## University Vice-Presidency of Academic Affairs

## **College of Health Sciences**

## **Department of Health Informatics**

# Academic Study Plan Bachelor of Science in Health Informatics



August 2025

#### **Program Definition and General Information**

#### 1.1 Program Name and Qualification:

Bachelor of Science in Health Informatics

#### 1.2 Number of Credit Hours Required to Complete the Program:

The study plan consists of 130 credit hours distributed as follows:

• University Requirements: 34 Credit hours

• College Requirements: 36 Credit hours

• Department Requirements: 54 Credit hours

• Elective Requirements: 6 Credit hours

#### 1.4 Employment Fields for Program Graduates:

Graduates of this program can be employed or participate in many fields including, but not limited to:

- E-health /Health Informatics
- Health Information Systems Management
- Public Healthcare Systems
- Management, Planning, and Implementation of Health Information Projects
- Electronic Medical/Health Records
- Education in Health / Medical E-learning
- Health Database Management

#### 1.5 Field Experience (Internship Period):

12 weeks of training at a selected healthcare institution according to the specialization. During this training period, the student will apply what they have learned under the supervision of both onsite supervisors and a coordinator from the College of Health Sciences. Students will be evaluated in each department, and completing this training period is mandatory for graduation and obtaining the bachelor's degree. The internship is done after successfully completing all courses in the study plan.

#### 1.6 Special Admission Requirements for the Program:

- The applicant must hold a high school diploma with competitive admission based on the high school certificate (scientific specialization).
- Completion of the first year (preparatory year) at the Saudi Electronic University.
- TOEFL or STEP certificate.

#### 1.7 Program Supervisor:

Head of the Health Informatics Department

## **Program structure by years:**

## First Year

First Semester					
Course Code	Course Title	Credit Hours	Pre- requisites	Co- requisites	
ENG001	English Language Skills	8			
CS001	Computer skills	3			
COMM101	Communication Skills	2			
Total 13					

Second Semester					
Course Code	Course Title	Credit Hours	Pre- requisites	Co- requisites	
ENG102	English Language Skills	8			
MATH001	Introduction to Mathematics	3			
CI001	Academic Skills	2			
Total 13					

## **Second Year**

Third Semester				
Course Code	Course Title	Credit Hours	Prerequisite	
BIO101	Basic Medical Terminology	3	PYP	
HCM101	Health Care Management	3	PYP	
HCM102	Organizational Behavior	3	PYP	
PHC121	Introduction to Biostatistics	3	PYP	
IT231	Introduction to IT and IS	3	РҮР	
IT232	Object Oriented Programming	3	РҮР	
	Total	18		

Forth Semester				
Course Code	Course Title	Credit Hours	Prerequisite	
BIO102	Introduction to Anatomy and Physiology	3	BIO101	
IT244	Introduction to Database	3	IT232	
IT245	Data Structure	3	IT232	
PHC131	Introduction to Epidemiology	3	PHC121	
HCM113	Health Policy and Saudi Healthcare System	3	HCM101	
ISLM101	Introduction to Islamic Culture I	2	PYP	
	Total	17		

## Third Year

Fifth Semester				
Course Code	Course Title	Credit Hours	Prerequisite	
PHC212	Concepts of Health Education and Promotion	3	BIOL101	
IT351	Computer Networks	3	IT231	
IT352	Human Computer Interaction	3	IT231-IT245	
HCI111	Introduction to Health informatics	3	PYP	
ISLM102	Prof. Conduct & Ethics in Islam	2		
IT353	System Analysis and Design	3	IT245	
	Total	17		

Sixth Semester					
Course Code	Course Title	Credit Hours	Prerequisite		
HCM213	Financial Management for Healthcare	3	HCM101		
PHC215	Healthcare Research	3	PHC131		
IT362	IT Project Management	3	IT353		
PHC216	Ethics & Regulations in Healthcare	3	HCM113		
HCI112	Electronic Health Records	3	HCI111 - IT231		
IT361	Web Technologies	3	IT352 - IT244		
	Total	18			

## Fourth Year

Seventh Semester					
Course Code	Course Title	Credit Hours	Prerequisite		
IT475	Decision Support Systems	3	IT244		
IT476	IT Security & Policies	3	IT351		
HCI214	Consumer Health Informatics	3	HCI112		
ISLM10 3	Islamic Economic System	2			
HCI213	Medical Coding and Billing	3	HCI111 - HCI112		
PHC312	Health Communications	3	PHC216		
	Total 17				

Eighth Semester					
Course Code	Course Title	Credit Hours	Prerequisite		
HCI315	Telehealth and Telemedicine	3	HCI213		
HCI316	E-Health	3	HCI214		
HCI314	Public Health Informatics	3	HCI213		
ISLM10 4	Social System and Human Rights	2			
XXX	Elective 1	3	PHC312 - HCI213 - HCI214		
XXX	Elective 2	3	PHC312 - HCI213 - HCI214		
	Total	17			

## **Elective courses:**

## Students must register two courses from the elective course listed below

Course Code	Course Title	Credit Hours	Prerequisite
IT487	Mobile Application development	3	
IT364	IT Innovation and Entrepreneurship	3	PHC312 - HCl213 -
IT485	IT Professional Ethics in IT	3	HCI214
ECOM101	E-Commerce	3	
PHC101	Introduction to Public Health	3	
PHC151	Environmental Health	3	
PHC261	Occupational Health	3	
PHC273	Introduction to Mental Health	3	
PHC311	Global Health	3	
	Total	6	