# PHARMACY -- Doctor of Pharmacy (Pharm.D.)

## RECOMMENDATIONS ONLY

### Schools Referenced
- Creighton University--Omaha, NE
- University of Iowa--Iowa City, IA
- University of Minnesota--Minneapolis, MN
- Drake University--Des Moines, IA

### Notes
- A minimum of 2 years (60 or more hours) required for admission.
- A minimum GPA of 2.5 up to a 3.0 is required to apply.
- Pharmacy College Application Service (PharmCAS), [www.pharmcas.org](http://www.pharmcas.org)
- Pharmacy College Admission Test (PCAT), [www.pcatweb.info/](http://www.pcatweb.info/); Testing occurs in January, July or September
- PharmCAS will factor in (average) all grades for repeated coursework

### Biology
- General Biology: Organismal Diversity -- BIOL2051
- General Biology: Cell Structure and Function -- BIOL2052
- Anatomy & Physiology I -- BIOL3101
- Anatomy & Physiology II -- BIOL3102
- General Microbiology -- BIOL3151

### Chemistry
- General Chemistry I -- CHEM1110
- General Chemistry II -- CHEM1120
- Organic Chemistry I -- CHEM2210
- Organic Chemistry II -- CHEM2220
- Organic Chemistry Lab -- CHEM2230
- Biochemistry I -- CHEM4510

### Physics
- General Physics I -- PHYSICS1511

### Psychology
- Introduction to Psychology -- PSYCH1001

### Mathematics
- Calculus I -- MATH1420
- Statistics -- STAT1772 or Biostatistics -- BIOL4157

### Economics
- Principles of Microeconomics -- ECON1051

### Suggested Electives
- Genetics -- BIOL3140
- Cell Biology -- BIOL4128
- Immunology -- BIOL4150
- Biochemistry II -- CHEM4520
- Neurobiology -- BIOL4116
- Biopsychology -- PSYCH2101
- Drugs and Individual Behavior -- PSYCH3102
- Intro to Neurology -- PSYCH3104

### Experiential Component
- Working as a pharmacy tech, shadowing a variety of pharmacists, science research and participating in service and leadership organizations strengthens applications.
Pharmacists dispense the medicine prescribed by doctors and other authorized health professionals. Over-the-counter drugs are already packaged, but prescriptions have to be measured, bottled and sometimes mixed from medicinal compounds.

Pharmacists are experts in the use, composition and effects of medications, as well as the laws that regulate the manufacture and sale of drugs. They review medications for possible reactions to patients’ other prescriptions, foods and diseases to reduce the chances of side effects.

Pharmacists play a vital role in patient education by ensuring people understand how to take their prescription and any possible side effects that may result. Working in a pharmacy requires great attention to detail so that prescriptions are filled correctly and accurate records are kept.

Pharmacists have a lot of flexibility in their job. About 20% work part-time. Full-time pharmacists work between 40 and 50 hours a week, with nights and weekends possible in pharmacies with extended hours.

Average Starting Salary: $94,000

Practice Areas in Pharmacy
https://pharmacy.osu.edu/forms/outreach/intro-to-pharmacy/PfizerPharmacyCareerGuide.pdf

1. Academic Pharmacist
2. Chain Drug Store Pharmacist
3. Community Pharmacist
4. Compounding Pharmacist
5. Critical Care Pharmacist
6. Drug Information Specialist
7. Home Care Pharmacist
8. Hospice Pharmacist
9. Hospital Staff Pharmacist
10. Industry-Based Pharmacist
11. Infectious Disease Pharmacist
12. Long-term Care Pharmacist
13. Managed Care Pharmacist
14. Military Pharmacist
15. Nuclear Pharmacist
17. Oncology Pharmacist
18. Operating Room Pharmacist
19. Pediatric Pharmacist
20. The Pharmacist in a Grocery Chain
21. Pharmacists in Non-traditional Settings
22. Pharmacy Benefit Manager
23. Poison Control Pharmacist
24. Primary Care Pharmacist
25. Psychiatric Pharmacist
26. Public Health Service Pharmacist
27. Regulatory Pharmacist
28. Veterinary Pharmacist