
<td>PHAR:8371</td>
<td>Integrated Pharmacotherapy: Oncology and Hematology</td>
<td>2</td>
</tr>
<tr>
<td>PHAR:8378</td>
<td>Pharmacy Law and Ethics</td>
<td>2</td>
</tr>
<tr>
<td>PHAR:8384</td>
<td>Applications of Pharmacy Practice IV</td>
<td>1</td>
</tr>
</tbody>
</table>

**Third Year Spring Semester and Fourth Year: Advanced Pharmacy Practice Rotations**

PharmD students must complete at least 10 s.h. of professional electives before progressing to advanced pharmacy practice experiences; see the “Professional Electives” section that follows.

During the spring semester of the third year, students may choose to complete one rotation in addition to the eight rotations required during the fourth year. During the fourth year, students must complete eight advanced pharmacy practice rotations. All students must complete the first four rotations in the following list (24 s.h.); the remaining rotations may be selected by each student.

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHAR:9401</td>
<td>Ambulatory Care Rotation</td>
<td>6</td>
</tr>
<tr>
<td>PHAR:9404</td>
<td>Community Clinical Rotation</td>
<td>6</td>
</tr>
<tr>
<td>PHAR:9410</td>
<td>Hospital Pharmacy Rotation</td>
<td>6</td>
</tr>
<tr>
<td>PHAR:9413</td>
<td>Acute Care Medicine Rotation</td>
<td>6</td>
</tr>
</tbody>
</table>

Four of these (maximum of two non-patient care):

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHAR:9402</td>
<td>Elective Ambulatory Care Rotation</td>
<td>6</td>
</tr>
<tr>
<td>PHAR:9403</td>
<td>Elective Nuclear Pharmacy Rotation</td>
<td>6</td>
</tr>
<tr>
<td>PHAR:9405</td>
<td>Elective Hospice and Palliative Care Rotation</td>
<td>6</td>
</tr>
<tr>
<td>PHAR:9406</td>
<td>Elective: Drug Information Rotation</td>
<td>6</td>
</tr>
<tr>
<td>PHAR:9407</td>
<td>Elective Family Medicine Rotation</td>
<td>6</td>
</tr>
<tr>
<td>PHAR:9408</td>
<td>Elective Hematology/Oncology Rotation</td>
<td>6</td>
</tr>
<tr>
<td>PHAR:9409</td>
<td>Elective Home Health Care Rotation</td>
<td>6</td>
</tr>
<tr>
<td>PHAR:9411</td>
<td>Elective Long Term Care Rotation</td>
<td>6</td>
</tr>
<tr>
<td>PHAR:9412</td>
<td>Elective Managed Care Rotation</td>
<td>6</td>
</tr>
<tr>
<td>PHAR:9415</td>
<td>Elective: Pediatrics Rotation</td>
<td>6</td>
</tr>
<tr>
<td>PHAR:9416</td>
<td>Elective: Pharmacy Rotation</td>
<td>6</td>
</tr>
<tr>
<td>PHAR:9417</td>
<td>Elective Psychiatry Rotation</td>
<td>6</td>
</tr>
<tr>
<td>PHAR:9418</td>
<td>Elective Research Rotation</td>
<td>6</td>
</tr>
<tr>
<td>PHAR:9419</td>
<td>Elective: Surgery Rotation</td>
<td>6</td>
</tr>
<tr>
<td>PHAR:9420</td>
<td>Elective Pharmacy Practice Underserved Population Rotation</td>
<td>6</td>
</tr>
<tr>
<td>PHAR:9421</td>
<td>Elective Community Management Rotation</td>
<td>6</td>
</tr>
<tr>
<td>PHAR:9422</td>
<td>Elective: Compounding/Complementary Alternative Medicine Rotation</td>
<td>6</td>
</tr>
<tr>
<td>PHAR:9423</td>
<td>Elective: Critical Care Medicine Rotation</td>
<td>6</td>
</tr>
<tr>
<td>PHAR:9424</td>
<td>Elective Emergency Medicine Rotation</td>
<td>6</td>
</tr>
<tr>
<td>PHAR:9425</td>
<td>Elective Hospital Management Rotation</td>
<td>6</td>
</tr>
<tr>
<td>PHAR:9426</td>
<td>Elective Infectious Disease Rotation</td>
<td>6</td>
</tr>
<tr>
<td>PHAR:9427</td>
<td>Elective Medication Use Evaluation Rotation</td>
<td>6</td>
</tr>
<tr>
<td>PHAR:9428</td>
<td>Elective Pharmacy Industry Rotation</td>
<td>6</td>
</tr>
<tr>
<td>PHAR:9429</td>
<td>Elective: Pharmacy Regulatory Rotation</td>
<td>6</td>
</tr>
<tr>
<td>PHAR:9430</td>
<td>Elective: Professional Association Rotation</td>
<td>6</td>
</tr>
<tr>
<td>Course</td>
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<tr>
<td>PHAR:9431</td>
<td>Elective: Veterinary Pharmacy Rotation</td>
<td>6</td>
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<tr>
<td>PHAR:9432</td>
<td>Elective Community Rotation</td>
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</tr>
<tr>
<td>PHAR:9433</td>
<td>Elective Academic Rotation</td>
<td>6</td>
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<tr>
<td>PHAR:9434</td>
<td>Elective International Pharmacy Non-Patient Care Rotation</td>
<td>6</td>
</tr>
<tr>
<td>PHAR:9436</td>
<td>Elective Transitions of Care Rotation</td>
<td>6</td>
</tr>
<tr>
<td>PHAR:9437</td>
<td>Elective Informatics Rotation</td>
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<tr>
<td>PHAR:9438</td>
<td>Elective International Pharmacy Patient Care Rotation</td>
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<tr>
<td>PHAR:9441</td>
<td>Elective Neurology Rotation</td>
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<tr>
<td>PHAR:9450</td>
<td>Elective: Patient Care Rotation</td>
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</tr>
<tr>
<td>PHAR:9451</td>
<td>Elective: Non-Patient Care Rotation</td>
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</tr>
</tbody>
</table>

**Professional Electives**

PharmD students must complete at least 10 s.h. of professional electives in College of Pharmacy courses (prefix PHAR) numbered 8501–8799. See Courses in this section of the catalog.