

First: Introduction to the program:		
1. Program name	Arabic	بكالوريوس المعلوماتية الصحية
	English	Bachelor of Health Informatics
2. Program language		English
3. The program sub-level code according to the Unified Saudi classification. (SASCED-L)		Level 6
4. Specialization code according to the Unified Saudi classification (SASCED-P)		06880101
5. The academic qualification granted by the program		Bachelor of Health Informatics
6. Total credit hours to complete the program		135
7. Expected start date of the program (created/developed)	Semester	Year
	461	2024
Second: Significance of the program		
1. Objectives		
-	To assess uses and value of different types of data to answer public health questions.	
-	To apply user-centered design techniques to determine information needs.	
-	To assess the usability and user satisfaction of an information system or application, and its utility, including effectiveness and efficiency.	
	To Produce distinguished research and studies in the fields of health informatics to achieve healthcare service quality goals.	
	To Prepare students to join graduate programs related to the specialty.	
	To Encourage and prepare students to contribute to community service programs related to the specialty.	
2. Vision		
Leadership in public health disciplines through qualifying national competencies for improving health services and supporting scientific research and community services.		

3. Mission	
Qualifying distinguished professionals in the fields of public health through high quality education, scientific research, and community services.	
4. Justifications for creating/developing the program (labor market need, graduating class from the existing program, opinion polls, etc..)	
-	<ul style="list-style-type: none"> •The health informatics program was updated to keep pace with developments in health care systems, which are witnessing an increase in the use of advanced information technology. •The program curricula have been reviewed and modified by taking into account the learning content and outcomes followed in similar study abroad programs. <p>Some courses have been added that are important to the academic program, such as courses</p> <ol style="list-style-type: none"> 1 .Bioinformatics (BHIF 352) 2 .Health Informatics Management (BHIF 364) 3 .Biomedical Informatics (BHIF 365) 4 .Health Economics and Comparative Health System (BHIF 481) <p>Instead of courses</p> <ol style="list-style-type: none"> 1 .Healthcare Database 2 (HIF 352), whose academic content has been merged with the Healthcare Database 1 course (BHIF 242) in the updated plan. 2 .Health Care System Analysis and Design (HIF 364) 3 .Computer and data transfer networks (HIF 365) 4 .Health Information Service Management (HIF 481), whose academic content has been merged with the updated course Health Informatics Management (BHIF 364) <p>The program was modified based on the recommendation of experts in health informatics and through benchmarking the health informatics program plan in international universities.</p> <ul style="list-style-type: none"> •Working to prepare research competencies by adding courses starting at advanced levels and ending with a graduation project to enhance students’ skills in scientific research through competition in scientific publishing and innovation locally and internationally. • Some courses have been combined into units and increased courses that rely on practical training and clinical practice to achieve compatible and coherent educational objectives based on the recommendations of experts.

5. Admission requirements

- The initial enrolment for the program is done once a year at the beginning of each academic year. The enrolment in the program is completely online, the students apply through the deanship of student's admission and registration website. Based on their eligibility and availability of seats, the students are then assigned to different colleges and departments. A total of 10 students are accepted in Health Informatics program every year.

Study programs and development Dept at Vice Rector's Office for Educational Affairs-2024

General Requirements for Admission: Majmaah University (MU) has central policies and procedures for admitting and following up the progress of all students throughout the university. The following are admission requirements stipulated for the admission of the new student:

- An applicant for admission must have a Saudi Secondary School Certificate - Science Section (SSSCSS) or its equivalent. The secondary school certificate should not be more than five years old, and the Rector of the University may give an exemption from this condition.
- Must have an Aptitude Test Certificate (ATC) administered by the National Center for Assessment in Higher Education.
- The minimum qualifying scores in SSSCSS & ATC tests are:(a) A total equivalent percentage of 75% based on 30% from the SSSCSS + 30% from the ATC + 40% from cumulative basic Science of SSSCSS.(
- Must not have been dismissed from another university for disciplinary reasons. When applicants exceed availability, priority is given to the students with higher grades.

6. Training Requirements (if any)

- Hospitals with a separate Health Informatics Unit
- Providing both inpatient & outpatient Health Informatics (Electronic Health) services to the patients
- Multispecialty Hospital offering treatment for all medical condition (Ortho, Cardio, Neuro, Pediatrics ... etc.)
- Equipped Electronic Healthcare outpatient services & inpatient services in various specialty

7. Requirements for obtaining the degree

To earn a Bachelor of Health Informatics degree at Majmaah University, the students must complete 135 credits which is distributed as 75 credits of compulsory program requirement courses, 4 credits of elective program requirement courses, 12 credits of university requirements courses, 6 credits of College requirements, 6 credits of research oriented graduate projects (2 Capstone Courses) and 32 credits of

preparatory year courses. After the completion of 135 credits, it is mandatory for the students to undergo compulsory clinical internships for 12 months in the hospitals.

8. Expected job facilities for graduates

-	-	Hospital and healthcare systems .
	-	Health informatics firms.
	-	Hospital and medical centers
	-	Food and Drug Administration
	-	Various health sectors
	-	Universities
	-	Medical research centers
	-	Medical diagnostic centers
	-	Criminal Research Centers

Third: The program’s relationship among other programs:

1- Programs taught at the university and related to the created or developed program

	Program name	Department/ college	Credit hours
1	Bachelor of Health Informatics (BHIF)	Public Health / College of Applied Medical Sciences	135
2			
3			
4			

2. Tracks available in the program

Not Applicable		

The study plan should be included before developing.

B - The new/developed study plan:			
1- Compulsory and optional requirements:			
Requirement	Type of Requirement	Total credit hours	Percentage of the total hours of the study plan
University	Compulsory		
	Optional	12	9.1%
College	Compulsory	2	1.5%
	Optional	4	3%
Program	Compulsory	71	62.1%
	Optional	4	3%
Graduation project		6	2.3%
Field Training		4	3%
Internship			
Other (preparatory year)		32	22%
Total number of hours and percentages		135	100%

*A separate table should be added for each track (if available).

2. University requirements: The student chooses 12 hours, divided into two groups, the first (ladder) of 4 hours, and the second group of 8 hours.

Course code	Course name	Credit hours
يختار منها الطالب 3 مقررات (6 ساعات معتمدة)		
SALM 101	Introduction to Islamic Culture	2
SALM 102	Islam and Society Building	2
SALM 103	Economic System in Islam	2
يختار منها الطالب مقرا واحدا (2 ساعتان معتمدتان)		
ARAB 101	المهارات اللغوية	2
ARAB 103	التحرير العربي	2
يختار منها الطالب مقررين 2 (4 ساعات معتمدة)		
SOCI 101	Societal Issues	2
VOW 101	Volunteering Systems	2
ENT 101	Business Entrepreneurship	2
HAF 101	Principles of Health and Fitness	2
INF 101	Computer Skills and Information Technology	2
LHR 101	Human Rights Systems	2
PLS 100	Practical Life's Skills	2
SOS 100	Social Skills	2
ULS 100	University Life Skills	2
NIHD 100	National Identity in its Historical Depth	2

3. College requirements

Course code	Course name	Credit hours
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يختار منها الطالب مقررين (4 ساعات معتمدة)

CAMS 231	Emergency healthcare	2
CAMS 234	Healthcare quality	2
CAMS 235	Healthcare Standards and Regulations	2

4. Compulsory program requirements

Course code	Course name	Credit hours
PENG 100	اللغة الانجليزية (1) English (1)	5
STA 100	إحصاء حيوي Biostatistics	3
PBIO 100	علم الأحياء البشري Human Biology Science	4
ULS 100	مهارات الحياة الجامعية University Life Skills	2
PPHS 100	فيزياء حيوية Biophysics	3
PENG 101	اللغة الانجليزية (2) English (2)	5
PENG 102	مصطلحات طبية Medical Terminology	2
PCHM 100	كيمياء حيوية Biochemistry	4
SOS 100	المهارات المجتمعية Community Skills	2
PCOA 100	العلوم الرقمية	2

	Digital Sciences	
BHIF 231	Basics of Physiology	2
BHIF 232	Fundamentals of Anatomy	2
BHIF 233	Calculus	3
BHIF 234	Introduction to Public Health Informatics	2
BHIF 235	Introduction to Hospital System and Organization	2
BHIF 236	Principles of Nutrition	2
BHIF 241	Quality improvement in health care	2
BHIF 242	Healthcare database system	2
BHIF 243	Epidemiology	2
BHIF 244	Electronic Health Records	2
BHIF 245	Applied Mathematics I	3
BHIF 246	Disease Mapping and Surveillance	2
BHIF 351	Linear Algebra	3
BHIF 352	Bioinformatics	2
BHIF 353	Public Health Policy and Society	2
BHIF 354	Information Technology Governance	2
BHIF 355	Healthcare billing and coding	2
BHIF 356	Introduction to computer programing in healthcare	3
BHIF 361	Survey of Disease and Treatment	2
BHIF 362	Computer Applications in Hospital	2
BHIF 363	Discrete Mathematics	2
BHIF 364	Healthcare Informatics Management	2
BHIF 365	Biomedical Informatics	3

BHIF 366	Healthcare Informatics	3
BHIF 471	Research Methodology	3
BHIF 472	Minor Project	3
BHIF 473	Hospital Practice I	2
BHIF 474	Information System Application and development	3
BHIF 475	Data Mining for Healthcare Management	3
BHIF 481	Health Information Service Administration	3
BHIF 482	Health Economics and Comparative Health System	2
BHIF 483	Hospital Practice II	2
BHIF 484	Major Project	3
BHIF 485	Data Security and Human Ethics	3

5. Optional program requirements: The student chooses... hours

Course code	Course name	Credit hours
يختار منها الطالب مقرر (2 ساعات معتمدة)		
BHIF 476	Image Processing	2
BHIF 477	Clinical decision support system	2
BHIF 478	Selected topics in health informatics I	2
يختار منها الطالب مقرر (2 ساعات معتمدة)		
BHIF 486	Artificial Intelligence	2
BHIF 487	Clinical Trials	2
BHIF 488	Selected topics in health informatics II	2

6. Graduation project

Course code	Course name	Credit hours
BHIF 472	Minor Project	3
BHIF 484	Major Project	3

7. Training

Course code	Course name	Credit hours
BHIF 473	Hospital Practice I	2
BHIF 483	Hospital Practice II	2

8. Distribution of courses at levels

Course code	Course name	Distribution of study units				Prerequisite/concurrent requirement number and code	Name of prerequisite/corequisite
		Theoretical	practical	training	certified		
PENG 100	اللغة الانجليزية (1) English (1)	5	0	0	5		
POCA 100	العلوم الرقمية Digital Sciences	1	1	0	2		
PBIO 100	علم الأحياء البشري Human Biology Science	3	1	0	4		
ULS 100	مهارات الحياة الجامعية University Life Skills	2	0	0	2		
STA 100	إحصاء حيوي Biostatistics	2	1	0	3		
Total		13	3	0	16		

Level Two							
Course code	Course name	Distribution of study units				Prerequisite/concurrent requirement number and code	Name of prerequisite/corequisite
		Theoretical	practical	training	certified		
PENG 101	اللغة الانجليزية (2) English (2)	5	0	0	5		
102PENG	مصطلحات طبية English for Medical Specialties	2	0	0	2		
PCHM 100	كيمياء حيوية Biochemistry	3	1	0	4		
SOS 100	المهارات المجتمعية Community Skills	2	0	0	2		
PPHS 100	فيزياء حيوية Biophysics	2	1	0	3		
Total		14	2	0	16		

Level Three

Course code	Course name	Distribution of study units				Prerequisite/concurrent requirement number and code	Name of prerequisite/corequisite
		Theoretical	practical	training	certified		
BHIF 231	Basics of Physiology	1	1		2	PBIO 126	Biology Science
BHIF 232	Fundamentals of Anatomy	1	1		2	PBIO 126	Biology Science
BHIF 233	Calculus	3			3	PMTH 112	Introduction to Mathematics (1)
BHIF 234	Introduction to Public Health Informatics	2			2		
BHIF 235	Introduction to Hospital System and Organization	2			2		
BHIF 236	Principles of Nutrition	2			2		
CAMS1	CAMS Elective Course	2			2		
MU1	MU Elective Course	2			2		
Total		15	2		17		

Level Four							
Course code	Course name	Distribution of study units				Prerequisite/concurrent requirement number and code	Name of prerequisite/corequisite
		Theoretical	practical	training	certified		
BHIF 241	Quality improvement in health care	2			2		
BHIF 242	Healthcare database I	1	1		2		
BHIF 243	Epidemiology	2			2	BHIF 234	Introduction to Public Health Informatics
BHIF 244	Electronic Health Records	1	1		2	BHIF 235	Introduction to Hospital System and Organization
BHIF 245	Applied Mathematics I	3			3	BHIF 233	Calculus
BHIF 246	Disease Mapping and Surveillance	1	1		2		
CAMS 233	Biostatistics	2			2		
MU2	MU Elective Course	2			2		
Total		14	3		17		

Level Five							
Course code	Course name	Distribution of study units				Prerequisite/concurrent requirement number and code	Name of prerequisite/corequisite
		Theoretical	practical	training	certified		
BHIF 351	Linear Algebra	3			3	BHIF 245	Applied Mathematics I
BHIF 352	Bioinformatics	1	1		2	BHIF 242	Healthcare database I
BHIF 353	Public Health Policy and Society	2			2	BHIF 235	Hospital System and Organization
BHIF 354	Information Technology Governance	1	1		2	BHIF 244	Electronic Health Records
BHIF 355	Healthcare billing and coding	1	1		2	BHIF 241	Quality improvement in health care
BHIF 356	Introduction to computer programing in healthcare	2	1		3		
MU2	MU Elective Course	2			2		
Total		12	4		16		

Level Six

Course code	Course name	Distribution of study units				Prerequisite/concurrent requirement number and code	Name of prerequisite/corequisite
		Theoretical	practical	training	certified		
BHIF 361	Survey of Disease and Treatment	2			2	BHIF 246	Disease Mapping and Surveillance
BHIF 362	Computer Applications in Hospital	1	1		2	BHIF 356	Introduction to computer programing in healthcare
BHIF 363	Discrete Mathematics	2			2	BHIF 351	Linear Algebra
BHIF 364	Healthcare Informatics Management	1	1		2		
BHIF 365	Biomedical Informatics	2	1		2	BHIF 352	Bioinformatics
BHIF 366	Healthcare Informatics	2	1		3	BHIF 354	Information Technology Governance
CAMS2	CAMS Elective Course	2			2		
MU4	MU Elective Course	2			2		
Total		14	4		18		

Level Seven

Course code	Course name	Distribution of study units				Prerequisite/concurrent requirement number and code	Name of prerequisite/corequisite
		Theoretical	practical	training	certified		
BHIF 471	Research Methodology	1	2		3	BHIF 246	Disease Mapping and Surveillance
BHIF 472	Minor Project		3		3	BHIF 356	Introduction to computer programing in healthcare
BHIF 473	Hospital Practice I			2	2	BHIF 351	Linear Algebra
BHIF 474	Information System Application and development	2	1		3		
BHIF 475	Data Mining for Healthcare Management	2	1		3	BHIF 366	Healthcare Informatics
BHIF 47*	Department Elective Course	1	1		2	BHIF 366	Healthcare Informatics
MU5	MU Elective Course	2			2		
Total		8	8	2	18		

Level Eight

Course code	Course name	Distribution of study units				Prerequisite/concurrent requirement number and code	Name of prerequisite/corequisite
		Theoretical	practical	training	certified		
BHIF 481	Health Information Service Administration	2	1		3	BHIF 475	Data Mining for Healthcare Management
BHIF 482	Health Economics and Comparative Health System	2			2	BHIF 474	Information System Application and development
BHIF 483	Hospital Practice II			2	2	BHIF 473	Hospital Practice I
BHIF 484	Major Project		3		3	BHIF 472	Minor Project
BHIF 485	Data Security and Human Ethics	2	1		3	BHIF 475	Data Mining for Healthcare Management
BHIF 48*	HIF Elective Course	1	1		2		
MU6	MU Elective	2			2		
Total		9	6	2	17		