

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



Assessment Report

for the application of

Najran University,

College of Applied Medical Sciences,

for the accreditation of Bachelor Study Program

“Radiological Sciences”

**(Bachelor of Applied Medical Sciences in Diagnostic Radiological
Sciences)**

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Decision	21.07.2015

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1 Introduction into the accreditation procedure

In order for the external assessment to be implemented, Najran University has commissioned the Accreditation Agency in Health and Social Science (further referred as the AHPGS). The AHPGS is listed in the European Quality Assurance Register (EQAR), among Full Members of the European Association for Quality Assurance in Higher Education (ENQA), and is also accredited by the German Accreditation Council (until 2019).

Study programs of Najran University, Najran, Kingdom of Saudi Arabia, are required by the decision of the University to be accredited by an international accreditation agency. The decision regarding the accreditation of each of the study programs of Najran University, Najran, Kingdom of Saudi Arabia, is carried out by the Accreditation Commission of the AHPGS.

In the Kingdom of Saudi Arabia, the national regulation in matters of higher education accreditation is established by the National Commission for Academic Accreditation & Assessment (NCAAA, www.ncaaa.org.sa). The specifications formulated by the Commission are legally binding. Thus, every study program must undergo the NCAAA accreditation and comply with the criteria set by the NCAAA Commission.

The accreditation process conducted by the AHPGS runs independently from the NCAAA.

The Accreditation Commission of the AHPGS takes a decision on accreditation of a study program on the basis of the Application documents, the On-Site Visit at Najran University, and the Expert Report.

The external assessment procedure is carried out in four steps:

I. The University's application

The AHPGS verifies the sufficiency of the documents submitted by the University, namely the Application and its corresponding annexes. These are to fulfill the assessment spheres, as well as the AHPGS standards. As a result, the AHPGS produces a summary (see below), which is to be approved by the University, and subsequently made available for the expert group, together with all other documentation.

II. Review regarding the content of the programs

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

III. On-site visit (Peer-review)

The experts carry out an external on-site visit to the University. During this visit, discussions are held with members of the University, including the University and department administration, program management, teachers and students. This enables the experts to learn additional details about the program, which complement the information of 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, structure, staff, material resources, course of studies and 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 on-site visit, the expert group issues an expert report for each study program. This is based on the results of the visit, the written review of the study programs, and the documents submitted by the University. The expert reports are made available to the University, in order for it to issue a response opinion.

The expert report, as well as the University's response opinion – together with the submitted documents – is presented to the accreditation commission of the AHPGS for the final decision regarding accreditation, accreditation with conditions or denial of accreditation.

IV. The AHPGS accreditation decision

The accreditation commission of the AHPGS examines the documentation made available, namely the University's Application, its annexes, the summary comprised by the AHPGS, the expert report, as well as the University's response opinion. These documents represent the basis of the commission's decision regarding the accreditation of the study programs, based on the accreditation criteria of the AHPGS.

2 Facts by the time of pre-visit-assessment

2.1 Procedure-related documents

The Application 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 (further referred as the Application) of Najran University was submitted to the Accreditation Agency in Health and Social Science (AHPGS e.V.) in electronic format on the 26th January 2014. The contract between Najran University and the AHPGS was signed on the 02nd May 2013.

On the 23rd May 2014 the AHPGS forwarded the open questions and explanatory notes (further referred as the OQ) pertaining to the Application for accreditation for the study programs to the University. On the 3rd June 2014 the University submitted the answers to the open questions and explanatory notes (further referred as the AOO) to the AHPGS in electronic format.

The present document presents the summary of the AHPGS for the “Radiological Sciences” Bachelor study program. The program admitted the first cohort of male students in 2007/2008, and female students in 2008/2009.

The application documentation submitted by Najran University follows the outline recommended by the AHPGS. Along with the application request for accreditation of the “Radiological Sciences” Bachelor study program, the following additional documents can be found in the application package (the documents are numbered in the following order for easier referencing):

Annex	Description
1	Course descriptions
2	Course overview
3	Plan of course of study
4	Regulations
5	Executive Summary
6	Teaching interdependence matrix
7	Short CVs of the teaching personnel
8	Formal Declaration from the management board of the Higher Education Institution

Table 1: Specific Documents for “Radiological Sciences” Bachelor Program

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.

2.2 Study program

2.2.1 Structural data of the study program

University	Najran University
Faculty/Department	College of Applied Medical Sciences
Title of the study program	"Radiological Sciences"
Degree awarded	Bachelor of Applied Medical Sciences in Diagnostic Radiological Sciences
Working language	Mainly English (9 courses are in Arabic, 54 courses—in English)
Students' gender	Both male and female
Form of studies	Full-time
Organizational structure	Sunday – Thursday, 8:00 – 15:00
Period of education	9 semesters (2 semesters in a preparatory year, 7 semesters of main studies) plus 1 semester of an internship
Credit Points (CP) according to the European Credit Transfer System (ECTS)	The program is offered only by the credit hour system: 142 credit hours
Credit hour	1 credit hour = 1 contact hour of a theoretical course; = 2 contact hours of a practical course (lab training); = 2 contact hours of hospital training (self-study hours are not included)
Workload	Total: 4.510 hours Contact hours: 3.255 hours Individual work: 295 hours Practice (internship): 960 hours
CP for the final paper	The program does not require a final thesis, but ends in a project work

Beginning of the study program	1st cohort of male students: fall semester 2007/2008; 1st cohort of female students: fall semester 2008/2009.
First accreditation	Not applicable
Time of admission	Each semester
Number of available places on the program	50 places (25 places for males and 25 places for females)
Number of enrolled students up to now	73 male students and 48 female students
Number of graduates up to now	27 male graduates and 7 female graduates
Particular enrollment conditions	Saudi Arabian Secondary School Certificate (science section) or its equivalent; Aptitude Exam (provided by the National Centre for Assessment in Higher Education)
Tuition fees	Not applicable (cf. Question 11 in the AOQ)

Table 2: Structural Data of "Radiological Sciences" Study Program

The "Radiological Sciences" Bachelor study program is designed to train diagnostic radiographers who will perform safely medical radiographic procedures. The program provides its students with the opportunity to study different modalities of medical imaging and radiological procedures such as general x-ray, fluoroscopic and contrast media investigations, computerized tomography (CT), ultrasound, magnetic resonance imaging (MRI) and nuclear medicine.

As the program is taught mainly in English (except for 9 Islamic and Arabic courses), the first preparatory year (Study Phase I) is dedicated to mastering the language as well as developing general learning, thinking, research, and computer skills. During Study Phase II, the students build their theoretical, practical, and ethical knowledge in the field of radiological studies. Within these 7 semesters all program-specific and supportive science courses are taught. Moreover, seven practical courses take place in hospital settings. The last stage of the program, Study Phase III, is a six-month internship that serves a comprehensive clinical training to prepare the students for high-quality service in the profession. Upon their successful completion of all clini-

cal rotation, the student is awarded with the title Bachelor of Applied Medical Sciences in Diagnostic Radiological Sciences.

2.2.2 Qualification objectives and employment opportunities

In the Application, the University posits that a graduate of Najran University is generally expected to demonstrate proficiency in their field, critical thinking and problem solving necessary for the professional practice, be able to apply information technology, data processing, storage and retrieval in the professional sphere, participate in professional activities, and continue professional and personal growth. More specific educational objectives are indicated for the “Radiological Sciences” Bachelor study program that should prepare their graduates to:

- Demonstrate proficiency in the operation of digital radiologic systems;
- Apply knowledge of anatomy, physiology, pathology as well as radiographic procedures and technical factors to demonstrate accurately anatomical structures on a diagnostic image;
- Apply the principles of radiation protection for patients, themselves and others;
- Evaluate the physical, psychological and social needs of patients during radiological examinations and act responsibly at all times towards them;
- Communicate effectively with patients, family, and team members (see Application A2.1)

First and foremost, the program is expected to prepare qualified specialists with a thorough theoretical and practical knowledge in radiological sciences and general medical field. For this purposes, the students are taught to understand essential physical concepts of radiation production, describe normal human anatomy and physiology, recognize pathological processes to facilitate clinical decisions, identify signs and symptoms of diseases and traumas and identify these processes by radiological investigations, safely apply radiology for treating patients, know the composition of contrast agents and drugs used in radiological sciences, interpret diagnostic images, and be acquainted with the policy, ethical and research framework of the field.

In order to prepare its students for the professional occupation, the program also trains their cognitive, psychomotor, and communication skills. On the cognitive level, the students are taught to apply and evaluate the scientific

principles underpinning diagnostic radiographic practice, understand the role of a radiologic technologist in patient's care, and appraise moral and ethical issues related to the clinical situation. Psychomotor skills are developed to ensure the graduates' ability to perform a diagnostic imaging examination, prepare a patient for the procedure, safely operate diagnostic imaging equipment, as well as apply effective safety measures to protect patients and themselves. Since a job of Diagnostic Radiographer presupposes constant professional communication with patients, family members and colleagues, attention is paid to the development of communication and interpersonal skills.

Radiological Sciences is claimed to be one of the most dynamic, expanding and high-demand fields in clinical medicine. Initially launched by the College of Applied Medical Sciences for the reasons of high population growth and nation-wide urgent need for diagnostic radiologists, especially in the southern region of the Kingdom of Saudi Arabia, the study program aims to recruit modern technologies for health education purposes, contribute to the recognition of the role of Radiologic Technology in the society, lay the basis for the development of national politics in the field, and raise awareness of safety issues in health education and for environmental protection (see Application A2.4).

Upon successful completion of the Bachelor program in Radiological Sciences, the students will be entitled to apply to the Saudi Arabian Commission for Health Specialists (SCFHS) for registration as a Specialist of Radiological Technology. In correspondence with the strategic plan of the Saudi Arabian Ministry of Health for 2010/2019, there is a demand for all qualified graduates in the radiology field, whether in governmental or private health institutions, and a great shortage of national staff scientifically highly qualified in diagnostic radiological studies in Najran area and all over the Kingdom. According to the statistics provided in the Application, 9 out of 10 graduates in 2011 and 12 out of 15—in 2012 were able to find employment (see Application A3.2).

The University claims that a wide range of career opportunities is open to the graduates of the program, in both public and private sectors. They can carry on their research activities, teach and contribute to scientific discoveries in their field, practice their profession of Diagnostic Radiographer and provide care to patients in hospitals and clinics, work for the government and other agencies engaging themselves with radiation safety regulation, hold adminis-

trative and management positions, or specialize in new product development for commercial companies (see Application A3.1).

The University offers support for work placement by prescribing an obligatory internship in the last semester and staying in touch with its former graduates. A professional practice placement coordinator prepares students for clinical placement and further finds placement opportunities for them. What is more, the Alumni Office maintains and updates alumni records providing opportunities for career services and mentorships to the students of the program.

2.2.3 Structure of the study program and exam system

According to the documents provided by the University, the “Radiological Sciences” Bachelor study program comprises 63 courses including a half-year internship. There are no optional or elective courses, all courses are compulsory. The body of the program consists of a preparatory year (Study Phase I) with two semesters including 12 courses. The preparatory year is a compulsory year for any student wishing to join any of medical colleges in Najran University. Study Phase II of the program includes 50 Radiological Sciences courses, whereas Study Phase III is a six-month internship. Moreover, as stated in the Application, all courses of the program can be divided into three categories: program-specific courses (33), supportive scientific courses (31), and humanity courses (9). In their curriculum, the study program follows the university regulations on lower and upper levels of student workload.

The total workload of the program “Radiological Sciences” equals to 3.550 contact hours, which corresponds to 142 credit hours. The total amount of workload is determined by calculating the contact time spent during classes, laboratory hours and in a formal teaching environment excluding student’s individual study time.

Study Phase I. A preparatory year includes 12 courses that are envisaged to improve students’ English language skills and help them build scientific, ethical, and cultural background for the following introduction into the field of radiological sciences. Successful completion of the preparatory year gives the students 27 credit hours out of the 142 required.

Semester	Course Title	Credit	Attendance
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		Hours/week	hours/week
1	English Language: Reading skills	2	2
	English Language: Writing skills	2	2
	English Language: Listening and Conversation Skills	2	2
	English Language: Grammars	2	2
	Introduction To Mathematics	2	3
	Ideation and Thinking Skills	2	2
	Computer Skills	3	
2	General English Language	3	3
	Writing Reports	2	2
	Professional Ethics	1	1
	Communication Skills	2	2
	Algebraic Sciences	4	4
Total:		27	27

Table 3: Overview of Study Phase I

Study Phase II consists of Radiological Sciences courses that offer deep insight into the professional field and prepare students for the practical application of the acquired knowledge and skills. The program courses of Study Phase II are worth of 115 credit hours (out of 142 required).

Semester	Course title	Credit hours/week	Attendance hours/week
3	Introduction to Islamic Culture	2	2
	Language Skills (1)	2	2
	Physiology	2	3
	Introduction to Physics	2	3
	Computer Applications in Health Sciences	2	3
	The Basics of Histology	2	3
	Anatomy (1)	2	3
	Basics of Biostatistics	2	2
	Introduction to Biochemistry	2	3
Total:		18	24
4	Radiation Physics	3	4
	Radiographic Anatomy	3	4
	Basics of General Radiographic	3	4

	Investigations		
	Radiographic Physiology	3	4
	Anatomy (2)	2	3
	Patient Care	2	4
	Applied Biostatistics	1	1
	Islamic Culture (2)	2	2
Total		20	26
5	Ultrasound Physics & Instrumentation	3	4
	Radiation Protection	2	3
	Techniques of Radiographic Image Recording (1)	3	4
	Practical Training (1)	3	6
	Radiological Pathology	2	3
	Special Radiographic Investigations	3	4
Total:		16	24
6	Cross Sectional Anatomy	2	3
	Nuclear Medicine Physics	2	3
	Ultrasound Investigation Techniques	3	4
	Fluoroscopy Techniques	2	3
	Advanced Imaging Techniques	3	4
	Practical Training (2)	3	6
	Radiation Equipment & Management	2	3
	Techniques of Radiographic Image Recording (2)	2	3
Total:		19	29
7	Computerized Tomography Techniques	3	4
	Practical Training (3)	2	4
	Practical Training (4)	2	4
	Advance Equipment	3	4
	Accident and Emergency Radiography	2	3
	Nuclear Medicine Techniques	2	3
	X-Ray Film Reading	2	3
Total:		16	25

8	Islamic Culture - 3	2	2
	Language Skills- 2	2	2
	Practical Training (5)	2	4
	Practical Training (6)	2	4
	Magnetic Resonance Imaging Techniques	3	4
	Radiology Departments Management	2	2
	Scientific Research Methodology	2	2
Total:		15	20
9	Islamic Culture -4	2	2
	Practical Training (7)	2	4
	Essential of Radiotherapy	3	4
	Applied Radiological Pathology	2	4
	Project Work	2	4
Total:		11	18
Total for Radiological Sciences courses		115	166
Total for the whole program:		142	193

Table 4: Overview of Study Phase II

Study Phase III, an internship period, is intended to give students an opportunity to integrate into the future career and gain experience in individual as well as group work in authentic hospital environment. The students need to have completed all academic requirements to qualify for an internship program. The internship assures that the graduates have the necessary knowledge, attitude and competency to perform the essential, common technical skills in the field. The internship semester lasts 960 contact hours.

The Course Description (see Annex 1) covers the following aspects: course title, semester, number of credit hours, language of instruction, description of the course content, its educational objectives, and the methods for student's assessment. Moreover, Attachment A.2 of the Application presents correlation between study-program objectives (see Paragraph 2.2.2 of the present document) and corresponding courses whereas Attachment A.3 of the Application outlines the structure of the study program in correspondence with the declared learning outcomes.

As stated in Paragraph A1.16 of the Application, the study program “Radiological Sciences” applies such forms of teaching as lectures, tutorials, seminars, practical and clinical sessions, and a one-semester internship. A lecture is used primarily for introducing new topics and is supported by other forms of studies to consolidate learning. In a seminar, specific topics are explored: students research a topic and present their findings to other students. A tutorial enables students to discuss issues with a tutor in a small group or on an individual basis as well as prepares students for a set task. Practical sessions enable students to acquire practical and analytical skills through application of theory. And finally, clinical education is represented by the periods of time which students spend in the diagnostic imaging departments in hospitals.

The course of studies involves a variety of teaching strategies and methods, such as demonstrations, case studies, use of video materials, discussions, independent work over assignments, etc. as well as electronic and media teaching aids (multimedia projectors, plasma TVs, simulators, smart boards, computer software, models and others). However, no distance learning is possible at the “Radiological Sciences” Bachelor study program.

At the moment the study program cannot offer student exchange with other universities. However, according to Paragraph A1.15 of the Application, the “Radiological Sciences” program provides opportunities for the Demonstrator to study abroad. Besides this, the study program has been planning to sign a Memorandum of Understanding with the *Diagnostic Radiography Program* in London South Bank University.

Regarding collaboration with national organizations, the “Radiological Sciences” Bachelor study program has an agreement for cooperation with the National Training Department of Health Affairs for providing training at different units of Najran King Khalid as well as Maternity and Children hospitals to all students of the program during the internship period. For detailed information on the correlation between the institutions and parts of the curriculum they are responsible for, refer to Paragraph A1.12 of the Application.

Throughout the course of studies and their one-semester internship, the students are guided by the faculty staff and hospital personnel. Practical sessions are conducted under supervision of the faculty staff members, whereas ‘field’ trainings are monitored and evaluated by hospital trainers. There are seven practical training courses taught at the “Radiological Sciences” program, plus

a six-month internship. All these courses help the student to build and develop professional skills. An internship is an opportunity to integrate career-related experience into undergraduate education by participating in planned, supervised work. The Administrative Coordinator of the study program from the College of Applied Medical Sciences in collaboration with the Radiology Director of a corresponding hospital provides a proper training area to meet the objectives of the internship program. The role of the Hospital Radiology Coordinator is to coordinate the implementation and appraisal of the internship program together with the assigned coordinator from the College of Applied Medical Sciences.

As already mentioned, the “Radiological Studies” Bachelor program does not provide for student exchange or studies abroad; nonetheless, the program is designed to suit the purposes of internationality. The curriculum is closely linked to different organizations in the community (business, industry, voluntary and public sectors), which are either representatives of cross-cultural interests or are involved in cross-cultural work. Eighty-six percent of the program courses (except for Arabic and Islamic ones) are taught in English. Moreover, the program’s faculty personnel includes international staff members who are contractually available to teach at Najran University as well as faculty members who have experience of teaching and research in other countries. In future, the study program is planning to offer student exchange opportunities, have international collaborations and partnerships, use international learning materials and resources as well as enjoy international accreditation (refer to Application A1.14).

The “Radiological Studies” Bachelor program offers two courses related to scientific research. The *Scientific Research Methodology* course is designed to provide an understanding of data management as well as teach students how to write a scientific paper or a proposal and follow medical ethics. The second course, *Project Work*, is a study of theoretical or practical (or both) component of any of the program-specific course taught during the program. In teams, students are supposed to choose a title of their project and write a proposal, which should include an introduction, scientific background, and a project work plan. Integrating research into study courses in this way, the University strives to promote interest to scientific research work among students.

According to the University, recent research results are taken for course formation, researchers are employed to teach program courses, solutions based on scientific research are found for clinical problems, and collaboration is fostered in the field of clinical research. Although the College of Applied Medical Sciences does not organize its own student conferences, the College participates semiannually in the Regional Scientific Conference which is supported by the Saudi Arabian Ministry of Higher Education. Question 13 of the AOQ presents a list of students of the College of Applied Medical Sciences, titles of their reports and scientific conferences they have partaken in.

Concerning the examination system of the Bachelor program “Radiological Sciences”, a variety of assessment methods is provided for. The following Assessment Schedule is applied to evaluate a student’s performance during their course of studies:

Assessment task (e.g. essay, test, group project, examination etc.)	Week due
Midterm exam	8th
Practical exam	11th
Continuous assessment (attendance, participation, home assignments)	1st – 15th
Final exam	16th

Table 5: Assessment Schedule for “Radiological Sciences” Bachelor Program

Furthermore, in accordance with the intended learning outcomes such evaluation methods as quizzes, student discussions, presentations, log books, log-books, and observation with a checklist can be used at each individual course. There is no re-examination specific schedule; extraordinary cases are transferred to the College Council for decision and a re-examination is scheduled. Students may advance to classes prescribed by the curriculum for the next semester if they have successfully passed the requirements of the courses of the current semester. In case a student fails to succeed in completing requirements of a particular course, the student has to repeat the course along with the courses of the next semester (see Annex 4 Section A, Paragraph 8).

The University mentions the following measures for assuring academic feasibility of the evaluation methods: internal review of all examination procedures by the Audit Committee, appointment of external examiners, application of examination rules enforced by the Control Unit Committee, and others. Fur-

thermore, courses are reviewed by student questionnaires and the teaching staff's reports. Progress of the students' clinical placement is controlled through reports and feedbacks by practice educators.

Najran University applies the following grading system:

Letter grade	Percentage	Grade	Average Point
A +	95-100	High Excellent	5.0
A	90-less than 95	Excellent	4.75
B +	85-less than 90	High Very Good	4.5
B	80-less than 85	Very Good	4.0
C +	75-less than 80	High Good	3.5
C	70-less than 75	Good	3.0
D +	65-less than 70	High Acceptable	2.5
D	60-less than 65	Acceptable	2.0
F	Below 60	Fail	1.0

Table 6: Grading system at Najran University

For each course the students of Najran University receive a final grade in the form of a percentage or an alphabetical letter. A temporary assigned incomplete grade (IC) appears in the transcript for courses not completed on time. In case of continuous evaluation for courses that last more than one semester, a cumulative grade is awarded upon completion of all units of the course.

The University claims that in accordance with Islam that views women playing an integral role in all aspects of society, including working spheres, there is no gender discrimination in education at Najran University. The gender equality concept is developed in the "Radiological Sciences" study program by providing equal opportunities to the both sexes in allocation of places in the program, admission, employment and promotion politics, access to teaching and training facilities, distribution of scholarships and salaries, as well as allocation of workload and research projects.

Regarding the compensatory measures for students with disabilities or chronic illnesses, Najran University offers special parking places and entrances for disabled students. Besides, the Deanship of Student Affairs provides members for special assistance of disabled students. But regarding the nature of the profession, applicants shall be physically and medically fit to be enrolled in the "Radiological Studies" Bachelor program. For more information, refer to Section 2.2.4 *Admission requirements* of the present document. In case of tem-

porary or acquired disability of an enrolled university student, the study program administrator and the committee of the Deanship of Admission and Registration decide whether such a student is able to continue their education at the program (see AOQ, Question 9).

In its answer to Question 11 in the AOQ, the University indicates that all Saudi Arabian students get financial support of 1000 SAR (equivalent to 267 US\$) per month. In addition, Najran University offers such financial support to its students as extra subsidy of 500 SAR (133 US\$), a marriage subsidy of 1000 SAR (267 US\$) or a university loan of 1000 SAR (267 US\$). For a full list of financial aid possibilities, refer to Question 11 in the AOQ.

2.2.4 Admission requirements

Admission requirements for the “Radiological Sciences” Bachelor program include a Saudi Arabian Secondary School Certificate (science section) or its equivalent and an Aptitude Exam (provided by the National Centre for Assessment in Higher Education). The priority of acceptance is given to the applicants with the highest equivalent percentage (70% of the secondary school grade + 30% of the Aptitude Exam grade). To be accepted to Najran University an applicant is to fulfil the following general rules of the university:

- 1) Apply for the university not longer than within two years after school graduation;
- 2) Be of good conduct and behavior;
- 3) Be physically fit;
- 4) In case of employment, obtain approval from their employer regardless of whether it is a governmental or private enterprise;
- 5) Have no previous academic or disciplinary expulsion from Najran University or any other institution of education;
- 6) Be not registered for a university degree at the same university or at another institution that they have previously attained (see Annex 4).

Applications are to be submitted electronically to the Deanship of Admission and Registration in the specified periods for each semester. For instance, for admission in fall semester 2013/2014 one had to apply within a week from 27 June 2013 to 5 July 2013. The applicants shall receive the first reply within 72 hours after having applied. To complete the registration procedure, further communication with the Deanship of Admission and Registration is required (see AOQ, Question 5).

The acceptance application will be repealed for applicants who do not complete all procedures of acceptance in a timely manner without an acceptable excuse from the Office for Admission and Registration. If it becomes apparent that a newly accepted student has been previously dismissed for disciplinary or academic reasons, the acceptance shall be nullified (See Annex 4 Section A).

2.3 Conditions of studies and quality assurance

2.3.1 Human resources

The teaching staff of the “Radiological Sciences” Bachelor program is split between the male and females sections of the program with total 34 and 33 faculty members, correspondingly. Table 7 presents a number of full-time and part-time members of the teaching staff in the both sections of the program:

Type of employment	Male Section	Female Section
Full-time members	24 (70.5%)	12 (36%)
Part-time members	10 (29,5)	21 (64%)
Total	34	33

Table 7: Number of Full-Time and Pat-Time Teaching Staff Members in Male and Female Sections of Study Program

In the male section, among the full-time faculty staff there are 4 assistant professors and 10 lecturers. Besides, there are 7 demonstrators and 3 lab technicians. The part-time staff employed for the study program includes 5 assistant professors, 4 lecturers, and 1 demonstrator. For teaching female students at the program, there are 4 assistant professors and 7 lecturers among the full-time faculty staff. The part-time staff consists of 5 assistant professor, and 15 lecturers and 1 demonstrator.

The students of the program are expected to complete their studies in 5 years (10 semesters with 15 weeks each, including an internship at a hospital). The full enrollment capacity of the program is 50 places (maximum 25 male and 25 female students); the admission is each semester. The total number of students in case of full enrolment is 500 students in each section. With two part-time teachers taken as a full-time one, the expected student-teacher ratio for male and female sections of the program is approximately 17:1 and 23:1, respectively. This means that there are 18 male students and 24 female students per each full-time teacher. However, in correspondence with the statistics provided for the academic year 2012/2013, 73 males and 48 females are

enrolled in the program. Hence, the actual student-teacher ratio can be much lower.

The program sets the following requirements for the personnel responsible for mentoring and supporting students:

- Teaching a theoretical program-specific course requires at least a degree of Master of Science from one of the Saudi Arabian Universities or other recognized University with a very good average grade.
- To be Assistant Professor, one has to hold a Doctorate degree with at least a very good average grade. An Associate Professor needs to have a doctoral degree, experience of faculty membership of not less than four years after appointment to the rank of Assistant Professor and be scientifically promoted to the rank of Associate Professor from a Saudi Arabian University or other recognized University.
- To be promoted to the rank of Full Professor, one has to obtain the experience of faculty membership of not less than eight years including at least four years as Associate Professor.
- A demonstrator shall have at least a bachelor degree from one of the Saudi Arabian Universities or other recognized University with a very good average grade;
- To work as a practical supervisor, a radiology technician shall first receive an Associate's degree to enter the profession and work as lecturer-technician at the University.

Annexes 6 and 7 give information on teaching and hospital staffs' corresponding competence and academic background.

The technical-administrative staff consists of 7 people: 2 secretaries (for the Program Coordinator and the Development and Quality Unit), 2 coordinators for Student and Staff Affairs, 1 librarian, 1 person in IT support, and 1 lab technician. For the scope of professorial instruction in the study program, refer to Section B of the Application or Annex 7.

As reported in Section B1.4 of the Application, selection of the teaching personnel for the "Radiological Sciences" Bachelor study program is based on the rules for Saudi Arabian employees of university faculties issued by the Higher Education Council. Recruitment processes ensure that an applicant for a teaching position at university has a specific area of expertise as well as the personal qualities, experience, and skills to meet the teaching requirements.

The candidates are provided with a full position description and conditions of employment, together with specific information about expectations of a candidate's contribution to the program as part of the teaching team. Prior to making an appointment, the university checks the information on references, experience and qualifications provided by an applicant. Assessment of qualifications includes verification of the standing and reputation of the institutions from which references are obtained.

Paragraph B1.5 of the Application states that the University and the College offer chances for the academic improvement of the teaching staff. The University has established a Skill Development Unit that provides for annual plans for personnel qualification development in accordance with training needs. Continuous training programs in teaching are provided including effective use of new and developing technologies.

2.3.2 Material and space resources

Najran University claims that there is no external funding: the "Radiological Sciences" Bachelor study program is financed solely by the University. Nonetheless, all health sciences colleges of Najran University share Najran-based Prince Mishaal bin Abdullah research chair for endemic diseases. The College of Applied Medical Sciences has opportunities to benefit from this research chair.

The College of Applied Medical Sciences is split between the female and male campuses. In the female campus (the Al-athayba campus), there are three neighboring buildings that offer space for the health sciences colleges, i.e. the College of Medicine, the College of Nursing, and the College of Applied Medical Sciences. The College of Applied Medical Sciences occupies two buildings. The first one is smaller and houses administrative and teaching staff offices and laboratories (such as anatomy, physics, ultrasound, CT and other labs). The other one is bigger and used by the both, the College of Medicine and the College of Applied Medical Sciences. In that part of the building belonging to the College under consideration, one can find classrooms as well as a faculty library, with the amount of seats sufficient for the students of the College. Biochemistry and physiology labs as well as a cafeteria are located in the buildings that belong to other health sciences colleges.

The premises of the Radiological Sciences Department of the College of Applied Medical Sciences in the male campus (the Al-Swadei campus) meet the requirements for lighting, air conditioning systems, and health and safety conditions. Working spaces and facilities for the “Radiological Sciences” Bachelor program are new and located on the same floor. The current teaching facilities include study rooms, laboratories and a library. There are security systems to ensure safety for researchers and their activities.

Table 8 gives an overview of the facilities available for male and female students of the program:

Room	Number	Capacity	Facility
Lecture rooms	5 (male) 7 (female)	30	Chairs, overhead projector, whiteboard, air conditioner, Internet connection
Meeting room	1 (male) 1 (female)	15	Chairs, round tables, overhead projector, whiteboard, air conditioner, Internet connection, network service, air conditioner
Radiological laboratories	8 (male) 4 (female)	20	Book stands, chairs, computers, Internet connection, air conditioner
Workplaces for students	1 per each campus	15	Chairs, tables, air conditioner

Table 8: Facilities of “Radiological Sciences” Bachelor study program

For a detailed list of learning facilities and lab equipment, refer to Annex 8.

As for EDP and media equipment, teaching rooms are provided with whiteboards, show projectors, and new computers to conform to the requirements of the study process. The program has been equipping the faculty library with computers and the Internet connection. Students can check class schedule, teaching materials, announcements, grades, and get useful instructions online on the university website.

Alongside with the centralized digital funds, the students of the program enjoy access to libraries: the female students have a department library in their campus which is open from 7:30 to 14:30 from Sunday to Thursday whereas the male students have access to the central library. The central library has 11.929 books and 52 periodicals, 28 computers, a printer, a xerographic copier, a scanner, Internet connection and data show at its disposal. Library funds

for all study programs are managed centrally by Najran University. Furthermore, the management of each College is committed to providing sufficient funds for purchasing new books.

2.3.3 Quality assurance of studies

According to the information provided by the University, there are Deputy Rector and Dean Offices as well as Development and Quality Units responsible for development and quality assurance. A Development and Quality Unit implements Dean's policies at the level of a college and monitors execution of improvement plans at the level of college courses and programs. At the College of Applied Medical Sciences, a Development and Quality Unit was established in 2010 following the administration decision of the Vice-President for Development and Quality.

By means of these Development and Quality Units, the Dean administrates all quality activities and implementation of development plans at the college level. The Dean Office also ensures technical support and arranges different activities and workshops for increasing quality awareness and training faculty members and staff to improve their performance according to annual studies of their training needs. Moreover, the Dean is also responsible for supervising the implementation of University's strategic plans and execution of projects at the level of the college and programs.

For the "Radiological Sciences" Bachelor study program, the overall evaluation of the program and its academic achievements is carried out on a regular basis every three months and at the end of each academic year. The gathered evaluation data is studied, analyzed and summarized. A report is submitted to the Dean of the College that includes a summary of the results of the evaluation and corrective actions are taken to improve weak areas.

The teaching and other staff engaged in the study program is committed to improving both their own performance and the quality of the program on the whole. Regular quality evaluations are undertaken for each course, and plans for improvement are made and implemented. Much attention is paid to students' learning outcomes and each course contributes to the achievement of the overall program objectives.

Evaluation of teaching is based on assurance that students' learning outcomes are clearly specified (in accordance with the National Qualifications Frame-

work and Requirements for Employment or Professional Practice) and standards of learning are assessed and verified. Teaching staff should meet the requirements of qualification and experience for their particular teaching responsibilities, use teaching strategies suitable for different kinds of learning outcomes, and participate in different activities to improve their teaching effectiveness. Teaching quality and effectiveness of courses are evaluated through student assessments, surveys among graduates and employers as well as annual reports of external examiners and periodic reviews by colleagues. Every semester the program carries out course reports and improvement plans that are to be assessed and provided with a feedback from the program instructors. In addition, the study program draws up a program report to be presented for external review.

The research projects suggested by the study program are examined by the Scientific Research Deanship that has established criteria for research projects and their assessments. Research priorities at the "Radiological Sciences" Bachelor study program are set according to the national plan of the Kingdom of Saudi Arabia. Mechanisms have been introduced to encourage publishing of scientific papers and encouraging national and international research cooperation in the field of radiology.

To assess professional relevance of the study program, the Alumni Office has been established. Via the Alumni Office, the program keeps in touch with their graduates to follow their career and upgrade the existing data on the field. Moreover, the relationship between the College and its alumni encourages excellence among the students and graduates of the study program. From time to time, the alumni and students are also asked to fill in questionnaires on their practical experience, participate in interviews and discussions with the College teaching staff, university stakeholders, etc. In its Application, the University refers to one of such recent feedbacks from graduates of the College of Medical Laboratory Sciences that indicates their high satisfaction with the choice of the study program. The experience at the College has taught them life-long learning as well as helps them in communication with their colleagues and problem-solving. A similar survey carried among employers also shows high level of satisfaction with the program graduates' knowledge and competence (see Application A5.4).

On the whole, the evaluation is said to be carried out in dialogues, debates and discussions on program-specific learning outcomes, course specifications, course and program reports, workshops held by the Skills Development Unit, and results of surveys and independent evaluation of the program within the Department of Radiological Science. The concept of the study program is modified through continuous development for the teaching staff, support and monitoring provided by the Learning and Teaching Committee of the Deanship for Development and Quality and investigation if no improvement has been achieved.

The University claims to involve students in the internal quality assurance system of the study program by introducing them to the culture of quality assurance through brochures and quality guide. What is more, each semester one student from each group is nominated to be a representative of his colleagues and attend meetings of the Quality Committee (see Application A5.2).

All information about the study program and requirements can be found on the official websites of Najran University (where personal web pages of the academic staff can be found), in student guide handbook, and various brochures, banners and posters or by contacting the Program Coordinator per email, telephone or fax. The Program Coordinator also provides orientation for the students during their study in the preparatory year: prospective students visit the Radiological Sciences department and get information about the program before they join it. Further, each student is assigned to a university academic guide that is expected to have regular meetings with their students. A student can also get support regarding practice or job placement from a professional practice educator at placement centers or turn to a faculty placement officer for administrative support. The Application also briefly mentions policies for supporting underachieving students and honoring high-achievers (see Application A5.8). Each student can contact an academic/professional advisor per email or during their office hours. Student suggestions and complaints in the written form can be also dropped into a suggestion box.

2.4 Institutional context

Established in 2006, Najran University is located on the Eastern outskirts of the city of Najran, the Kingdom of Saudi Arabia and occupies an area of 18 million square meters, thus being the largest University campus in the country. Although currently only 18.905 students are enrolled at Najran University, the

overall capacity is 45.000 male and female students. For the enrolment rates in the academic year 2012/2013, refer to the AQQ, Question 1.

According to development plans, the university will include two campuses for males and females, consisting of 15 and 10 colleges, respectively. The university will also have a medical city, a research center, sport and entertainment arenas and accommodation for the faculty and staff members as well as students. A future investment city with hotels, commercial centers and private schools, etc. is planned to serve as a trust foundation for the university.

The male campus (the Al-Swadei campus) is only 15 minutes by car away from Najran Airport. The male campus is composed of 8 colleges: Applied Medical Sciences, Medicine, Sharia and Fundamentals of Religion, Pharmacy, Dentistry, Engineering, Arts and Sciences, and Computer Science and Information Systems. The campus contains an excellent IT infrastructure, copy centers, a theatre, a nursery, a mosque, and is provided with security. It takes just 10 minutes to drive from the administrative building of the university to the female campus (the Al-athayba campus). The campus is composed of 7 colleges: Applied Medical Sciences, Medicine, Nursing, Education, Administrative Sciences, Community, and Computer Science and Information Systems. Like the male campus, it also includes excellent IT infrastructure, copy centers, a theatre, a nursery, a mosque, and is provided with security.

The Prince Meshaal Library is a central library that serves for the whole university. The library is organized in a special way to facilitate the educational process: the first floor contains scientific text- and reference books in the field of Medicine, Biological Sciences and Computer Sciences. The university hospital is situated in a separate building and is open from 8:00 am to 10:00 pm from Saturday to Wednesday. Regular buses are provided for the students during the academic year which cover all parts of Najran. This service is free of charge and helps students be on time for their classes.

Founded in 2006, the College of Applied Medical Sciences consists of three departments (Radiological Sciences, Physical Therapy, and Medical Laboratories) and, therefore, offers three Bachelor study programs, one at each of the departments: "Bachelor of Medical Sciences in Diagnostic Radiological Sciences", "Bachelor of Medical Sciences in Physical Therapy", and "Bachelor of Medical Sciences in Clinical Laboratory Sciences". The College of Applied Medical Sciences is split between the female and male campuses. For a de-

scription of the College facilities, please refer to Subsection 2.3.2 *Material and space resources* of the present document. There are currently 73 male students enrolled in the “Radiological Studies” Bachelor study program, and 48 students—in its female section. The enrolled students enjoy the same benefits as students of other study programs at Najran University, such as discounts in canteens and cafeterias, for transportation, extra-curriculum activities, etc.

In Section C of its Application, the University refers to the plans of current and further development. The university is keen to achieve better conditions by updating lighting, ventilation and air conditioning systems. Moreover, as already mentioned, the campuses will be further developed to contain accommodation, restaurants, stores and 24/7 campus security. New college buildings will house workplaces that will fully satisfy the needs of students and their professional development. New classrooms, laboratories, faculty, and administrative rooms will meet the requirements of university study programs. Regarding the College of Applied Medical Sciences, the University is finishing construction of a College building in a new male campus of the University City. The College building will include sport facilities (3 gyms as well as volleyball, basketball, and handball fields), a hall for leisure activities (billiards, table tennis, a table hockey game, etc.), a cafeteria, and a large green space (see AOO, Question 15).

3 Expert report

3.1 Preliminary remarks

Study programs of Najran University, Kingdom of Saudi Arabia, are required by the decision of the University to be accredited by an international accreditation agency. The accreditation criteria of the Accreditation Agency in Health and Social Science (AHPGS) are the basis for the accreditation decision. These criteria can be found on the webpage of the AHPGS². 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 AHPGS criteria include the following aspects:

- 1) Program Aims and Learning Outcomes
- 2) Curriculum Design
- 3) Staff
- 4) Facilities and Learning Resources
- 5) Study Process and Student Assessment
- 6) Program Management

The main focus of the accreditation procedure is the assessment of learning outcomes and objectives of the study programs, the structure of the study programs, the examination system and transparency, the provision of adequate staffing and facilities, the implementation of the results of quality assurance in terms of the further development of the study programs and the implementation of equal opportunities for all University members involved.

The following study programs were the subjects of the accreditation procedure:

College of Applied Medical Sciences:

- a) "Clinical Laboratory Sciences" (Bachelor of Clinical Laboratory Sciences);

²http://ahpgs.de/wp-content/uploads/2014/11/accred_criteria.pdf

- b) "Physiotherapy" (Bachelor of Physiotherapy);
- c) "Radiological Sciences" (Bachelor of Radiological Sciences);

College of Nursing:

- d) "Nursing" (Bachelor of Nursing).

The accreditation procedure of these study programs offered at Najran University is carried out by the AHPGS according to the previously agreed structure.

As the first step, the documents submitted by the University were reviewed by all nominated experts with regard to the specified criteria as well as disciplinary and substantive aspects.

As the second step, a part of the nominated expert group implemented an on-site visit at Najran University, Kingdom of Saudi-Arabia, with the aim to clarify open aspects and also to verify the descriptions and statements presented in the University documents.

The third step had been the preparation of the expert report by the expert group. The report is structured in compliance with the accreditation criteria approved by the AHPGS. The documents of the university, the evaluation feedback from the experts regarding the documents and the results of the discussions with the representatives of the University during the on-site visit serve as the basis for the statements made in the expert report.

The last step is the decision regarding the accreditation of the study program of Najran University, Kingdom of Saudi Arabia. The decision is taken by the Accreditation Commission of the AHPGS.

3.2 Expert group

The following experts were appointed by the Accreditation Commission of the AHPGS for the evaluation of the study programs:

As representatives of higher education institutions:

Prof. Dr. Birgit Vosseler³

*Professor of Nursing Science, Faculty of Social Work, Health and Nursing, University of Applied Sciences Ravensburg-Weingarten, Germany
Visiting Professor at the School of Nursing at Shandong University, Chi-*

³ People shown in italics have participated in the assessment.

na and at KwaZulu Natal University, South Africa

Prof. Dr. Peter Dieter

Professor of Biochemistry, Institute of Physiological Chemistry, Medical Faculty, Dresden University of Technology, Germany

Prof. Dr. Christian Grueneberg

Professor of Physiotherapy at the University of Applied Medical Sciences Bochum, Germany; Head of the study program "Physiotherapy"

Prof. Dr. Stephan Lehnart

Professor of Translational Cardiology, Clinic of Cardiology and Pneumology, University Medical Center Goettingen, Georg-August-University Goettingen, Germany; Visiting Professor of the Biomedical Research and Medical Technology Center (BioMET), University of Maryland Medical School

Prof. Dr. Christian Trumpp

Professor of Logoaedics and Neuro/Patho-Linguistics at the Faculty of Health Sciences, IB University of Applied Sciences Berlin, Germany; Rector of the IB University of Applied Sciences Berlin; Chairman of the Academic Senate of Study Program Directors in Logoaedics

Prof. Dr. Johannes Keogh

Professor of Nursing Sciences at the University of Applied Sciences Fulda, Germany; former Head of the study program "Nursing"; currently responsible for foreign relations at the program "Nursing"

Dr. Werner Reiche

Medical specialist in neuroradiology and vascular intervention at the Central Institute of Diagnostic and Interventional Radiology, Ludwigshafen Hospital Clinical Care Centre, Germany

Beate Methke

University Medical Center of Freiburg, Germany

Dr. Dirk Haeger

University Medical Centre of Hamburg, Germany

As student representative:

Mathias Maximilian Dilger

Student at the University of Freiburg, Germany

3.3 Expert Report

The Accreditation Commission of the AHPGS nominated the above mentioned list of expert for the implementation of written review and the on-site visit at Najran University.

During March and April 2014, the relevant documents were made available to the group of experts for written evaluation with regard to the specified criteria as well as the disciplinary and substantive aspects. The AHPGS received the experts' evaluations in May 2014. These evaluation results served as the basis for the open questions forwarded to the University on 26 May 2014.

The University submitted the answers to the open questions by 3 June 2014. Consequently, the AHPGS processed these answers and integrated them into the program summary as appropriate.

The self-evaluation report, its accompanying documents, and the summary of the study program were forwarded to the members of the expert group.

The on-site visit was carried out on 22-25 February 2015 according to the previously agreed schedule. The expert group was accompanied by the representatives from the central office of the AHPGS.

The expert group met on 22 February 2015 for the initial discussion and briefing by the APHGS prior to the on-site visit. They discussed the submitted application documents and the results of the written evaluation as well as other procedure-related questions and foreseeable problems. Furthermore, they prepared the plan of the on-site visit and revised the transportation-relevant aspects.

In the course of the on-site visit, the experts held open discussions with the University management, leading representatives of different faculties, program directors and teachers, as well as with groups of students representing each program. The experts observed and examined the University facilities, equipment and study premises, such as libraries, lecture halls, classrooms and laboratories.

The expert report is structured in compliance with the accreditation criteria approved by the AHPGS. The study program will be discussed in a comprehensive manner below. The documents submitted by the university, the ex-

perts' feedback on these documents, the observations made during the on-site visit and the results of the discussions with the university community serve as the basis for the statements made in the expert report.

(0) Introduction and comprehensive remarks

Najran University, Kingdom of Saudi Arabia, was established in 2006 as a public state-funded higher education institution.

Currently, the University hosts over 18.000 students and offers 38 Bachelor and 8 Master degree programs. There are 15 colleges at the University providing education in such spheres as Applied Medical Sciences, Computer Science and Information Systems, Education, Engineering, Administrative Sciences, Languages, Sharia and other.

The University consists of female and male campuses offering education in 10 and 15 colleges, respectively. Both campuses are equipped with all necessary infrastructures, including a theatre, a nursery and a mosque. The University Library and the Hospital provide educational and training opportunities for all students. It is noteworthy that students can travel into the city of Najran on buses free-of-charge.

With regard to current developments, the University is planning to open more colleges in both female and male campuses, to establish a medical city and a research centre, to improve study premises, equipment, recreation facilities as well as accommodation resources for students and members of the teaching staff. Given the fact that the number of students is yearly growing, the University places great value on the enhancement and modernization of its infrastructure.

According to the provided information, the University strives to stimulate more dynamic research activities among students and teachers. Therefore, the Dean of the University offers additional financial support to enthusiastic and active researchers.

The study programs to be accredited are offered by two colleges of the University:

- College of Applied Medical Sciences,
- College of Nursing.

The College of Applied Medical Sciences was founded in 2006. It includes three departments: Clinical Laboratory Sciences, Physiotherapy and Radiological Sciences representing the respective study programs. In the academic year 2012/2013, the enrollment rate at the College of Applied Medical Sciences constituted 89 students (all male) in the program "Clinical Laboratory Sciences", 137 students (all male) in the program "Physical Therapy" and 121 students (73 male and 48 female) in the program "Radiological Sciences". When compared to the amount of graduates in the same year (29, 31 and 34 students, respectively) the number of students in the college reveals a clear tendency to increase.

Initially, the College of Nursing was managed by the Ministry of Health and in 2007 it became part of Najran University. The College offers two programs: "Nursing" and "Midwifery". In the academic year 2012/2013, there were 192 female students admitted to the Nursing program, whereas the number of graduate students in the same year constituted 27 people. Hence, the College of Nursing also witnessed a considerable increase of the enrollment rates.

(1) Program aims and learning outcomes

The objective of the study program "Radiological Sciences" is to prepare specialists who can describe and identify the impact of radiation and radiographic examinations on patients with different health conditions, who can recognize various pathological processes and provide the imaging necessary for taking clinical decisions. Furthermore, graduates of the program are expected to determine the existence of diseases and traumas with the help of radiological investigations, to explain different methods of diagnostic technologies in order to promote health education, and to identify the influence of contrast agents and drugs in diagnostic imaging examinations. The program teaches students to interpret and correctly apply the radiological images according to patients' health condition and needs. Besides, students learn to use different equipment of diagnostic imaging according to the principles of precaution and safety.

With regard to additional objectives, the program envisages the development of communication skills to establish contacts with patients, colleges and other medical personnel in health care institutions. Moreover, communication skills are necessary to convey information and medical examination data acquired through radiographic examinations. Concerning psychomotor skills, students have to be able to prepare patients for clinical procedures, to perform diagnos-

tic imaging procedures using different equipment and to provide safety for patients, themselves and other health care personnel. In terms of cognitive skills, the program requires of students to observe moral and ethical rules applied in clinical settings and to act as a member of a health care team working within a specific professional and legal framework.

The first preparatory year of the program is dedicated to the improvement of students' English language skills and learning methods. Moreover, students attend courses in Mathematics and professional ethics. Qualification competences and skills are further taught in the program-specific courses, which include "Radiographic Physiology", "Ultrasound Physics & Instrumentation", "Radiation Protection" and other. At the same time, the program offers interdisciplinary courses, such as "Computer Applications in Health Sciences". The research project in the fourth year of studies further complements the list of academic abilities and skills developed in the program. The final internship period (6 months) ensures that graduates are prepared to start working in a health care institution. Moreover, the internship serves the program to correlate its learning objectives with the requirements of the professional practice.

The learning objectives of the study program are estimated to be appropriate for the acquisition of the profession in Radiology. Graduates of the program find employment in governmental and private health care institutions. Besides, they can work as researchers in various scientific centers or commercial companies engaged in sales and the development of new products. Thus, students can pursue a career in clinical sphere, management or research.

From the expert's point of view, the program is consistent with the mission of the University, which is "to provide distinctive education that meets the needs of society and the labor market and to effectively contribute to the sustainable development through applied research, the optimal use of modern technologies and the active partnership at the local, regional and global levels"⁴. The experts also highlight the fact that the curriculum incorporates the principles of evidence-based practice and research methods, as well as the aspect of community care, as important parts of the program content.

Najran University aims to contribute to the development and expansion of the national labor market and also to the improvement of the general quality of

⁴ See the official website of the University: <http://portal.nu.edu.sa/en/university-mission> (10.04.2015)

health care system and services in the country. Furthermore, the University's goal is to educate specialists working in accordance with the cultural and ethical framework of local communities. Implementation of the objectives of the study program "Radiological Sciences" decidedly contributes to the realization of the University's goals. The program's principal purposes and priorities are clearly and appropriately defined as well as effectively put into action in the course of studies.

The expert group concludes that the requirements of the criterion are met in full.

Considering recommendations for future development in the area of health sciences, the experts underline that the University should work in two directions: one is to offer continuous academic study opportunities for students, and the other is to encourage professional growth and scientific engagement of the teaching staff. Both can be achieved by means of master's degree study programs.

The experts underline that the advanced master studies will require of students to dedicate more thought and effort for the accomplishment of academic work and research projects than it is expected of them in bachelor programs. Moreover, master's degree studies demand from students a higher degree of independence and awareness in their choice of a project or a paper topic, planning and implementation of the theoretical and practical parts of the master thesis, choice of learning methods and the arrangement of independent study time. Finally, master programs should supply students with respective academic and clinical/laboratory tools, as well as with the guidance of qualified supervisors, which constitute an indispensable part of a research-oriented master study program. By means of master programs, the University could prepare a new generation of local academically trained specialists and, thus, continuously lead them to a career in the field of science as well as teaching in higher education institutions.

The experts emphasize that not each health science bachelor program needs to be developed and individually offered on a master level. Instead, one master program may cover a relatively broad range of study subjects with a focus on general or public health sciences and research competences, particularly those necessary for the implementation of scientific research in the form of smaller research projects with carefully planned and documented experiments. Such

programs are expected to help the University achieve a larger scientific paper output in various specializations, and thus to become more experienced as well as competitive in the field of health care education.

For the current and future teaching staff, one or several master programs may provide an advanced professional environment for continuous improvement in terms of new teaching and research methods in the respective areas of health sciences. Moreover, such programs offer an opportunity for experience exchange with colleges from other universities.

With regard to the aspect of life-long learning, the University may consider the possibility of offering specific study programs for employees for qualification advancement as well as the acquisition of additional qualification competences. These can be master's degree programs focused, for instance, on the areas of health management and health economics or other related specializations, which will enable the employees of the University to move forward in their career.

From the European perspective, internationality is an important aspect of quality evaluation of an individual study program and of a higher education institution as a whole. Therefore, the experts encourage Najran University to establish closer and more interactive contacts with other universities within and outside of Saudi Arabia. Such cooperation should include experience exchange in terms of visiting professors, students' exchange programs and events, and a number of scientific conferences, workshops and discussions organized by and for both teachers and students of the University. By means of such actions, the University can contribute to the solidification of university networking on the national level.

(2) Curriculum design

The regulated study period in the program "Radiological Sciences" is 5 years: 9 semesters at the University followed by a 6-month internship in a hospital or other medical institution. The study programs of the College of Applied Medical Sciences are structured according to three stages of education:

Phase I – preparatory year (2 semesters),

Phase II – period of main studies in the program (7 semesters)

Phase III – Internship period (1 semester or 6 months).

The study program “Radiological Sciences” comprises 63 mandatory courses, of which 33 are program-specific courses and 30 are courses offered by other departments of the University (12 of them are taught in the preparatory year and 18 during the main period of studies). All courses of the program can be grouped into 3 categories:

- University requirement courses, which focus on general competences and skills of learning, the English and Arabic language as well as on Islamic culture. These courses are offered throughout the whole period of education and they are attended by all students of the University, regardless of their program specialty;
- College requirement courses, which are fundamental for all specialties in the field of medical sciences and they include courses such as “Anatomy”, “Biostatistics”, “Physiology”, “Biochemistry” and other. These courses are offered mostly in the initial years of the program;
- Program requirement courses (or program-specific courses), which are taught exclusively by the teaching staff of the Department of Radiological Sciences to the students of the program. These courses provide a thorough theoretical and practical knowledge of specialty and they are usually taught starting with the second year of studies.

The preparatory year consist of the university and college requirement courses, and it functions as an orientation period for students to improve their English language skills and acquire the level of scientific, ethical, and cultural background necessary for further specialization. By the end of the preparatory year, students have to obtain 27 credits and successfully complete all the courses offered during this period.

Phase II is dedicated to providing students with specific theoretical, practical and scientific knowledge in the chosen field of medical care. This period includes program-related courses that offer students a good insight into the nature of their future work and functions. Apart from program-specific courses, this period contains also university and college requirement courses. Students complete this phase with the acquisition of obligatory amount of 115 credits and completion of all courses.

Phase III is the internship period envisaged in each study program, which lasts from 6 months up to one year. This period offers students an opportunity to

integrate into the future career and gain experience of working in authentic clinical environment. Students are admitted to do their internship only upon completion of the requirements of all theoretical courses. During the internship, students are required to complete rotations focused on general x-ray, fluoroscopy, ultrasound, computed tomography and magnetic resonance imaging as well as on one of the elective directions of nuclear medicine, dental radiography, angiography, mobile and operation room machines, or mammography.

Each academic year is planned in compliance with the objective of the program envisaged for that specific period of studies. The complexity of every semester continuously increases leading up to a graduation project and an internship period, both of which require a certain level of autonomy and intensive involvement in professional activities.

The expert group concludes that the requirements of the criterion are met in full.

Nevertheless, it is important to mention the outcomes of the experts' discussion about the University credit system from the European perspective. Taking into account the national particularities and legal requirements, the expert group has concluded that until now the self-study time has not been calculated into the total workload of the program. Given the fact that self-study time, as well as students' independent work on program-specific and general study contents, constitute an important part of serious academic analyses, the experts recommend the University to review the currently applied credit system. Suggestions and recommendations on how to organize the credit award system are presented for example in the "ECTS Users' Guide"⁵. These regulations must be observed by all European universities. From the experts' point of view, adoption of the European system of grading could facilitate the direct recognition of students' study performance and accomplishments in case of transfer from one university into another and also in case of international student exchange programs.

Furthermore, the experts encourage the program management to arrange the offered courses in terms of larger modules with a standardized credit value, when one credit is equal to a set amount of workload hours. Such a design of

⁵ http://ec.europa.eu/education/tools/docs/ects-guide_en.pdf

the program would enable students to arrange their study plan in a self-contained manner. According to the "ECTS Users' Guide", the introduction of standardized modules with the defined amount of credits and workload hours enables students to correlate the exchange studies accomplished in different universities and also to obtain credits for specialty-related courses offered by other departments within the same university (for details, see the "ECTS User's Guide", section 4.1). Also country-specific training conditions should be observed and taken into account. Thus, a higher compatibility between study programmes can be achieved.

(3) Staff

During the on-site visit, the experts observed that the teaching staff of Najran University has revealed a clear commitment to the implementation and further improvement of the education process in the program they are responsible for.

The teaching staff of the study program "Radiological Sciences" consists of 34 members in male section and 33 members in female section. Of 34 instructors in the male section, 24 are employed on a full-time and 10 on a part-time basis; of 33 instructors in the female section, 12 are employed on a full-time and 21 on a part-time basis. In the male section, there are 4 assistant professors and 10 lecturers among the full-time staff; there are 5 assistant professors, 4 lecturers, and one demonstrator among the part-time staff. In the female section, there are 5 assistant professors and 7 lecturers among the full-time staff; there are 5 assistant professor, 15 lecturers and one demonstrator among the part-time staff.

The enrollment capacity of the program is 50 places (maximum 25 male and 25 female students); admission is each semester. The total number of students in case of full enrolment is 500 students in each section. With two part-time teachers taken as a full-time one, the expected student-teacher ratio for male and female sections of the program is approximately 17:1 and 23:1, respectively. This means that there are 18 male students and 24 female students per each full-time teacher. However, according to the statistics provided for the academic year 2012/2013, there are 73 males and 48 females are enrolled in the program. Hence, the actual student-teacher ratio can be much lower.

Employment of the teaching personnel for the study program is determined by the rules of the Higher Education Council of Saudi Arabia. Prior to taking the decision about the appointment to the position, the University verifies the information regarding the references, experience and qualifications provided by an applicant. New employees are thoroughly briefed about the program and their teaching responsibilities. The experts observed that the teaching staff involved in study programs reveals a high level of competence in the relevant field of health care and medical studies.

Students regularly evaluate the performance of the teaching staff of the study program.

To conclude, members of the teaching staff are appropriately qualified and experienced to perform their responsibilities in the program “Radiological Sciences”. Teaching strategies are used in accordance with the intended learning outcomes. Furthermore, teachers are encouraged to participate in activities focused on the improvement of their teaching methods and techniques.

However, the fact that members of the teaching staff are employed on the basis of extremely short-term contracts is regarded critically by the experts. Such yearly contracts reveal the position of the instructors at the University as uncertain and unstable. In such circumstances, the questions of the current or the next employment might become too urgent and distractive for the teachers. Consequently, this situation can potentially hamper the realization of long-term sustainable projects and developments since they require a certain period of time for preparations and the actual implementation. The experts are aware that the described conditions are determined by the Saudi-Arabian governmental requirements and national legal regulations. Nevertheless, the University should elaborate whether the introduction of long-term contracts could be more useful. As an example, the length of a teaching contract can be determined based on the criterion of belongingness to the University.

The Kingdom of Saudi Arabia is competing worldwide for the best minds in science/for the best scientists. Particularly in the field of Radiology, the scientific staff is limited. Offering sustainable employment conditions is an important factor for increasing the own attractiveness as a University.

To enable continuous professional growth and academic development of the teaching staff, the experts recommend the University to introduce new mas-

ter's degree study programs, as it has already been mentioned under Criterion 1. By offering advanced study programs, the University could develop its own system of continuous life-long education for employees and thus prepare new teaching forces for further realization of bachelor programs and, at the same time, attract applicants from other Saudi universities wishing to continue their academic career within the country. Given the fact that master study programs focus on academic research and scientific projects, the University should consider them as an opportunity to extend its' scientific material produced by its own current and former students.

Furthermore, the experts encourage the University to provide a sufficient number of workshops, exchange opportunities to visit other higher education institutions, and scholarships for research activities and continuous study programs within and outside of the country. Hereby, the experts discussed and positively evaluated the idea to establish a "life-long-learning Institute" as a part of the University.

The expert group concludes that the requirements of the criterion are met in full.

(4) Facilities and learning resources

The campus area of Najran University is considered to be the largest in Saudi Arabia. During the on-site visit, the experts have visited the newly occupied premises of the male campus. By relocating its units to the new campus, the University is striving to accommodate the rapidly growing number of students in Najran region. Female students are also expected to move to the new campus within the next few months after the building works are completed.

Currently, the university includes campuses for males and females, consisting of 15 and 10 colleges, respectively. The university encompasses a medical center, research center, sport and entertainment facilities, and it provides accommodation for the teaching staff and students. For the coming years, there is a plan to found the so-called 'investment city', which will incorporate commercial units, private schools, hotels and other objects, and which will serve as the foundation trust for the University.

The experts have been impressed by the large dimensions of the current construction projects.

There are sufficient classrooms throughout the university campus to conduct courses for groups of students of different sizes. The University Central Library provides students with a large amount of learning material and literary resources as well as with a sufficient number of computers, printers, scanners, copiers and other technical equipment. It must be emphasized that only male students have direct access to the central library. Female students can order the necessary learning material through the electronic library system. During the discussions with students, they evaluated the described access opportunities as sufficient.

In the course of the on-site visit, the expert group had the opportunity to observe and evaluate the learning and training premises of the College of Applied Medical Sciences and its departments. The Department of Radiological Sciences offers premises for two groups of students: female students are provided with 7 lecture rooms (30 seats), 1 meeting room (15 seats), 4 laboratories and 1 workplace (15 seats); male students are provided with 3 lecture rooms, 1 meeting room, 4 laboratories and 1 workplace. Female students have a department library in their campus which is open from 7:30 to 14:30 from Sunday to Thursday whereas the male students have access to the central library.

From the experts' point of view, the learning resource materials and associated services are consistent with the requirements of the programs and the courses offered by them.

Both students and the teaching staff take part in the evaluation of learning material used in theoretical and practical classes. Course instructors are responsible for the due preparation of the equipment before the beginning of each semester. The "Radiological Sciences" program is financed from the University resources.

According to the experts' conclusions, the University provides an appropriate amount of theoretical and practical learning material, general study and the program-specific equipment, learning resources, including literary material available in both libraries.

With regard to the support of students with disabilities, the experts witnessed that the building entries of the new University campus, as well as the labora-

tories and lecture halls, are designed for people with movement restrictions. Furthermore, there are special parking places for students with disabilities.

The acquisition of new equipment is a centralized procedure and is monitored by the central policy of the University.

The experts have concluded that the available facilities and the equipment comply with the standards of high quality as well as health and safety requirements. Management and administration of facilities, equipment and associated services are efficient and ensure maximum effective utilization of facilities provided.

To conclude, the "Radiological Sciences" program is implemented with the help of suitable and sufficiently provided material and facilities, which complies with the objectives and learning methods applied in the given specialization. The use of facilities and equipment is monitored as part of the quality assurance of the program.

The expert group concludes that the requirements of the criteria are met in full.

(5) Study process and student assessment

The study program "Radiological Sciences" is offered by the College of Applied Medical Sciences.

The study process of the program is administered and carried out according to the general *List of Regulations* of the University. These regulations apply for admission and registration procedures, grading system, structure and organization of semesters, transfer opportunities, postponement and suspension actions, re-enrollment and graduation requirements, examination system, conditions for visiting courses at another university, methods of internal and external quality assurance, learning methods and learning resources.

The decision making structures in the program are the Department Council, the College administration, the Dean and other bodies functioning on the institutional level.

The study program "Radiological Sciences" is offered for both female and male students.

In order to be enrolled into the preparatory year in each study program accredited, applicants have to submit a Saudi Arabian Secondary School Certificate or an equivalent document and the results of an Aptitude Test organized by the National Centre for Assessment in Higher Education. An applicant's enrolment rate is determined by the school grade average (70%) and the Aptitude Test (30%). Besides, applicants must have graduated school not longer than two years ago, be physically fit and in case of employment submit the approval of the employer.

Upon completion of the preparatory year, students can apply for the admission to one of the programs offered by the College of Applied Medical Sciences. To be admitted to the College, students have to obtain a grade equivalent to 75% of performance in the preparatory year. The application is submitted online to the Deanship for Admission and Registration in the specified periods for each semester. Students are informed about the decision regarding admission within 72 hours after the application has been submitted.

The experts have expressed their concern regarding the situation of students with disabilities or chronic illnesses because 'being fit' is one of the main admission requirements of the University. Since it can become a very important issue and even a hindrance for some applicants on their way to receive higher education, the experts strongly recommend the University to give a clear definition and describe its criteria for 'physical fitness' in a transparent manner. This means that the relevant information should be publicly available, for instance through the official website of the University.

Students of the program receive support from the teaching staff and internship supervisors of the Department and also from the hospital coordinators during the internship period. Each member of the teaching staff is assigned to a certain amount of students in order to provide them with academic guidance, which includes the explanation of the College regulations, the system of workload distribution, course structuring and other aspects. Students of the program can have individual counselling appointments with teachers during the office hours. Duties and responsibilities of internship supervisors and hospital coordinators are well-defined and described. Furthermore, program coordinators organize orientation sessions in the preparatory year, where students are shown medical laboratories and premises of the College before they decide

which program to join. Finally, the University applies a special system of policies to support underachieving students and to award high-achieving students.

Examinations taken in the study program follow the regulations of the University, which define when students are permitted to examinations, what additional material (e.g. bilingual dictionaries, pocket calculators) they may use and what time requirements they have to fulfil. Among the assessment methods used in the study programs, the University names seminars and discussions, assessment of group assignments, homework, essays, presentations, practical sessions and other. Assessment methods are further categorized into: midterm written exams (20% of the final grade for the semester) final written exams (40%), midterm practical and oral exams (10%), final practical and oral exams (10%), 2 quizzes taken at the beginning and the end of a semester (10%), and an assignment carried out in the middle of a semester (10%).

According to further regulations, students who missed more than 25% of the course lectures are not allowed to take final exams. If students were absent due to health or other acceptable reasons, they can take an alternative examination. In case students fail to succeed in completing requirements of a particular course, they have to repeat the course along with the courses of the next semester.

The grading system applied in the study programs complies with the academic requirements of the University. Nevertheless, the experts recommend - as written under Criterion 2 - to review the implementation of the current credit system so that it will show the complete study process of students, including their self-study time.

In the course of the on-site visit, the experts witnessed the vivid dedication with which teachers and students are involved in the realization of the program objectives. The experts described the University as a higher education institution with great potential and unique character striving towards academic growth and qualitative improvement of teaching and learning processes.

The College of Applied Medical Sciences prepares and implements a number of questionnaires to evaluate the efficiency of study processes by current students, graduates and employed students as well as by actual and prospective employers. Results of these questionnaires are analyzed and applied for

issuing the development plan for the coming academic year. In this regard, experts agreed that the University should ensure that these evaluation results are made available to all stakeholders, including students. The obtained information can be communicated to students in the form of numerical calculations and statistical charts. By doing so, the University could guarantee transparency and effectiveness of quality assurance procedures implemented in the program as well as within the University, in general. Furthermore, such a feedback could motivate students to take a more active part in the improvement of the program.

The system of students support is maintained by the program management on a high level. Similarly, the examination system of the study program is suitable and effective for the evaluation of students' achievement in the courses. Students' rights and actions in examinations and transfer procedures are well described in the University *List of Regulations*.

The College assures to provide equal rights and opportunities, as well as similar equipment and learning material resources, for both female and male students.

The expert group concludes that the requirements of the criterion are met. However, the experts point out that the University should specify its requirements and selection criteria implied under the aspect of 'physical fitness' and properly communicate the results of quality evaluation questionnaires to all stakeholders, including students.

The share of E-learning offers could be increased. As a result, students can be better achieved. In addition, the key competences in the field of electronic communication can be improved. This is desirable especially in the field of Radiology.

(6) Program management and quality assurance

Najran University implements a set of internal quality assurance procedures, which involve both students and teachers. The Dean of Development and Quality is responsible for the execution of strategic development plans on the level of colleges and departments. The Dean and its units ensure technical support of the study processes and arrange different activities and workshops to increase professional performance and quality awareness of the teaching staff. Furthermore, the University emphasizes its reliance upon the standards

and the recommendations of the National Commission for Accreditation and Assessment (NCAAA).

The College of Applied Medical Sciences has its own Development and Quality Unit, which was established in 2010 following the administration decision of the Deputy Rector for Development and Quality.

According to the University, at the end of each semester, the program coordinator submits a report for the discussion of program development and improvements by the program council. The Development and Quality Unit studies, analyses and summarises the obtained results, which are then submitted to the Dean of the College. Besides, this Unit issues an annual plan for the improvement of the college, monitors the execution of this plan and then submit follow-up reports to the Deanship of Development and Quality.

Teaching process is evaluated in the College of Applied Medical Sciences by means of student questionnaires, review of teachers' portfolios and the overall assessment of their academic achievement. The program's relevance to the professional practice is monitored through continuous communication with graduates and the activity of a consultation committee, which consists of representatives from professional practice and future employers. Finally, program implements periodical questionnaires for graduates and for current as well as prospective employers.

Program students are required to complete course evaluation questionnaires at the end of each semester. In the final year of studies, students are asked to evaluate the program learning facilities and services that had been offered in the course of studies. Students of the program confirmed that they are actively involved in the described quality assurance processes.

The University ensures academic feasibility of the evaluation methods by means of continuous monitoring of the intended and achieved learning outcomes through students' feedback and program coordinators' reports.

Based on the observations during the on-site visit, the experts concluded that the quality assurance concept of the University relies on continuous and evidence-based evaluation of performance. The quality assurance processes are carried out in the form of written evaluations, discussions held by the teaching staff and students. It is noteworthy that the University strives to apply internal as well as external standards and requirements of quality evaluation; the

latter is implemented through the involvement of external evaluators such as prospective employers of graduate students and academic experts from other countries. The College of Applied Medical Sciences issues an annual development report containing information on the achievements, shortcomings and the necessary changes and improvements for the next academic year.

The credit system of the University takes into account only contact hours, although students' self-study time is equally valuable in higher education programs. Therefore, the experts underline that the rationality of the program study workload should be determined based on all activities performed by students, which include not only regulated theoretical classes, practical sessions and the internship period, but also students' investment time of independent studies and preparation for examinations.

Teaching and other staff involved in the program must regularly evaluate and document their own performance and be personally committed to improving both their own performance and the quality of the program as a whole. Regular evaluations of quality are undertaken within each course based on valid evidence, relevant performance indicators, and appropriate benchmarks; subsequent plans for improvement are made and implemented. Central importance is given to student learning outcomes with each course contributing to the achievement of the overall program objectives.

The University determines a set of regulations for students transferring from other universities. Thus, students should not have any record of dismissal from their previous university; they have to complete not less than 60% of the total program requirements at Najran University in order to graduate from it. The College council decides about the recognition of previous studies and the amount of credits they are equal to. In order to transfer from one college to another within Najran University, students must provide a Grade Point Average not less than 2.00 and have no previous record of transfer.

Information about the program, its admission requirements and other details relevant to the program are available on the website of the University. Students evaluated the information provision measures and information resources of the University as sufficient and adequate. Academic counselling and career advice in the given field of study are offered. The website of the College contains information about the offered study programs, their mission, goals, or-

ganizational structure, study plan, training plan, internship organization and other details.

Practical relevance of the study program “Radiological Sciences” is confirmed by the fact that the majority of program graduates are employed and that the program has received positive evaluations by its former students and their employers, according to the records of the Alumni Office of the University. Since there is a considerable lack of specialists in the field of medical care in Saudi Arabia, employment opportunities of the program graduates are claimed to be very good, which is confirmed by current employers as well.

The University strives to supply the teaching staff and students with sufficient research equipment and material, as well as financial support. Members of the College teaching staff are actively involved in various scholarly activities to ensure that they remain up to date with developments in their respective field and that these developments are reflected in their work. Achievements in research and publication in respective periodicals play an important role for promotion of teachers to a higher academic position within the University.

As a recommendation for further enhancement of research activities, the experts emphasize that primarily teachers themselves should actively encourage and trigger bachelor students’ interest in scholarly work. Course teachers can do so, for instance by involving students in their own projects, practical experiments or social initiatives.

Moreover, the recommendation to introduce scientific and educational oriented master programs could have a positive influence on the future development of research activities and recruitment of qualified staff.

The expert group concludes that the requirements of the criteria are met in full.

3.4 Summary

Based on the information from written documents and the results of the on-site visit, the experts came to the conclusion that the study program “Radiological Sciences” offered at Najran University, Saudi Arabia, fulfills the above described and evaluated criteria.

The program has demonstrated its capacity to train specialists working with technological equipment to provide diagnostic images and therapeutic applica-

tions for diagnosis and treatment of diseases and injuries. The University assures successful employment opportunities for the program graduates and also enables them to continue their academic career within as well as outside the country.

The qualification objectives, the design and the structure of the study program, admission requirements, quality assurance procedures and evaluation methods in particular have been the focus of the accreditation procedure. Aspects related to quality management, as well as the learning resources, facilities and staff have been discussed.

The study program "Radiological Sciences" responds to the needs of the labor market situation in the Kingdom of Saudi-Arabia and especially in Najran region witnessing a significant increase of population. The experts agreed that the reasons for the establishment of the study program are clear and well-founded. The study curriculum and course content comply with the overall objectives of the study program. The facilities are new and of high quality.

The program complies with the overall mission of the University to contribute to the improvement of the national health care system and to enhance the education opportunities of younger generations.

The continuously growing number of local students creates various challenges for the University, in terms of additional learning resources and study premises. Therefore, the University responds to these needs by establishing new campuses for male and female students.

Taking these facts into consideration, the experts have come to the conclusion that they will submit a recommendation to the Accreditation Commission of the AHPGS for a positive decision regarding the accreditation of the study program "Radiological Sciences".

The members of the expert group have, at the same time, outlined a number of recommendations and suggestions, which they believe to reinforce the educative potential of the program:

- In terms of further continuous study opportunities, the University should work in two directions: one is to encourage professional growth and enable further scientific engagement for the teaching staff, and the other is to offer continuous academic study opportunities for students. This can be

achieved through the introduction of master level study programs, which will help the University to enhance its output of scientific work, thus increasing its competitiveness in the field of health care education. Furthermore, by offering advanced studies, the University can create a continuous life-long learning environment for its academic teaching forces and students.

- The Department of Radiological Sciences and the University in general, should establish closer and more interactive contacts with other higher education institutions within and outside of Saudi Arabia. This includes student exchange opportunities, exchange of teaching experience through visiting professors, organization of conferences, workshops, and discussions among students and teachers from partner universities. By means of such actions, the University can contribute to the solidification of university networking on the national level.
- Considering the structure of the curriculum, the experts strongly encourage the program management to introduce more optional courses.
- The experts recommend the Department of Radiological Sciences and the University in general, to review the currently applied credit system in terms of:
 - a) the self-study time dedicated to program-specific and general study content, which according to the European perspective constitute an important part of the higher education process and is therefore included to the total amount of working hours and credits allocated in a study program;
 - b) the arrangement of the program courses within larger modules with a set amount of credit value and workload hours, which enables students to correlate the exchange studies accomplished in different universities and also to obtain credits for specialization-related courses offered by other departments within the same university.

Suggestions and recommendations on how to organize the credit award system are presented for example in the "ECTS Users' Guide".

- The University should consider the employment of the teaching staff based on long-term contracts. The length of a contract might be, for instance, de-

terminated by the criterion of belongingness to the University. The advantage of such a system is that it could enable the realization of continuous and long-lasting projects and scientific experiences, which require a certain period of time for preparation, implementation and subsequent analyses.

- With regard to the admission procedure, the University should specify its requirements and selection criteria implied under the aspect of 'physical fitness'. The relevant information should be publicly available, for instance through the official website of the University.
- As a recommendation for further enhancement of research activities, the experts emphasize that primarily teachers themselves should actively encourage and trigger bachelor students' interest in scholarly work. Course teachers can do so, for instance by involving students in their own projects, practical experiments or social initiatives.
- The University should ensure that the results of evaluation questionnaires completed by students are properly communicated to all stakeholders, including students themselves. By doing so, the University could guarantee transparency and effectiveness of quality assurance procedures implemented in the program as well as within the University in general.

4 Decision of the accreditation commission

Najran University, Najran, Kingdom of Saudi-Arabia, Bachelor Program "Radiological Sciences"

The resolution of the Accreditation Commission is based on the University's application, as well as the expert review and the on-site visit covered in the expert report. Moreover, the Accreditation Commission takes into account the response opinion regarding the study program. The on-site visit occurred on February 23 and 24, 2015 according to the previously agreed schedule.

The accreditation decision is based on 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.

The Bachelor study program "Radiological Sciences" is completed with awarding of the academic degree "Bachelor of Applied Medical Sciences in Diagnostic Radiological Sciences".

The regulated study period in the program "Radiological Sciences" is five years: nine semesters at the University followed by a six-month internship. The study program "Radiological Sciences" comprises 63 mandatory courses, of which 33 are program-specific courses and 30 are courses offered by other departments of the University (12 of them are taught in the preparatory year and 18 during the main period of studies).

The AHPGS Accreditation Commission considers that all Accreditation Criteria are fulfilled. The AHPGS Accreditation Commission accredits the study program "Radiological Sciences" for the duration of five years, until September 30, 2020.

For further development and enhancement of the study program and the University as a whole, the AHPGS Accreditation Commission recommends taking the study program specific recommendations as well as the overarching rec-

ommendations described in the summary of the Expert Report, into consideration.