# Akkreditierungsagentur im Bereich Gesundheit und Soziales Accreditation Agency in Health and Social Sciences



# **Assessment Report**

for the Application of
the Inaya Medical Colleges
College of Health Information Systems,
Department of Health Informatics
for the Accreditation of the Study Program "Health Informatics",
Bachelor of Health Informatics

AHPGS Akkreditierung gGmbH

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February 15, 2024

<sup>&</sup>lt;sup>1</sup> The experts in italics did not participate in the site visit but evaluated the study program on paper beforehand.

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#### 1 Introduction

The Accreditation Agency in Health and Social Sciences (AHPGS) is an interdisciplinary and multi-professional organization. Its mission is to evaluate Bachelor and Master' programs in the fields of health and social sciences, as well as in related domains such as law or economics. By conducting accreditation and recommendation procedures, the AHPGS contributes to the improvement of the overall quality of teaching and learning. However, the higher education institutions remain responsible for implementing the quality assurance recommendations made by the AHPGS. Since 2004, the AHPGS has been a member of the European Consortium for Accreditation (ECA). In 2006, the AHPGS also joined the ENQA and became a member of the International Network for Quality Assurance Agencies in Higher Education (INQAAHE) in 2009. Since 2012, the AHPGS has been a member of the Network of Central and Eastern European Quality Assurance Agencies in Higher Education (CEENQA). Furthermore, the AHPGS has been listed in the European Quality Assurance Register (EQAR) since 2009.

In carrying out accreditation procedures, the AHPGS follows the requirements of the Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG). In the present case, the decision regarding the accreditation of the study program is carried out by the AHPGS Accreditation Commission based on the following accreditation criteria<sup>2</sup>:

- 1. Program aims and learning outcomes
- 2. Curriculum design
- 3. Personnel
- 4. Facilities and learning resources
- 5. Study process and student assessment
- 6. Program and quality management

<sup>&</sup>lt;sup>2</sup> Approved by the AHPGS Accreditation Commission

# I. The University's application

The AHPGS verifies the sufficiency of the documents submitted by the University, namely the Self-Evaluation Report and its corresponding annexes. These are to fulfil the assessment spheres as well as the AHPGS standards. With these information, the AHPGS produces a summary (see Sections 2-5), which is to be approved by the University and subsequently made available for the expert group, together with all other documentation.

### II. Written review

The main documents are reviewed by the expert group assigned by the accreditation commission of AHPGS. This is done in order to verify the compliance of the study program with the applicable accreditation criteria. Consequently, the experts comprise a short summary regarding the study programs.

# III. On-site visit (peer-review)

The experts carry out a site visit at the University. During this visit, discussions are held with members of the University, which include University and department administration, degree program management, teachers, and students. These discussions provide the expert group with details about the study program beyond the written documents. The task of the experts during the on-site visit is to verify and evaluate the objectives of the program and its projected study results, its structure, staff, material resources, course of studies, methods of assessment (selection of students, assessment of achievements, students' support), as well as the program management (program administration, external assurance of study quality).

Following the site visit, the expert group writes the Expert Report. This report is based on the results of the visit, the written review of the study programs, and the documents submitted by the University. Finally, the report is made available to the University for the opportunity to issue a response opinion.

The Expert Report as well as the University's response opinion – together with the provided documents – is submitted to the accreditation commission of the AHPGS.

### IV. The AHPGS accreditation decision

The accreditation commission of the AHPGS examines the documentation made available in the process of application, namely the University's self-evaluation report, its annexes, the summary comprised by the AHPGS, the Expert Report, as well as the University's response opinion. These documents represent the foundation for the commission's decision regarding the recommendation for accreditation of the study program. Consequently, the decision – together with all other documentation – is forwarded to AHPGS Accreditation Commission for it to reach a decision regarding the accreditation of the study program.

# 2 Information about the University

Inaya Medical College (IMC) is a private higher education institution, located in the upper north area of Riyadh, Kingdom of Saudi Arabia, which was established in 2011. IMC is committed to provide students access to education, research as well as community services, which will have a positive impact on the economic, social and cultural vitality and health and well-being of the Kingdom of Saudi Arabia (KSA). Currently, IMC has 10 programs from the three Colleges (College of Health Information Systems, College of Applied Medical Sciences, College of Nursing) with 1.735 students in total.

The following table presents the number of students in each program at IMC:

Study Program	Registered Students
Clinical Laboratory Sciences	204
Dental Health Care	46
Nuclear Medicine Technology	46
Nursing	540
Radiological Sciences	138
Biomedical Technology	43
Respiratory Theory	287
Emergency Medical Services	295
Health Information Systems	67
Health Administration	69
	1.735

The "Health Informatics" program was established in 2017 to cover the need for Health Informatics specialists who are in great demand in all health institutions and specialized centers. Currently, there are 67 students in the "Health Informatics" program. This program is the only one within the department of "Health Informatics".

#### 3 Overview

### 3.1 Procedure-related documents

The Self-Evaluation Report for accreditation (without the awarding of the official seal of the Accreditation Council of the Foundation for the Accreditation of Study Programs in Germany) of the above-mentioned study programs (hereinafter the SER) of the Inaya Medical College (hereinafter the University or IMC) was submitted to the Accreditation Agency in Health and Social Science (AHPGS) in electronic format on November 30, 2022. The decision regarding the accreditation of a study program is carried out by Accreditation Commission of AHPGS. The contract between the IMC and the AHPGS was signed on March 14, 2022.

On April 28, 2023 the AHPGS forwarded the open questions and explanatory notes (hereinafter OQ) pertaining to the Application for accreditation for the study programs to the University. On May 23, 2023, the University submitted the answers to the open questions and explanatory notes (hereinafter AOQ) to the AHPGS in electronic format.

The application documentation submitted by the IMC follows the outline recommended by the AHPGS. Along with the application request towards accreditation of the Bachelor study program "Health Informatics", the following additional documents can be found in the application package (the documents submitted by the University are numbered in the following order for easier referencing):

Specific documents for the study program "Health Informatics"

Annex	Description
1	Program Specifications
2	Study Plan
3	Module Descriptions
4	Internship Logbook
5	Teachers' CV
6	Course specifications
7	Annual Student Research Day

Alongside the study-program-specific documents, the following documents pertain to all study program submitted for external evaluation:

Annex	Description
Α	Study & Examination Bylaws
В	Credit Transfer Committee
С	Quality Manual
D	Academic Advising Policy
Е	Student Handbook
F	Employment Policy
G	Recruitment, Selection & Hiring Policy
Н	Professional Development Program Policy
I	Professional Development Report 2020/2021
J	Library Policy
K	Budget Policy
L	Organigram
М	Final License
N	Statute & Regulation of IMC
0	Internship Policy
Р	Assessment Policy
Q	Specification & Reports Policy
R	IMC Research Plan 2012-2022
S	Scientific Research Unit Policies
T	Registration and Graduation Policy

The application, the open questions (OQ) and the answer to the open questions (AOQ) as well as the additional documents build the basis for the present summary. The layout bears no significance, as it solely reflects the agreed standard within the University.

# 3.2 Structural data of the study program

University	Inaya Medical College	
Faculty/Department	College of Health Information Systems	
Department of Health Informatics		

Cooperation partner	<ul> <li>The ministry of Education</li> <li>The ministry of Health</li> <li>Government Hospitals (e.g. King Khalid Hospital, Specialized Medical Center and Military Hospital)</li> </ul>	
Title of the study program	"Health Informatics"	
Degree awarded	Bachelor of Health Informatics	
Form of studies	Full-time, on-campus	
Organisational structure	Sunday to Thursday from 08:00 am until 11:00 pm	
Language of Studies	English	
Period of education	Eight semesters (common first year included) + one-year rotary internship)	
Credit Points (CP) according to the European Credit Transfer System (ECTS)	131 Credit Hours (= 273 ECTS)	
Hours/CH	1 hour of lecture = 1 Credit Hour 2 hours of laboratory = 1 Credit Hour	
Workload	Total: 8,073 hours Contact hours: 1,583 hours Individual work: 3,930 hours Practice: 480 hours Internship: 2,080 hours	
Launch date of the study program	2017	
Time of admission	Twice a year at the beginning of each academic semester	
Number of available places on the program	125	
Number of enrolled students since 2017	67	

Particular enrollment	- Secondary School Certificate Science
conditions	Section
Tuition fees	40,000 SAR per year (= 9,584 Euro)

Chart 1: Structural data of the study program

# 4 Expert Report

The site visit was carried out on December 11-12, 2023, according to the previously agreed schedule. Representatives from the head office of AHPGS accompanied the expert group.

The expert group met on December 10, 2023 for preliminary talks prior to the site visit. They discussed the submitted application documents and the results of the written evaluation as well as questions that had been raised before. Furthermore, they prepared the plan of the site visit at the University.

During the on-site visit, experts conducted discussions with the University management, representatives of the College of Health Information Systems, the Chair, Vice Chair and the teaching staff of the program "Health Informatics" as well as with students currently studying in the program. Furthermore, they inspected the learning premises, such as lecture halls, seminar classrooms, library, and computer classes. Moreover, experts had the opportunity to examine the equipment and the capacity of the laboratories.

The Expert Report is structured based on the "Standards and Guidelines for Quality Assurance in the European Higher Education Area" (ESG), established by the European Association for Quality Assurance in Higher Education (ENQA). The Study Program will be described and analyzed in a comprehensive manner below. The documents submitted by the University, the Experts' feedback to the documents, the observations made during the on-site visit, the results of discussions with the representatives of the University, College of Health Information Systems and the Department of Health Informatics serve as the foundation for the statements made in the expert report.

# 4.1 Program aims and their implementation

# Summary

The "Health Informatics" program is dedicated to help students analyze, design and develop health information systems that enhance operational efficiencies and strategic goals of different organizations. Students get prepared to be specialists who possess the knowledge, skills and attitudes to success as health informatics professionals (SER 1.3.1).

With regard to scientific qualifications, the study program "Health Informatics" aims to educate and prepare competent health informatic specialists, who are able to deliver professional practices by integrating evidence-based knowledge and practical skills. Therefore, students will be prepared to integrate theoretical knowledge and practical skills underpinning paramedic practice to solve real relates problems in healthcare information system. In order to embrace the social responsibility of the graduates of the "Health Informatics" program, the students are expected to critically evaluate and continuously monitor the impact of health information systems and technology provided, as well as to plan and implement various strategies to continuously improve its quality. The graduates should also be able to critically analyze themselves, the standards of care and the current research practices (SER 1.3.2).

According to the National Qualifications Framework (NQF), the following learning outcomes have been identified in the three domains "Knowledge", "Skills" and "Values" (SER 1.3.3):

# Knowledge:

- Recognize informatics theories, basic terms related to health information systems, information and communication technology applications in healthcare domain.
- Acquire the knowledge and skillsets needed within the health informatics field of study, encompassing health information technology, health information management, and information systems pertaining to healthcare organizations and their impact on the population and healthcare environment.

- Acquire the skills necessary to contribute to a strategic and tactical approach in utilizing health information systems to improve healthcare quality.
- List the steps required to analyze health information system problems and define appropriate computing solutions.
- Describe the impact of health policies, laws, and legislation on the implementation of health information systems.

### Skills:

- Analyze health information system problems through the application of resources, knowledge and technical skills.
- Evaluate the efficiency and effectiveness of the adoption and implementation of information systems and communication technologies in the healthcare domain.
- Utilize the knowledge, skills and concepts of health information technology using evidence-based practice methodologies.
- Demonstrate proficiency in written, oral and visual communication skills for scientific communications.
- Perform health informatics research and analyze data.

# Values

- Act ethically and responsibly with high moral standards in personal and public forums using all forms of data and technology.
- Enhance leadership and decision-making capabilities to manage medical data and prepare for a successful career in the healthcare industry.
- Contribute to the development of team oriented and collaborative environments in healthcare organizations.

As the University states, the healthcare sector in Saudi Arabia is experiencing significant growth due to the country's rapidly increasing population, currently estimated at 34.8 million with an annual growth rate of 1.95%. As the demand for healthcare services rises, there is a need for Saudi Health Informatics specialists. To address this demand, the policy of the Kingdom of Saudi Arabia is focused on employing Saudi nationals in the health services. Both the Ministry of Health and the Ministry of Education have developed strategies to develop and train Saudi citizens in various health fields (SER 1.4.2).

Upon graduation, students will possess decision-making, problem-solving, management, and research skills, enabling them to function effectively as part of a healthcare team. The Health Informatics program opens up various career paths for graduates, including roles such as Health Informatics Specialist, Clinical Informatics Analyst, Health Informatics Consultant, EHR Implementation Manager, Health Information Technology Project Manager, Chief Medical Information Officer, Clinical Data Specialist, and Health Information Manager (SER 1.4.1).

# **Judgement**

In the strategic plan of Inaya Medical College, there is a transition in progress to become a university in the coming months. All stakeholders are actively involved in shaping this strategy, which emphasizes community service, research, and the renewal of policies to meet institutional accreditation standards, which will be conducted by NCAAA in 2024. The institution is gearing up to establish itself as a university by introducing new colleges, including the implementation of the College of Nursing. In order to be able to become a university, it is recommended by the experts that IMC prioritize increased transparency in reporting graduation rates and implementing robust staff retention strategies. This could involve regularly disseminating accurate graduation statistics to all stakeholders, fostering accountability and trust. Additionally, IMC should formulate a comprehensive strategic plan for the development of academic staff, setting specific targets for the recruitment and advancement of full professors, lecturers, and other academic positions. Furthermore, to promote a culture of research, IMC should explore and establish mechanisms that provide structured time for research activities. This might include introducing opportunities for faculty to apply for research terms or employing research assistants, fostering an environment conducive to impactful scholarly endeavors.

As explained by IMC, a new research lab with an electron microscope is being incorporated. Despite facing challenges such as a shortage of teaching staff due to the specialized nature of some programs, the college has outlined action plans and key performance indicators (KPIs) related to community service. Future plans include the introduction of more Master's programs to diversify academic offerings. These Master's programs play a pivotal role in fostering research endeavors at the college, contributing significantly to the institution's research output. The experts positively acknowledge that the first Master study programs

are going to be implemented in the area of Respiratory Therapy, Nucelar Medicine Technology as well as Clinical Laboratory Sciences in 2024. The experts recommend retaining this strategy and also implementing the Master's programs for the other study programs.

The experts inquire about the advantages of private colleges over governmental universities. As IMC explains, the decision-making process is faster, allowing for more dynamic and easy implementation of changes compared to governmental universities. Additionally, they can approach admissions holistically, considering the overall enrollment rather than focusing solely on specific programs. This approach allows IMC to continue maintaining programs with lower enrollment numbers.

From the experts' point of view the Bachelor study program "Health Informatics" focuses on specific qualification objectives. These objectives cover professional and interdisciplinary aspects and particularly refer to the domain of academic competences, competences necessary for a qualified employment, skills of social commitment and personal development.

### **Decision**

From the experts' point of view, the requirements of this criterion are fulfilled.

# 4.2 Structure of the study program

### Summary

The department aims to train students to become highly skilled professional health informatics specialists. The curriculum is carefully designed to provide students with extensive and up-to-date theoretical knowledge, drawing from various relevant sources, and aligning with national and international standards and guidelines, as well as the practices of the Saudi Council for Health Specialties (SCFHS). The program adopts a multidisciplinary educational approach to foster personal growth and professional development among students (SER 1.4.1).

The program comprises 47 modules, out of which 26 are studied within the common first year as well as Islamic, Arabic and basic medical sciences modules and 21 are health informatics specialty modules. There are no elective modules. There are between five and seven modules in total provided for each semester.

All modules have to be completed within one semester. Currently, there are no semesters offered as a period for exchange programs. Nevertheless, the "Health Informatics" program allows students to take part in mobility between colleges/universities inside and outside the Kingdom of Saudi Arabia. Students are admitted under the transfer policy according to each university eligibility requirements.

# The list of modules offered:

Nr.	Title	Sem.	СН
BIOS101	Biostatistics	1	2
COMM101	COMM101 Communication Skills		1
ORI000	Orientation	1	0
ISLM105	Medical Jurisprudence	1	2
COMP101	Computer for Health Sciences	1	2
ARAB101	Arabic Language	1	2
ENGL101	English Language (I)	1	8
			17
BIOL101	Biology	2	3
ETH101	Ethics in Health Care	2	1
PHYS101	General Physics	2	3
CHEM101	Introduction to Chemistry	2	3
ENGL102	English Language (II)	2	4
ENGL105	Medical Terminology	2	3
			17
HSA231	Introduction to Health Services Administration	3	2
ISLM106	Family in Islam	3	2
PHS231	Introduction to Public Health and Epidemiology	3	4
BMS234	Medical Ethics	3	2
BMS235	Pathology and Pharmacology	3	3
CLS221	Anatomy and Physiology	3	4
HINF231	Introduction to Health Informatics	3	2

			19
HSA353	Health Organizational Behavior	4	3
ISLM107	Economic System in Islam	4	2
ARAB103	Writing In Arabic Language	4	2
HINF241	Introduction to Programming	4	4
HINF242	Comparative Healthcare Systems	4	3
HINF243	Health Information Systems	4	3
			17
ISLM108	Human Rights	5	2
PHS351	Global Health	5	2
HINF351	System Analysis and Design	5	3
HINF352	Database Management Systems	5	3
HINF353	Electronic Health Records	5	3
HINF354	Health Data Structure and Standards	5	3
			16
HSA364	Health Quality and Patient Safety Management	6	2
HSA473	Health Care Economics	6	2
HINF361	Computer Communication Networks	6	3
HINF362	Decision Support Systems	6	3
HINF363	Research Methods in Health Informatics	6	4
HINF364	Health Information Privacy and Security	6	3
			17
HINF471	Selected Topics on Health Informatics	7	3
HINF472	Web Technologies for Health Informatics	7	3
HINF473	Project Management	7	3
HINF474	Health Informatics Project 1	7	3
HINF475	Medical Coding and Reimbursement	7	3
			15
PHS481	Interpersonal Development	8	2

HINF481	Seminar in Health Informatics	8	2
HINF482	Health Informatics Project 2	8	3
HINF483	Healthcare Analytics and Data Mining	8	3
HINF484	Modern Application Development	8	3
			13
	Total:		131

The module description/catalogue covers the following aspects: module number and title, description of the content, level/semester, credit hours (divided in lecture hours, practical hours and self-study hours), language of instruction, learning outcomes/goals/skills, content of the module, examination methods (see Annex 04).

The structure of the study program is described as follows (SER 1.3.4):

Semester 1-2: The Common First Year (CFY) is designed to help students during their transition from high school to college life. These modules aim to lay down the foundation of the student's learning through communication in English, information technology and science courses such as Physics, Chemistry and Biology. The CFY develops the mental capabilities of the first-year students and provides them with technical, linguistic, cognitive and thinking skills through a progressive environment that stimulates learning and inspiration.

Semester 3-4: Basic medical sciences courses introduce students to unique medical concepts essential for mastering core skills and competencies in Health Informatics. Additionally, specific courses are provided to acquaint students with the foundational knowledge and skills required for the Health Informatics profession.

Semester 5-8: During these semesters, students are solely under the supervision of the Department of Health Informatics. After completing all courses at the IMC campus in eight semesters, students undergo a one-year rotary internship without earning credits. The duration of the internship is determined by the department specializing in a specific area of health informatics. Students need to fill out a form, signed by the themselves, the head of the department, and the

admission and registration supervisor, and obtain approval from the dean before commencing their internship at the chosen training entity. In case a student faces challenges during any stage, whether it be due to an assessment failure or excessive absenteeism, they may have the opportunity to retake the assessment with the recommendation of the department head and dean's approval. In situations where students are absent with an acceptable excuse, they are required to compensate for the absence duration at the end of the internship year. Furthermore, students are subject to evaluation by their training entity supervisor, and subsequently by the college using a specific evaluation form to gauge their performance and progress during the internship period. By providing an experiential and integrative learning environment, the internship program aims to equip Health Informatics students with practical skills, industry insights, and professional acumen, preparing them well enough to contribute effectively to the healthcare sector upon graduation (SER 1.2.6).

The successful completion of the internship is a prerequisite for obtaining the Bachelor degree and completing the licensing procedures with professional bodies in the Kingdom of Saudi Arabia. In Saudi Arabia, obtaining a license from the Saudi Commission for Health Specialties (SCH) is mandatory for students to work in any health institution (SER 1.3.4).

In the "Health Informatics" program, the curriculum is designed to integrate theory and practice while developing both academic and professional competencies. The teaching and learning methods focus on active learning and skill development rather than simply transmitting information. Various strategies, such as interactive lectures, role play, group work, case studies, simulations, problem-based and practice-based learning, presentations, class discussions, and media-enhanced electronic learning, are employed to achieve the module's objectives and align with the learning outcomes and assessments. These activities and methodologies are closely linked to the program's objectives and assessment strategies, ensuring students' competence in both academic and professional aspects (SER 1.2.4).

As the University states, students are introduced to research concepts through specific courses starting from level 6. These courses (e.g., HINF 363, HINF 474, HINF 482) aim to familiarize students with various research methods and promote evidence-based practice during their internship. Additionally, students

have the opportunity to voluntarily participate as undergraduate student cooperators in faculty-led projects. They are also invited to take part in an annual college-wide research competition, as well as attend seminars, conferences, and workshops outside the campus. These initiatives encourage students to actively engage in research and contribute to the field of Health Informatics (SER 1.2.7).

The classrooms are equipped with smart boards connected to the internet, providing a dynamic and interactive learning environment with multimedia capabilities. Google Classroom and Google Meet are used for sharing class materials, assignments, and for the communication between students and faculty. Medgate, the college website portal, allows students to access course details, timetables, assessment scores, admission policies, online applications, course registration, and graduation documents (SER 1.2.5).

The "Health Informatics" program allows students to take part in mobility between colleges inside the Kingdom and in international universities. Students are accepted according to the eligibility criteria of each college/ university according to the transfer policy (SER 1.2.9).

## **Judgement**

The Bachelor study program "Health Informatics" has a course-based structure and a course-related examination system. Descriptions of the courses are embedded within the course specifications. These course specifications contain information on the title, total credit hours, name of the instructor, office hours, phone number and mail address, class schedule, textbooks, description of the course, student learning outcomes, exams, weekly outline of curriculum as well as the schedule of assessments.

The combination and succession of the courses of the study program are consistent with the specified qualification objectives (described earlier). It is assured that students receive the support and guidance they need for the organization and accomplishment of assignments and the learning process in general. Nevertheless, the experts see a great chance in the interdisciplinary cooperation with other degree programs, including from the College of Applied Medical Sciences (e.g. Radiologic Sciences), not only in the first common year but also in the course of the curriculum. These interdisciplinary modules could also be offered in the form of elective modules. Elective modules could also be

introduced to enable students to specialize in certain areas of health informatics during their studies.

As the IMC states, throughout the internship, students are exposed to a variety of departments within different healthcare organizations, such as the General Directorate of Health Affairs at the Ministry of Health, Primary Health Care Centers, Public Hospitals and Medical Cities, Health Information Management Departments, Human Resource Departments, Finance Departments, Hospital Administrative Departments, Quality Management Departments, Medical Records Departments, and IT Departments. To successfully pass the internship, students must complete all stages outlined in the accredited academic plan provided in the Health Informatics internship Log Book and pass assessments specified by the department.

The experts acknowledge the very detailed course files with its contents and aims, which allows a high level of transparency. In the experts' opinion, the structure of the curriculum seems to make the workload manageable. However, digital lectures and encouragement of self-organized learning methods could enhance accessibility and student engagement. Therefore, the experts recommend integrating this more strongly into the curriculum.

### **Decision**

From the experts' point of view, the requirements of this criterion are fulfilled.

# 4.3 Admission and Feasibility

# **Summary**

The admission requirements for the Health Informatics course are as follows:

- Applicants must hold a Saudi Secondary School Certificate Science Section (SSSCSS) or its equivalent from inside or outside the Kingdom of Saudi Arabia, not more than five years old. Exemptions may be considered by the College Council based on satisfactory explanations.
- Candidates must have a good conduct record and should not have been dismissed from another university for disciplinary reasons.
- Successful completion of any required examination or personal interviews, as approved by the College Council.
- Applicants must be physically fit and healthy.

- Approval from the employer is required if the candidate is currently employed by any government or private agency

In case of limited availability, priority is given to students with higher grades.

Academic counseling and student support are integral to the "Health Informatics" program, and various forms of assistance are provided to students from the time of admission (SER 1.6.8):

- 1. Program Orientation: At the beginning of each academic year, both faculty and students participate in an orientation meeting to become familiar with the range of support services available and receive essential training.
- Academic Advisor Consultation: Each student is assigned an academic advisor who serves as a point of contact for consultation and advice throughout their studies.
- Office Hours: Instructors display their available office hours in the course syllabus and on notice boards, allowing students to visit them for additional support.
- 4. Open-Door Policy: An open-door policy is followed by the Heads of Department and the Vice Dean for Academic Affairs, making them accessible to students seeking guidance.
- 5. Academic Advisory Committee: For students facing academic warnings, a specialized committee closely monitors their performance, assesses their status, and implements a reinforcement plan to help them improve.
- 6. Student PDU Workshops: IMC hosts workshops and seminars to equip graduating students with career-related skills and enhance their employability, providing opportunities to interact with potential employers.

## **Judgement**

The admission policies and procedures along with the requirements are properly documented and made publicly available. The experts determine the admission procedures and requirements to be appropriate, as they correspond to the standards of the study program. As the experts learned in discussions on site, most students come to the program as so-called "bridging students" and therefore bring a previous education in the form of a diploma. As the majority of students continue to work, the college makes it possible to combine studying and working with evening lectures, for example.

The experts confirm that the University takes good measures to guarantee the feasibility of the study programs despite the high workload. The organization of the education process ensures the successful implementation of the study programs. The college prioritizes student support through a range of scholarship options. These include discounted tuitions for programs with lower enrollment, academic scholarships based on GPA, specific scholarships for siblings within the college, and additional support such as orphan discounts. The flexibility of fee payment, including installment plans, is designed to accommodate various financial situations, which the experts positively acknowledge.

On site, it became obvious that the teaching staff follows an "open-door-policy". In the first week of each year, students undergo an orientation which familiarizes them with available support services and where the colleges and departments are introduced. As another support mechanism, an academic advisor is responsible for a small number of students from the beginning of each semester. Students are supported through the advisors with their registration process, selecting a study program, financial and personal issues and their performance during the semester. If the students have problems besides academic issue, a social support unit is installed at the University. The experts find the support services at the University to be exemplary and conducive to the health and success of the student body.

#### **Decision**

From the experts' point of view, the requirements of this criterion are fulfilled.

# 4.4 Examination system and transparency

### **Summary**

The "Health Informatics" program uses various assessment methods to evaluate students' knowledge, skills, and clinical competency. The choice of assessment depends on whether it is for formative (diagnosis, feedback, and improvement) or summative (promotion and certification) purposes, or both. All modules have specific learning outcomes aligned with program outcomes, and faculty members utilize multiple assessment measures, including assignments, quizzes, mid-term and final exams, projects, and presentations. Students undergo formative assessments throughout the semester, which include quizzes, class presentations, group discussions, and assignments. Summative assessments

consist of the first and second assessment and one final examination at the end of the semester (SER 1.2.3).

If students are absent from exams, such as the midterm, practical, or final one, they can submit an application to the office of the student affairs department. This application should include supporting documents that provide a valid excuse for the absence. The Students' Rights and Responsibilities Committee reviews these applications.

If the absence excuse is approved by the Vice Dean's office, a make-up quiz will be scheduled for the student to compensate for the missed exam. This allows students with legitimate reasons for their absence to have an opportunity to complete the assessment and demonstrate their knowledge and skills.

The exam schedule during the study program is as follows:

- First assessment: Held in the 5th 6th week of the semester.
- Secon assessment: Scheduled for the 11th 12th week of the semester.
- Final exam: Scheduled for the 17th 19th week of the semester.

The following table shows the grade distribution:

Score	Grade	Course Grade
95 - 100	A+	Excellent Plus
90 - less than 95	A	Excellent
85 - less than 90	B+	Very Good Plus
80 - less than 85	В	Very Good
75 - less than 80	C+	Good Plus
70 - less than 75	C	Good
65 - less than 70	D+	Pass Plus
60 - less than 65	D	Pass
Less than 60	F	Fail

The program provides essential information to students through orientation, the IMC student handbook, and the Medgate platform. Medgate offers academic details like requirements, credits, attendance, grades, and the academic plan.

# **Judgement**

The University uses a continuous assessment process to ensure the quality of education for its students. The study programs have a course-related examination system. Its implementation, including the grading system, course load regulations, repetition of courses and exams is regulated and transparent

for the students. From the experts' point of view, the examination serves to determine whether the envisaged qualification objectives have been achieved. These examinations are focused on students' knowledge and competences. Nevertheless, in the experts' opinion, the study program includes a very high number of exams which causes a high workload not only for students but also for the teaching staff. The transparent information of examination methods and of the examination schedule at the beginning of each term makes the high number of assessments during and at the end of each semester manageable. An examination can be repeated once. Students who cannot attend the test due to health issues or other unforeseen circumstances are allowed to take the test on another agreed day. If the examination is failed twice, students must redo the course in the following semester. Thus, the experts conclude that the examinations, although numerous, serve to determine whether the envisaged qualification objectives have been achieved or not and are focused on students' knowledge.

The requirements to students' performance in examinations are regulated and published in the course specifications. The frequency of examinations, as well as their organizations, is appropriate.

From the experts' point of view, the relevant information concerning the study program, the process of education, the admission requirements and compensation regulations are documented and published. However, ensuring inclusivity for students with disabilities or chronic illnesses, providing repeatable exams, and compensatory measures are essential for an equitable learning environment. Therefore, the experts recommend to implement compensation regulations for students with difficulties.

### **Decision**

From the experts' point of view, the requirements of this criterion are fulfilled.

# 4.5 Teaching staff and material equipment

## Summary

The workload in the "Health Informatics" program is managed by four assistant professors and one lecturer. The College has additional staff for the modules taught in the first common year, the college and basic sciences modules as well

as special arrangements for the modules common between the health informatics and health administration. The current faculty to student ratio is 1:17.

As the University states, the Health Informatics program has faced challenges in recruiting Ph.D. holders in the field over the past 3 years due to the rarity of this specialty. Despite continuous announcements on the college website, no Ph.D. holders in health informatics have been recruited during this period. However, there is a high demand for Ph.D. holders in this field, and the program is actively seeking part-time Ph.D. holders to supervise advanced courses in collaboration with the Human Resource department (SER 2.1.1).

According to the Ministry of Education regulations, the workload for faculty members are as follows:

Academic Rank	Credits per week
Instructor	20
Lecturer	18
Assistant Professor	14
Associate Professor	12
Professor	10

The recruitment and appointment process for teaching positions at Inaya Medical College is well-structured and compliant with Ministry of Education and Ministry of Human Resources regulations. Available vacancies are posted on the college website and newspapers, providing complete job descriptions and required qualifications. The selection process involves initial application reviews to determine which candidates are meeting the minimum qualifications. Shortlisted applicants are then interviewed by a committee chaired by the Dean and composed of the Vice Dean, Head of Department, and a human resources representative. During the interview, candidates present a 20-minute topicrelated presentation, evaluated using a rubric developed by the HR department. Successful candidates receive an offer/appointment letter outlining their employment terms, including compensation and benefits. New hires are required to present valid eligibility documentation before their first day of employment. An orientation session is held to introduce new faculty members to the work environment, college and department facilities, and main rules and regulations. Professional development workshops organized by the Professional Development Unit (PDU) are held periodically. These workshops aim to improve

the knowledge and skills of the faculty, staff, and students at four levels: administration, faculty, employees, and students. Topics covered include course design, new teaching methodologies, authentic assessment, class management, infection prevention, and more. The college encourages its staff members to regularly attend these workshops for continuous improvement and quality job performance (SER 2.1.3).

The Health Informatics program has several coordinators responsible for different aspects of the program. These coordinators include:

- Student's Registration and Timetabling Coordinator (faculty member)
- Quality Assurance and Accreditation Coordinator (faculty member)
- Courses Coordinator (faculty member)
- Internship Coordinator (faculty member)

Each coordinator plays a crucial role in ensuring the smooth functioning and quality of the Health Informatics program (SER 2.2.1).

The Health Informatics Department is located within the College building and shares common facilities with other departments. The labs and classrooms are spacious, easily accessible, and situated on the ground and first floor. Faculty offices are well-equipped and comfortable, providing a suitable work environment. Classrooms are equipped with modern educational technology, including computers with internet access, whiteboards, and projectors. They can accommodate at least thirty students. Safety measures are followed in all laboratories to protect both students and equipment.

The Basic Skills Labs are equipped with software and hardware necessary for students to acquire fundamental informatics skills. These facilities support the practical training requirements of the courses and contribute to achieving the program's educational objectives and student outcomes (SER 2.3.1).

To support the curriculum and research of faculty and students, IMC has established a centrally located College library. The library offers a conducive learning environment, internet access, and quiet study areas.

The library ensures free and open access to information in both print and electronic formats for all members of the College community. Electronic resources are available 24/7 off-campus and 8 hours a day on-campus. Access to databases can be obtained from any computer within the campus. Students,

faculty, and staff can access databases remotely using individual passwords/username provided via the IMC website. Additionally, access to ProQuest databases and the Saudi Digital Library is available to students and faculty (SER 2.3.2).

Since its establishment, IMC has developed financial accounting policies and procedures in line with the requirements for private universities in Saudi Arabia. These policies ensure effective control over financial and accounting processes. The measures include organized financial planning and budgeting, stringent monitoring and follow-up procedures, proper accounting for all income and expenses with supporting vouchers and invoices, and a tracking system for accounting transactions.

The "Health Informatics" Program's annual budget is prepared by the department chairperson, in consultation with program council members. The budget aligns with the program's strategic and operational goals, which in turn are in line with IMC's strategic goals and operational plan. The budget, along with the plan, is reviewed, evaluated, and approved by both the department and college councils (SER 2.3.4).

### **Judgement**

New teaching staff is thoroughly briefed about the programs and their teaching responsibilities before they start teaching. Overall, the teaching and academic staff at the Inaya Medical College shows a very high level of commitment and potential for the execution as well as further development of the study program they are responsible for. The experts conclude that there is a strong corporate identity and positive group dynamics among the University and the faculty administration. As motivations to teach at the Inaya Medical College, the faculty cites a positive and supportive environment. There is a strong emphasis on staff development, with support for academic promotions. The comprehensive health insurance, favorable conditions for individuals with family responsibilities, and promising career opportunities contribute to a conducive work environment.

The experts find the amount of human resources allocated to the program to be sufficient to carry out its functions. The teaching staff is well qualified and in possession of academic and technical credentials and experience adequate to their tasks.

As the teaching staff explains, at IMC undergo a thorough approval process for their research proposals by the Research Ethics Committee. There's a clear funding policy in place, providing support for approved research projects. The College supports conference attendance, and there's a collaboration with King Saud University for a promotion policy, where members apply to their scientific council. Notably, there has been a substantial publication rate in the last year, with 24 papers and 85 research works published.

As a whole, the University informs its employees about opportunities for personal and professional development transparently, and actively encourages their participation in workshops, training courses and conferences intended to improve their abilities, which is confirmed during the talks with the staff on site.

The experts visited the premises of the College of Health Information Systems, where the Bachelor study program "Health Informatics" are located. As a whole, it was ascertained by the experts that the Bachelor study program "Health Informatics" has ample teaching facilities at its disposals.

#### **Decision**

From the experts' point of view, the requirements of this criterion are fulfilled.

## 4.6 Quality assurance

### Summary

IMC has a comprehensive internal quality system that covers various processes and organizational levels. Furthermore, IMC has a 4-year institutional accreditation from the National Commission for Academic Accreditation and Evaluation (NCAAA) in Saudi Arabia. The NCAAA establishes standards and criteria for academic accreditation and assesses postsecondary institutions and their programs to ensure they meet the highest international standards.

To integrate quality concepts throughout IMC, the Directorate of Planning and Quality Assurance (DPQA) was established. The DPQA assists academic and administrative departments in planning and implementing improvement strategies, evaluating performance, and reporting achievements. The program's quality assurance and planning committee, in collaboration with the DPQA, fosters a commitment to quality improvement within the program, assists in

quality improvement planning for administrative units, and reports on overall program quality assurance.

To maintain quality within the "Health Informatics" program, its learning outcomes align with the National Qualification Framework (NQF) and other employment and professional practice requirements. Various assessment methods, both direct and indirect, involving all stakeholders, are employed to measure the achievement of program objectives and courses within the study plan. These methods include program and course specifications and reports, surveys (student, alumni, employee, and faculty), advisory committee feedback, and program statistics.

There are monitoring and evaluation tools for improvement, such as the Annual Program Report (APR). The APR includes analysis of key performance indicators, students' feedback, retention and graduation statistics, and a summary of quality assurance activities. An improvement plan is developed based on the APR and forwarded for approval. Externally, benchmark processes, external reviews, and quality assessments are conducted. Additionally, surveys are carried out annually to gather feedback from stakeholders, including students, faculty, and employers, as part of indirect assessment of learning outcomes.

To ensure quality in teaching and learning within the "Health Informatics" program, several assessment tools are employed:

- Course Specifications (CS) and Course Reports (CR): These tools monitor
  and evaluate students' academic achievements in each module. Course
  coordinators review the CS to ensure unified learning objectives and
  assessment methods. Peer observations of course delivery and exam
  review and moderation policies are implemented during the semester.
- Field Specifications and Field Reports: Similar to CS and CR, completed field experience reports and feedback from internship students are shared with the quality coordinator and the Department Council for quality review and improvement planning.
- 3. NCAAA Surveys: Institutionalized feedback from students is gathered using NCAAA surveys. The results are analyzed and included in the program evaluation and improvement plan. Surveys include course

evaluation, student experience, program evaluation, alumni, and employer surveys.

The quality coordinator collaborates with the Curriculum and Outcomes Assessment Committee to enhance course objectives, content, teaching strategies, and assessment methods. Approved improvement plans are implemented, and course specifications for subsequent semesters are updated accordingly. This systematic approach ensures ongoing enhancement of teaching and learning in the "Health Informatics" program, aligning module objectives with the overall program objectives and meeting international quality standards.

# **Judgement**

From the experts' point of view, the University has a well-structured system of quality assurance spread across all of its unit. The University has developed and documented a concept of quality assurance in the education process, teaching and research, which serves as the basis for the quality-oriented development and implementation of the study program "Health Informatics".

The evaluation process at the college is comprehensive and involves various surveys designed by the National Commission for Academic Accreditation and Assessment (NCAAA). These include the course evaluation survey, a survey assessing the overall situation of the college (encouraged by department heads), and a survey targeting alumni. Students actively participate in the feedback process, serving as members of the annual student advisory board and contributing through the student council established in 2018. The open-door policy facilitates student involvement in curriculum development, and the program development manual incorporates a feasibility study that considers input from all stakeholders, including employers and students.

The results of the internal quality assurance management are applied for the continuous development of the study program. In doing so, the University takes into close consideration the quality evaluation results as well as the analyses of students' workload, their academic accomplishments and feedback from graduates. The experts appreciate that regularly meetings on different levels are held to improve the study programs. On-site, it was confirmed by the students that evaluation results are taken seriously and changes are implemented based on these results.

### **Decision**

From the experts' point of view, the requirements of this criterion are fulfilled.

# 4.7 Gender equality and equal opportunities

## Summary

Both Inaya Medical College and the "Health Informatics" study program have a nondiscriminatory policy when offering study places to students, including those with various disabilities. However, the Health Informatics program requires students to be physically and mentally fit due to the nature of the profession. Chronic illnesses are not exempted, but students can join the program if their condition does not pose any physical or psychological risk (SER 1.2.3).

Both the Male and Female sections of the Health Informatics program follow the same rules and regulations. Faculty and students from both sections have equal rights and responsibilities governed by the college's bylaws. The college ensures that education is provided to both male and female students without any discrimination (SER 1.6.9).

# **Judgement**

The University demonstrates its commitment to the provision of equal opportunities for all students and shows openness for diversity and social development. Overall, the experts conclude that the University's actions on the provision of gender equality and promotion of equal opportunities for students with particular living circumstances are implemented in a transparent manner. The nature of support varies depending on the program and the specific needs of the students. The college ensures that students facing circumstances that may impact their ability during their study are not excluded and are instead provided with necessary assistance. A barrier-free environment is maintained to accommodate the diverse needs of students, and special funds are allocated to support those with specific requirements.

### **Decision**

From the experts' point of view, the requirements of this criterion are fulfilled.

## 5 Conclusion

Overall, the experts were impressed and highlight the strong commitment and engagement demonstrated by all levels of the University. From the experts' point of view, the curriculum is well-structured and aligned, providing a solid foundation for the program. The student-centered philosophy of the University is highly appreciated, as students are treated with care and respect. The experts are looking forward to Inaya Medical College's plans to achieve university status.

Based on the information from written documents and the results of the site visit, the experts came to the conclusion that the study program "Health Informatics" offered at the Inaya Medical College fulfills the above-described criteria. Hence, the experts recommended that the Accreditation Commission of AHPGS make a positive decision regarding the accreditation of the study program.

For the continuous development of the study program, the experts have outlined the following recommendations:

- A comprehensive strategic plan for the development of academic staff, setting specific targets for the recruitment and advancement of full professors, lecturers, and other academic positions should be formulated.
- Mechanisms that provide structured time for research activities should be established. This might include introducing opportunities for faculty to apply for research terms or employing research assistants, fostering an environment conducive to impactful scholarly endeavors.
- IMC should continue to implement postgraduate study programs.
- Digital lectures and encouragement of self-organized learning methods could enhance accessibility and student engagement and could therefore be integrated into the curriculum more strongly.
- Compensation regulations for students with difficulties should be implemented.
- Elective courses could be introduced to enable students to specialize in certain areas of health informatics during their studies.

Interdisciplinary cooperation with other degree programs, including from the College of Applied Medical Sciences (e.g. Radiologic Sciences), not only in the first common year but also in the course of the curriculum should be used. These interdisciplinary modules could also be offered in the form of elective modules.

### 6 Decision of the accreditation commission

# Decision of the accreditation commission February 15, 2024

This resolution of the Accreditation Commission of the AHPGS is based on the University's application, as well as the expert review and the site visit covered in the Assessment Report.

The site visit of the University took place on December 11-12, 2023, according to the previously agreed-upon schedule.

The accreditation procedure is structured according to the Accreditation Criteria developed by the AHPGS. The Accreditation Criteria are developed by the AHPGS in close accordance with the existing criteria and requirements valid in the Federal Republic of Germany and based on the "Standards and Guidelines for Quality Assurance in the European Higher Education Area" (ESG), established by the European Association for Quality Assurance in Higher Education (ENQA).

The Accreditation Commission of the AHPGS discussed the procedural documents and the vote of the expert group regarding the Assessment Report.

The Bachelor study program requires the obtainment of 131 Credit Hours (CH) according to the internal credit hour system. The regulated study period in the program "Health Informatics" is five years: eight semesters (four years) at the Inaya Medical Colleges (IMC) followed by one year internship. The program comprises 47 modules out of which 26 modules are studied within the common first year as well as Islamic, Arabic and basic medical sciences modules and 21 are health informatics specialty modules. The main language of instruction is English. The Bachelor study program "Health Informatics" is completed with awarding of the academic degree "Bachelor of Health Informatics". Admission takes place twice a year at the beginning of each academic semester. The first cohort of students was admitted to the study program in the academic year 2017/2018.

The Accreditation Commission of the AHPGS considers that all Accreditation Criteria are fulfilled and adopts the following decision:

The Bachelor study program "Health Informatics" is accredited for the duration of five years until September 30, 2029.

For further development and enhancement of the study program, as well as of the University as a whole, the Accreditation Commission of the AHPGS supports the recommendation articulated in the Assessment Report.