

# PHARMACY

## Admission to Program

Admission to the program is explained in the HCT Admission Policy described in the Academic Policies section of this Catalog.

## Program Mission

The mission of the Bachelor of Pharmacy program is to produce graduates, in response to the stakeholders' demand, who are work-ready to operate as Pharmacists in various areas of the technology driven pharmaceutical care, research, education and pharmaceutical industries.

## Program Description

The Bachelor of Pharmacy is a four and half-year program preparing graduates as Pharmacists for professional practice in different areas of Pharmacy. Graduates are educated to provide quality pharmaceutical care with a patient centered focus.

The program stresses knowledge of the biological, chemical, pharmaceutical, clinical and social sciences that underpins pharmacy, an understanding of the relevance of that knowledge to patient care and pharmaceutical problem solving and the skills to apply that knowledge to specific pharmaceutical care circumstances. The program provides students with a firm foundation for lifelong learning by promoting the development of analytical thinking, problem solving abilities, communication skills, technical skills, intellectual leadership potential and a commitment to professional ethics, social responsibility, professional citizenship and the ability to adapt to changes and respond to challenges in pharmaceutical healthcare delivery.

Graduates of this program will be competent to provide quality pharmaceutical care, current information and products in different areas of pharmacy with a patient centered focus.

Students are eligible for a one year Work Experiential Learning experience during their study.

## Program Goals

1. Create an outstanding learning environment accentuating independent learning and problem solving that will provide students with a high-quality education that meets societal needs.
2. Produce competent pharmacists capable of delivering pharmaceutical care within an inter-professional context and contribute to the advancement of the pharmacy profession.
3. Improve public health by enhancing the quality of healthcare provided by graduates and conducting innovative basic and applied pharmaceuticals and pharmacy practice research.
4. Contribute effectively to the local community through engagement and outreach.
5. Prepare graduates to be life-long learners and ready for continuing professional development.

## Program Learning Outcomes

*On successful completion of this program, the graduate will be able to:*

1. Provide patient-centered care by applying knowledge, management and decision making skills to meet patients' drug related needs

with the objective of achieving optimal patient outcomes and patient safety in clinical and non-clinical settings.

2. Apply the major principles of basic, biomedical, administrative, and core pharmaceutical and clinical sciences, to successfully assess and solve problems both in disciplinary and interdisciplinary areas of pharmacy.
3. Apply effective cognitive and technical skills within the framework of evidence-based practice and continuing quality assurance to develop, implement and enhance processes and actions that ensure the safety, accuracy and high standards of patient-centered care, pharmaceutical services and supplied products.
4. Utilize the relevant advanced technologies, information systems, and communication devices that support quality professional practice routine as well as complex problems in a variety of pharmacy settings.
5. Work independently, lead or function as part of inter and intra-professional teams, implementing the professional practice standards in dealing with others in a diverse range of clinical and non-clinical settings.
6. Take responsibility of enhancing the professional attributes relevant to the pharmacist's role in general as well as specialized fields of practice by developing and maintaining professional competence.
7. Apply entrepreneurship and innovation skills to identify, develop and create innovative opportunities and solutions that will strategically navigate the complex demands stemming from pharmacy and the healthcare overall. (Graduating Companies).
8. Exhibit ethical and professional behaviors considering different cultural values and comply with laws and regulations related to pharmacy practice.

## Requirements Completion Requirements

Bachelor of Pharmacy

**Students must successfully complete a minimum of 160 credits as follows:**

Code	Title	Credit Hours
	Health Science Core Courses	15
	Pharmacy Core Courses	86
	Pharmacy Preceptorship Courses	26
	General Studies	33
<b>Total Credit Hours</b>		<b>160</b>

Code	Title	Credit Hours
<b>Health Science Core Courses</b>		
<b>Required Credits: 15</b>		
HSC 1023	Chemistry for Health Sciences	3
HSC 1033	Anatomy and Physiology	3
HSC 1113	Introduction to Healthcare Systems and Professional Practice	3
HSC 1123	Work Health and Safety	3
HSC 1803	Medical Terminology for Health Sciences	3
<b>Pharmacy Core Courses</b>		
<b>Required Credits: 86</b>		

HPH 1102	Pharmacy Law and Ethics	2
HPH 1502	Introduction to Pharmacy	2
HPH 2013	Microbiology	3
HPH 2033	Pharmaceutics I	3
HPH 2053	Pharmacology I	3
HPH 2063	Non-Prescription Medicines and Self-Care	3
HPH 2072	Pharmacy Practice Skills	2
HPH 2073	Biological Organic Chemistry	3
HPH 2143	Pharmaceutics II	3
HPH 2163	Pharmacology II	3
HPH 2173	Medicinal Chemistry I	3
HPH 3014	Pathophysiology and Therapeutics I	4
HPH 3022	Pharmacokinetics	2
HPH 3062	Immunology	2
HPH 3064	Pharmaceutics III	4
HPH 3073	Medicinal Chemistry II	3
HPH 3102	Clinical Laboratory Investigations	2
HPH 3124	Pathophysiology and Therapeutics II	4
HPH 3152	Pharmaceutical Care Practice Skills I	2
HPH 3173	Pharmaceutical Analysis	3
HPH 4011	Applied Pharmacokinetics	1
HPH 4034	Pathophysiology and Therapeutics III	4
HPH 4043	Clinical Toxicology and Pharmacovigilance	3
HPH 4053	Bio-Technology	3
HPH 4063	Pharmacy Research Methods and Data Analysis	3
HPH 4122	Pharmacoeconomics	2
HPH 4132	Pharmacogenomics	2
HPH 4143	Pharmacy Management and Informatics	3
HPH 4144	Pathophysiology and Therapeutics IV	4
HPH 4152	Pharmaceutical Care Practice Skills II	2
HPH 4163	Pharmacy Capstone Research Project	3

**Pharmacy Preceptorship Courses****Required Credits: 26**

HPH 2044	Community Pharmacy Preceptorship	4
HPH 2134	Ambulatory Pharmacy Preceptorship	4
HPH 3162	Industrial Pharmacy Preceptorship	2
HPH 5014	Advanced Pharmacy Preceptorship I – Hospital Pharmacy	4
HPH 5024	Advanced Pharmacy Preceptorship II – Internal Medicine I	4
HPH 5034	Advanced Pharmacy Preceptorship III- Internal Medicine II	4
HPH 5044	Advanced Pharmacy Preceptorship IV- Surgical and Emergency Care	4

**General Studies****Required Credits: 33**

English, Arabic or other Languages

Required Credits: 12

Humanities or Art

Required Credits: 3

Information Technology or Mathematics

Required Credits: 6

The Natural Sciences

Required Credits: 3

The Social or Behavioral Sciences

Required Credits: 9

Description	Data
Total Required Credits	160
Maximum Duration of Study	6.5 years
Minimum Duration of Study	4.5 years
Cost Recovery Program	No
Program Code	BPHU
Major Code	HPH

## Ideal Study Plan

### Recommended Sequence of Study

**Year 1****Semester 1**

		Credit Hours
HSC 1013	Human Biology	3
HSC 1113	Introduction to Healthcare Systems and Professional Practice	3
HSC 1803	Medical Terminology for Health Sciences	3
LSC 1103	Professional Communication and Reporting	3
LSS 1003	Life and Future Skills	3

**Credit Hours 15****Semester 2**

AES 1013	Arabic Communications	3
HSC 1023	Chemistry for Health Sciences	3
HSC 1033	Anatomy and Physiology	3
HSC 1123	Work Health and Safety	3
HPH 1502	Introduction to Pharmacy	2
LSS 1123	Basic Research Methods	3

**Credit Hours 17****Summer**

AES 1003	Emirati Studies	3
HPH 1102	Pharmacy Law and Ethics	2

**Credit Hours 5****Year 2****Semester 3**

HPH 2013	Microbiology	3
HPH 2033	Pharmaceutics I	3
HPH 2053	Pharmacology I	3
HPH 2063	Non-Prescription Medicines and Self-Care	3
HPH 2072	Pharmacy Practice Skills	2
HPH 2073	Biological Organic Chemistry	3

**Credit Hours 17****Semester 4**

AES 1033	Islamic Culture	3
HPH 2044	Community Pharmacy Preceptorship	4
HPH 2143	Pharmaceutics II	3
HPH 2163	Pharmacology II	3
HPH 2173	Medicinal Chemistry I	3

**Credit Hours 16****Summer**

HPH 2134	Ambulatory Pharmacy Preceptorship	4
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**Credit Hours 4****Year 3****Semester 5**

HPH 3014	Pathophysiology and Therapeutics I	4
HPH 3022	Pharmacokinetics	2

HPH 3062	Immunology	2
HPH 3064	Pharmaceutics III	4
HPH 3073	Medicinal Chemistry II	3
LSM 1113	Statistical Mathematics	3
<b>Credit Hours</b>		<b>18</b>
<b>Semester 6</b>		
BUS 2403	Innovation and Entrepreneurship	3
HPH 3102	Clinical Laboratory Investigations	2
HPH 3124	Pathophysiology and Therapeutics II	4
HPH 3152	Pharmaceutical Care Practice Skills I	2
HPH 3173	Pharmaceutical Analysis	3
LSC 2193	Applied Skills Capstone	3
<b>Credit Hours</b>		<b>17</b>
<b>Summer</b>		
HPH 3162	Industrial Pharmacy Preceptorship	2
<b>Credit Hours</b>		<b>2</b>
<b>Year 4</b>		
<b>Semester 7</b>		
HPH 4011	Applied Pharmacokinetics	1
HPH 4034	Pathophysiology and Therapeutics III	4
HPH 4043	Clinical Toxicology and Pharmacovigilance	3
HPH 4053	Bio-Technology	3
HPH 4063	Pharmacy Research Methods and Data Analysis	3
ICT 2013	Computational Thinking and Coding	3
<b>Credit Hours</b>		<b>17</b>
<b>Semester 8</b>		
HPH 4122	Pharmacoeconomics	2
HPH 4132	Pharmacogenomics	2
HPH 4143	Pharmacy Management and Informatics	3
HPH 4144	Pathophysiology and Therapeutics IV	4
HPH 4152	Pharmaceutical Care Practice Skills II	2
HPH 4163	Pharmacy Capstone Research Project	3
<b>Credit Hours</b>		<b>16</b>
<b>Year 5</b>		
<b>Semester 9</b>		
HPH 5014	Advanced Pharmacy Preceptorship I – Hospital Pharmacy	4
HPH 5024	Advanced Pharmacy Preceptorship II – Internal Medicine I	4
HPH 5034	Advanced Pharmacy Preceptorship III- Internal Medicine II	4
HPH 5044	Advanced Pharmacy Preceptorship IV- Surgical and Emergency Care	4
<b>Credit Hours</b>		<b>16</b>
<b>Total Credit Hours</b>		<b>160</b>

Additional courses may be offered in each Summer Semester at the discretion of the Academic Faculty.

## Faculty and Academic Staff

**Amged Mustafa**, PhD (Pharmacology), Uppsala University, Sweden.

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