**PHARMACY, M.S.**

The pharmacy master's program is a two-year, combined pharmacy administrative residency (an ASHP Accredited [https://accred.ashp.org/aps/pages/directory/residencyprogramsearch.aspx]) PGY-1 and PGY-2, hosted by the UW Health Department of Pharmacy) and academic degree program, which culminates in a M.S. degree, emphasizing health system pharmacy management and leadership. Applicants must be eligible for licensure as a pharmacist in the State of Wisconsin at the point of beginning the program. The program is designed to provide the pharmacy resident/graduate student with a solid academic foundation and experience in the administration of exemplary pharmaceutical services across an integrated health system.

The primary objective of the program is to develop health system pharmacy administrators who are trained and prepared to immediately assume administrative leadership positions within large, integrated health care delivery systems at the level of managers and assistant directors, and eventually as directors of pharmacy. These positions include oversight of pharmacy operations, clinical programs, medication safety, new business development, supply chain, etc. Residents complete clinical and management rotations in the first year of the program, and advanced administrative and elective rotations in the second year (chosen from a variety of settings, as desired by the resident). The curriculum's flexibility allows for specialization in administrative areas that best complement the student's career goals. Resident activities are varied in scope, depending on each individual's background and areas of interest.

See the detailed program overview (including a description of rotations; program strengths; resident competency objectives; projects; presentation, teaching, and travel opportunities); also see a pdf summary [https://www.uwhealth.org/files/uwhealth/docs/pdf6/Admin_Residency_Program_Summary.pdf] that includes the program's curriculum.

The UW Health Department of Pharmacy is a leader in the profession, and a leader within the University of Wisconsin Hospital & Clinics in the areas of technology assessment, new business development, information technology, patient safety, resource utilization and regulatory compliance. In 2006, this residency program proudly accepted the inaugural ASHP Foundation Pharmacy Residency Program Excellence Award for producing leaders across the profession.

## ADMISSIONS

<table>
<thead>
<tr>
<th>Requirements</th>
<th>Detail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall Deadline</td>
<td>April 1</td>
</tr>
<tr>
<td>Spring Deadline</td>
<td>This program does not admit in the spring.</td>
</tr>
<tr>
<td>Summer Deadline</td>
<td>This program does not admit in the summer.</td>
</tr>
</tbody>
</table>

GRE (Graduate Record Examinations) | Not required.  

English Proficiency Test | Every applicant whose native language is not English or whose undergraduate instruction was not in English must provide an English proficiency test score and meet the Graduate School minimum requirements [https://grad.wisc.edu/apply/requirements/#english-proficiency].

Other Test(s) (e.g., GMAT, MCAT) | n/a

Letters of Recommendation | Required

This is a combined MS degree and postgraduate residency training program. Thus, two applications must be submitted.

The first is through the standard Pharmacy Online Residency Centralized Application Service (PhORCAS). For additional details of this application process, see the area regarding “pharmacy administrative residency–applying to the program” on the UW Health website [https://www.uwhealth.org/health-professionals/internships/pharmacy-administrative-residency/applying/31924]. Applications are due in early January; the exact date will be listed on the PhORCAS website.

The second application is for the MS Pharmacy and is submitted to the UW Graduate School, with an application deadline of April 1.

Applications are not reviewed at any other time during the year. Applicants to the M.S. program must be eligible for licensure as a pharmacist in Wisconsin due to the program's pharmacy residency requirements.

## FUNDING

**GRADUATE SCHOOL RESOURCES**

Resources to help you afford graduate study might include assistantships, fellowships, traineeships, and financial aid. Further funding information [https://grad.wisc.edu/funding] is available from the Graduate School. Be sure to check with your program for individual policies and processes related to funding.

**PROGRAM RESOURCES**

**STIPEND/BENEFITS**

First year of residency: $47,500 (2018-19)  
Second year of residency: $47,500 (2018-19)  

10 paid vacation days, 8 paid legal holidays (at a minimum, each resident is required to staff one major and one minor holiday), and 9 sick days. As employees of the School of Pharmacy, residents receive health, dental, and vision insurance benefits and full access to the University of Wisconsin–Madison's recreational, educational, and cultural facilities. Tuition costs and university "segregated fees" are paid for by the UW Health Department of Pharmacy. Funding is available for attendance at professional meetings.
REQUIREMENTS

MINIMUM GRADUATE SCHOOL REQUIREMENTS

Review the Graduate School minimum academic progress and degree requirements (http://guide.wisc.edu/graduate/#policiesandrequirementstext), in addition to the program requirements listed below.

MAJOR REQUIREMENTS

MODE OF INSTRUCTION

<table>
<thead>
<tr>
<th>Mode of Instruction</th>
<th>Evening/Weekend</th>
<th>Online</th>
<th>Hybrid</th>
<th>Accelerated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Face to Face</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Evening/Weekend</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Online</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

Mode of Instruction Definitions

- **Evening/Weekend**: These programs are offered in an evening and/or weekend format to accommodate working schedules. Enjoy the advantages of on-campus courses and personal connections, while keeping your day job. For more information about the meeting schedule of a specific program, contact the program.
- **Online**: These programs are offered primarily online. Many available online programs can be completed almost entirely online with all online programs offering at least 50 percent or more of the program work online. Some online programs have an on-campus component that is often designed to accommodate working schedules. Take advantage of the convenience of online learning while participating in a rich, interactive learning environment. For more information about the online nature of a specific program, contact the program.
- **Hybrid**: These programs have innovative curricula that combine on-campus and online formats. Most hybrid programs are completed on-campus with a partial or completely online semester. For more information about the hybrid schedule of a specific program, contact the program.
- **Accelerated**: These on-campus programs are offered in an accelerated format that allows you to complete your program in a condensed time-frame. Enjoy the advantages of on-campus courses with minimal disruption to your career. For more information about the accelerated nature of a specific program, contact the program.

CURRICULAR REQUIREMENTS

<table>
<thead>
<tr>
<th>Requirements</th>
<th>Detail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum Credit Requirement</td>
<td>36 credits</td>
</tr>
<tr>
<td>Minimum Residence Credit Requirement</td>
<td>16</td>
</tr>
<tr>
<td>Minimum Graduate Coursework Requirement</td>
<td>18 credits must be completed in graduate-level coursework; courses with the Graduate Level Coursework attribute are identified and searchable in the university’s Course Guide (<a href="https://registrar.wisc.edu/course-guide/">https://registrar.wisc.edu/course-guide/</a>).</td>
</tr>
</tbody>
</table>

Overall 3.00 GPA required.

Other Grade Requirements

Candidates may be dropped from the program if they receive more than 7 credits of grades at the BC level or lower. This applies to formal courses, seminars, and research credits.

Assessments

A master’s research project is required.

Language

English

Requirements

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT I S 710</td>
<td>Managerial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>I SY E 515</td>
<td>Engineering Management of Continuous Process Improvement</td>
<td>3</td>
</tr>
<tr>
<td>I SY E/PSYCH 859</td>
<td>Special Topics in Human Factors Engineering</td>
<td>1-3</td>
</tr>
<tr>
<td>M HR 705</td>
<td>Human Resource Management</td>
<td>3</td>
</tr>
<tr>
<td>OTM/MARKETNG 421</td>
<td>Fundamentals of Supply Chain Management</td>
<td>3</td>
</tr>
<tr>
<td>OTM/MARKETNG 722</td>
<td>Logistics Management</td>
<td>3</td>
</tr>
<tr>
<td>PHM PRAC 617</td>
<td>Health System Pharmacy Data Analysis and Informatics</td>
<td>2</td>
</tr>
<tr>
<td>PHM PRAC 699</td>
<td>Advanced Independent Study</td>
<td>3</td>
</tr>
<tr>
<td>PHM PRAC 961</td>
<td>Graduate Seminar in Health-System Pharmacy</td>
<td>1</td>
</tr>
<tr>
<td>PHM PRAC 962</td>
<td>Graduate Seminar in Health-System Pharmacy</td>
<td>1</td>
</tr>
<tr>
<td>PHM PRAC 999</td>
<td>Advanced Independent Study</td>
<td>2</td>
</tr>
<tr>
<td>S&amp;A PHM 716</td>
<td>Advanced Hospital Pharmacy Administration</td>
<td>2</td>
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</tbody>
</table>

Total Credits 27-29

ELECTIVE COURSES

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>I SY E 520</td>
<td>Quality Assurance Systems</td>
<td>3</td>
</tr>
<tr>
<td>I SY E 555</td>
<td>Human Performance and Accident Causation</td>
<td>3</td>
</tr>
<tr>
<td>I SY E/ MED PHYS 559</td>
<td>Patient Safety and Error Reduction in Healthcare</td>
<td>2-3</td>
</tr>
<tr>
<td>I SY E/PSYCH 653</td>
<td>Organization and Job Design</td>
<td>3</td>
</tr>
<tr>
<td>I SY E/PSYCH 859</td>
<td>Special Topics in Human Factors Engineering</td>
<td>1-3</td>
</tr>
<tr>
<td>I SY E/ POP HLTH 875</td>
<td>Cost Effectiveness Analysis in Health and Healthcare</td>
<td>3</td>
</tr>
<tr>
<td>M HR 628</td>
<td>Negotiations</td>
<td>3</td>
</tr>
<tr>
<td>M HR 700</td>
<td>Organizational Behavior</td>
<td>3</td>
</tr>
<tr>
<td>M HR 704</td>
<td>Managing Behavior in Organizations</td>
<td>3</td>
</tr>
<tr>
<td>M HR 706</td>
<td>Leading and Working in Teams</td>
<td>1</td>
</tr>
<tr>
<td>M HR 722</td>
<td>Entrepreneurial Management</td>
<td>3</td>
</tr>
<tr>
<td>M HR 728</td>
<td>Bargaining, Negotiating and Dispute Settlement for Managers</td>
<td>3</td>
</tr>
<tr>
<td>OTM 753</td>
<td>Healthcare Operations Management</td>
<td>3</td>
</tr>
<tr>
<td>OTM 758</td>
<td>Managing Technological and Organizational Change</td>
<td>3</td>
</tr>
<tr>
<td>POP HLTH 785</td>
<td>Health Systems, Management, and Policy</td>
<td>3</td>
</tr>
</tbody>
</table>
Policies

Graduate School Policies
The Graduate School's academic policies and procedures (https://grad.wisc.edu/acadpolicy) provide essential information regarding general university policies. Program authority to set degree policies beyond the minimum required by the Graduate School lies with the degree program faculty. Policies set by the academic degree program can be found below.

Major-Specific Policies
Graduate Program Handbook
The Graduate Program Handbook (https://www.uwhealth.org/health-professionals/internships/pharmacy-administrative-residency/administrative/31907) is the repository for all of the program's policies and requirements.

Prior Coursework

Graduate Work from Other Institutions
No coursework taken outside of UW–Madison may be used to fulfill course requirements in the M.S. degree.

UW–Madison Undergraduate
No coursework taken as a UW–Madison undergraduate may be used to fulfill course requirements in the M.S. degree.

UW-Madison University Special
No coursework taken as a UW–Madison special student may be used to fulfill course requirements in the M.S. degree.

Probation
The status of a student can be one of three options:

1. Good standing (progressing according to standards; any funding guarantee remains in place).
2. Probation (not progressing according to standards but permitted to enroll; loss of funding guarantee; specific plan with dates and deadlines in place in regard to removal of probationary status).
3. Unsatisfactory progress (not progressing according to standards; not permitted to enroll, dismissal, leave of absence or change of advisor or program).

The UW Health Department of Pharmacy also has a disciplinary policy for its residents; contact the Department of Pharmacy for details.

Advisor / Committee
Students/residents are regularly reviewed by the UW Health Senior Director of Pharmacy and the program’s other preceptors.

Credits per Term Allowed
15 credits; students must maintain a minimum of 8 credits per semester.

Time Constraints
Master’s degree students who have been absent for five or more consecutive years lose all credits that they have earned before their absence. Further, that coursework may not count toward Graduate School credit requirements.

Other

Professional Development

Graduate School Resources
Take advantage of the Graduate School's professional development resources (https://grad.wisc.edu/pd) to build skills, thrive academically, and launch your career.

Professional development opportunities for residents/students include those in the following presentation, teaching, travel, and other categories:

Presentation Opportunities
- Weekly resident seminars
- Resident report presentations, educational presentations and in-services on clinical rotations
- Team and staff meeting leadership
- Leadership of monthly journal club discussions
- Nursing and pharmacy student orientation to pharmacy services
- Major projects are presented at the ASHP Midyear Clinical Meeting, Great Lakes Pharmacy Resident Conference, and Pharmacy Society of Wisconsin (PSW) Annual Meeting and Educational Conference

Teaching Opportunities
- Clinical Instructor status at the University of Wisconsin School of Pharmacy
- Lecturer and small group discussion leader for Drug Information class and participant in a Leadership Course led by our department within the UW School of Pharmacy
- Preceptorship of 4th year students on clinical rotation at UWHC
- Contribution to clinical faculty discussions with students
- Optional teaching certificate program for residents at area hospitals

Other Activities
- Weekly resident lunch seminars with hospital administrators to discuss administrative topics
- Patient and medication safety involvement
- Participation on various patient care committees
- Participation in resident community service projects
- Opportunities to interact with residents in the pharmacy practice, community practice, ambulatory, critical care, infectious disease,
medication systems and operations, oncology, transplant, and specialty pharmacy residency programs

- Monthly coffees with the Senior Director of Pharmacy for UW Health

Travel

- ASHP Midyear Clinical Meeting
- Great Lakes Pharmacy Residents Conference
- Pharmacy Administrative Residency Exchange
- Site visits to other health systems and residency programs
- ASHP Leadership Conference
- Pharmacy Society of Wisconsin (PSW) Annual Meeting and Educational Conference

LEARNING OUTCOMES

1. Demonstrates the ability to design, implement, evaluate, optimize, and manage the medication use process using technology, automation, workflow design, application, and optimal skill mix.

2. Thoroughly understands the components of an integrated health system and the role of pharmacy across the continuum of care.

3. Displays knowledge and expertise in the development and coordination of medication use policy to standardize practice, provide optimal patient care, and impact the financial performance of the organization.

4. Demonstrates the ability to manage the supply chain, including inventory analysis, contract negotiation, purchasing, and drug shortage management.

5. Comprehends medication safety principles to ensure safe medication practices.

6. Effectively monitors the financial performance of the pharmacy department, including knowledge of budgeting concepts, reporting of variances, and revenue cycle optimization.

7. Understands the principles of human resource management, including recruitment, interviewing, hiring, performance management, discipline, and effective day-to-day supervision.

8. Demonstrates personal leadership qualities essential to operate effectively within a health system and advance the profession and practice of pharmacy.

PEOPLE