

# DOCTOR OF PHARMACY / MASTER OF SCIENCE IN HEALTH INFORMATICS AND ANALYTICS

Designed to maximize graduates' opportunities in the rapidly growing fields of healthcare informatics and data analytics, the PharmD/MS HIA dual degree program allows students the opportunity to complete HIA coursework in place of elective course work within the pharmacy curriculum. Students begin at Drake in pharmacy and apply to the Master of Sciences in Health Informatics and Analytics Program during their first professional year or when they are nearing the completion of 90 credit hours.

Code	Title	Hours
BIO 012 & 012L	GENERAL/PRE-PROFESSIONAL BIOLOGY I and GENERAL/PRE-PROFESSIONAL BIOLOGY I LAB	4
BIO 095	MEDICAL MICROBIOLOGY	3
CHEM 001 & CHEM 003	GENERAL CHEMISTRY I and GENERAL CHEMISTRY I LAB	4
CHEM 002 & CHEM 004	GENERAL CHEMISTRY II and GENERAL CHEMISTRY II LAB	4
CHEM 097 & CHEM 098	ORGANIC CHEMISTRY I and ORGANIC CHEMISTRY I LAB	4
CHEM 108 & CHEM 110	ORGANIC CHEMISTRY II and ORGANIC CHEMISTRY II LAB	4
ENG 052	PUBLIC VOICES	3
FYS 0--	First Year Seminar	3
HSCI 060	STATISTICS IN HEALTH SCIENCES	3
HSCI 141 & 141L	HUMAN ANATOMY and HUMAN ANATOMY LAB	4
HSCI 285	HI & ANALYTICS CAPSTONE PROJ	3
MATH 050	CALCULUS I	3
PHAR 011	CAREER, ACADEMIC, AND PROFESSIONAL SUCCESS (CAPS) I: COLLEGE CONNECTIONS	1
PHAR 031	CAREER, ACADEMIC, AND PROFESSIONAL SUCCESS (CAPS) II: COMMUNITY CONNECTIONS	1
PHAR 051	CAREER, ACADEMIC, AND PROFESSIONAL SUCCESS (CAPS) III: PROFESSIONAL CONNECTIONS	0.5
PHAR 071	CAREER, ACADEMIC, AND PROFESSIONAL SUCCESS (CAPS) IV: CAREER CONNECTIONS	0.5
PHAR 122	CONTINUING PROFESSIONAL DEVELOPMENT I	1
PHAR 123	CONTINUING PROFESSIONAL DEVELOPMENT II	1
PHAR 125	PHYSIOLOGY	4
PHAR 130	BIOCHEMISTRY	4
PHAR 131	INTRODUCTION TO PHARM SCIENCES	3
PHAR 132 & 132D	PATHOPHYSIOLOGY and PATHOPHYSIOLOGY DISCUSSION	4
PHAR 133 & 133D	PRINCIPLES OF DRUG ACTION I and PRINCIPLES OF DRUG ACTION I DISCUSSION	5

PHAR 134 & 134D	PRINCIPLES OF DRUG ACTION II and PRINCIPLES OF DRUG ACTION II DISCUSSION	5
PHAR 135 & 135D	PRINCIPLES OF DRUG ACTION III and PRINCIPLES OF DRUG ACTION III DISCUSSION	4
PHAR 138	PHARMACEUTICAL CALCULATIONS	2
PHAR 140	PHARMACEUTICS I	2
PHAR 141	PHARMACEUTICS II	3
PHAR 142	BASIC PHARMACOKINETICS	3
PHAR 143	THERAPEUTIC DRUG MONITORING	2
PHAR 144	BASIC PHARMACY SKILLS AND APPLICATIONS I	2
PHAR 145	BASIC PHARMACY SKILLS AND APPLICATIONS II	2
PHAR 149	IMMUNIZATIONS	1
PHAR 154	INTERMEDIATE PHARMACY SKILLS AND APPLICATIONS I	2
PHAR 155	INTERMEDIATE PHARMACY SKILLS AND APPLICATIONS II	2
PHAR 162	PHARMACY LAW AND ETHICS	3
PHAR 167	CONTINUING PROFESSIONAL DEVELOPMENT III	1.5
PHAR 168	CONTINUING PROFESSIONAL DEVELOPMENT IV	1.5
PHAR 169	SELF CARE AND NON-PRESCRIPTION THERAPIES	3
PHAR 171	HEALTH CARE SYSTEMS AND POLICIES	3
PHAR 172	LITERATURE IN EVALUATION METHODS	3
PHAR 173	APPLIED SOCIAL AND ADMINISTRATIVE PHARMACY	3
PHAR 174	MANAGEMENT IN PHARMACY	3
PHAR 175	CONTINUING PROFESSIONAL DEVELOPMENT V	2
PHAR 176	CONTINUING PROFESSIONAL DEVELOPMENT VI	2
PHAR 184	ADVANCED PHARMACY SKILLS AND APPLICATIONS I	2
PHAR 185	ADVANCED PHARMACY SKILLS AND APPLICATIONS II	2
PHAR 190	THERAPEUTICS I	3
PHAR 191	THERAPEUTICS II	5
PHAR 192	THERAPEUTICS III	5
PHAR 285	EXPERIENTIAL ROTATION BLOCK	22
PHAR 285	EXPERIENTIAL ROTATION BLOCK	18
MS HIA 2XX Courses		27
General Electives		20
Written Communication AOI		3
<b>Total Hours</b>		<b>229</b>

## Program Notes:

Following completion of 90 credit hours and admission into the MS HIA program, students may enroll in MS HIA coursework.

## Recommended Summer Coursework

Students who wish to complete both degrees in the four professional years will need to plan to complete MS HIA courses during the summer sessions. This program requires a careful selection of courses for the MS HIA degree as electives in the pharmacy curriculum. Students may enroll in additional summer coursework or complete final MS HIA courses after PharmD completion. If the dual curriculum requires more than 18 credit hours in the fall or spring semesters, an overload credit fee waiver will be requested on the student's behalf. If students wish to take beyond the

required credit hours for the semester, they will need to request an "Over 18 Hours Request Form," which can be found in the Forms Library, and the additional course work will not qualify for an overload fee waiver.

A total of 210 credits are required to complete the pharmacy degree.

### General Electives:

Students complete the Drake Curriculum requirements and other credits for a total of 20 credits. Drake Curriculum requirements not fulfilled through required coursework are the Artistic Literacy, Historical Foundations, and Global and Cultural Understanding AOs. MSHIA coursework will count towards the general elective requirement.

### Professional Electives:

Five (5) professional elective credits are satisfied by MSHIA coursework.

### Professional Electives Policy:

Core curricula of CPHS degree programs may require professional elective courses that permit exploration of and/or advanced study in areas of professional interest within the student's primary degree. Professional electives provide the student with an opportunity to not only pursue areas of intellectual interest, but also to develop an individual "brand" that may benefit them in their professional or academic future. Students who desire to have a non-approved elective count toward professional elective credit should apply for an exception to program policy prior to taking the course whenever possible. Professional electives must be taken for a grade unless the course is designed as credit/no credit. Students should refer to their degree audit for determination of the total number of required professional electives. Students should review the **student handbook** (<https://www.drake.edu/cphs/handbookspolicies/>) for the complete professional elective policy and details specific to their degree program.

### Potential Professional Electives:

Code	Title	Hours
<b>May choose a maximum of 3 of the following:</b>		<b>9</b>
IS 210	BUSINESS ANALYTICS, TEAMS, AND PROJECTS	
IS 220	INFORMATION TECHNOLOGY LEGAL AND ETHICAL ISSUES	
STAT 260	APPLIED ANALYTICS PROJECT	
MBA 245	LEADING WITH DATA	
MBA 254	LEADERSHIP AND HUMAN CAPITAL DEVELOPMENT	
QUAN 270	QUANTITATIVE ANALYTICAL METHODS	
HSCI 261	REVIEW OF STATISTICS FOR EVIDENCE BASED HEALTHCARE	3
HSCI 262	CRITICAL APPRAISAL IN EVIDENCE BASED HEALTH CARE	3
HLTH 261	HEALTH CARE POLICY	3
HLTH 263	HEALTH CARE ADMINISTRATION	3