

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

“Clinical Laboratory Sciences”

(Bachelor of Applied Medical Sciences in Clinical Laboratory Sciences)

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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 given document presents the summary of the AHPGS for the “Clinical Laboratory Sciences” Bachelor study program. The first cohort of students was enrolled in 2007/2008; the program is established for male students only.

The application documentation submitted by Najran University follows the outline recommended by the AHPGS. Along with the application request for accreditation of the “Clinical Laboratory 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 description
2	Course overview
3	Plan of course of study
4	List of 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 “Clinical Laboratory 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	Clinical Laboratory Sciences
Degree awarded	Bachelor of Applied Medical Sciences in Clinical Laboratory Sciences
Working language	Mainly English (11 courses are in Arabic, 44 courses—in English)
Students' gender	Male only
Form of studies	Full-time
Organizational structure	Sunday – Thursday, 8:00 – 20:00 in the current 2014/2015 semester
Period of education	9 semesters (2 semesters in the preparatory year, 7 semesters at university), plus 1 semester of an internship at a hospital)
Credit Points (CP) according to the European Credit Transfer System (ECTS)	The program is offered only by the credit hour system:138 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: hours 4.410 Contact hours: hours 2.790 Individual work: hours 660 Practice (internship): hours 960
CP for the final paper	The program ends with a research project awarded with 7 credit points

Beginning of the study program	1st cohort of students (10 male students) was admitted in 2007/2008
First accreditation	Not applicable
Time of admission	Each semester
Number of available places on the program	40
Number of enrolled students up to now	89
Number of graduates Up to now	29
Particular enrollment conditions	Saudi Arabian General Secondary School Certificate (with high grades); successful completion of the 1st preparatory year at the University
Tuition fees	Not applicable (cf. Question 11 in the AOQ)

Table 2: Structural Data of "Clinical Laboratory Sciences" Study Program

The Bachelor study program "Clinical Laboratory Sciences" comprises 9 semesters (internship period not included) and it is structured according to three phases:

Phase I – preparatory year (2 semesters),

Phase II –Clinical Laboratory Sciences courses (7 semesters), and

Phase III – Internship period (6 months).

The preparatory year is mandatory for all students of Najran University since it functions as an orientation period when they can visit the Clinical Laboratory Sciences Department to get information about the program. During the preparatory year, students master their English, acquire necessary computer skills, and develop general learning techniques. Phase II is dedicated to providing students with more specific theoretical, practical, and ethical knowledge in the field of clinical laboratory sciences. In course of these 8 semesters all program-specific and supportive science courses are taught. It is claimed that most of the clinical laboratory sciences courses are taught in an integrated manner of theory and practice, in addition to three Clinical Practice courses in the 8th and the 9th semesters. Study Phase III is a six-month mandatory internship that assures that graduates have acquired necessary knowledge, attitude, and competency to perform the essentially medical, common technical and administrative skills in the clinical settings. The intern rotates under

supervision trying out different clinical areas within respective departments in a hospital. The intern is awarded the degree Bachelor of Applied Medical Sciences in Clinical Laboratory Sciences after successful completion of all clinical rotations, competencies and objectives (see Application A1.18 and Annex 3).

2.2.2 Qualification objectives and employment opportunities

In its 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 "Clinical Laboratory Sciences" Bachelor study program that should:

- Acquaint students with different work fields and the work cycle of each of the medical laboratory departments;
- Train their skills for efficient and accurate interpretation of various clinical laboratory test results;
- Enable them to choose and collect an appropriate specimen for the following laboratory investigations;
- Encourage their continuous education and training in order to maintain their professional knowledge up-to-date;
- Help them build practical and scientific research basis to apply it later in their professional life (see Application A2.1).

First and foremost, the program is expected to prepare specialists with a thorough theoretical and practical knowledge in Clinical Laboratory Sciences as well as in the general medical field. Hence, it offers its students an opportunity to select an area of specialization such as hematology, clinical chemistry, histopathology, and clinical microbiology. By the end of the program graduates are expected to describe the scientific bases of routine clinical laboratory tests, apply knowledge from medical statistics, computer sciences and other data resources, and be aware of the professional ethics and the regulations of laboratory practice.

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 analyze laboratory test results and correlate them with clinician's diagnosis of the relevant case, submit accurate

laboratory reports taking into account the patient's privacy requirements, and recognize different biological structures while using a microscope. Furthermore, the students have to be able to deduce the characteristics (chemical, hematological, immunological and histological components) of all types of biological specimens in order to make a precise diagnosis. Finally, it is important that the students learn to provide infection control during the laboratory investigation of various biological specimens. On the level of interpersonal relations and communication, graduates are trained to demonstrate professional behavior in all interactions with co-workers, patients/clients, and their families. As for psychomotor techniques, the students are trained to perform the laboratory tests taking into consideration the accuracy, safety and infection control measures and use the laboratory equipment and electronic apparatus according to the standards of operation (see Application A2.2).

Among the reasons for the introduction of the study program "Clinical Laboratory Sciences" the University names lack of corresponding specialists in the country and particularly in its southern regions. Furthermore, due to the low percentage of medical specialists of Saudi Arabian nationality, the University is interested in preparing the local youth to serve the community (see Application A2.4). According to the information provided, a profession in the field of clinical laboratory sciences is among the most dynamically expanding and highly demanded ones in clinical medicine.

Considering the labor-market situation, the University states that the program graduates can find employment in both public and private sectors. These include hospitals and clinics, emergency wards and clinic laboratories, governmental agencies, administrative and managerial sections, as well as commercial companies specializing in sales and development of new products. Thus, it is claimed that the students can choose career they would like to pursue in clinical sphere, management, teaching, or research (see Application A3.1 and A3.2).

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 opportuni-

ties for career services and mentorships to the students of the program. The degree also provides for the opportunity to study at postgraduate programs.

2.2.3 Structure of the study program and exam system

According to the documents provided by the University, the “Clinical Laboratory Sciences” Bachelor study program comprises 55 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 the medical colleges at Najran University. Study Phase II of the program includes 43 Clinical Laboratory 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 two categories: program-specific courses (30) and courses provided by other study programs, including the preparatory year (25). All courses have to be completed before the internship year starts.

The total workload of the program “Clinical Laboratory Sciences” equals to 3.450 contact hours, which corresponds to 138 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. Successful completion of the preparatory year gives the students 27 credit hours out of the required 138 hours.

Semester	Course Title	Credit Hours/week	Attendance 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	3	2
	Ideation and Thinking Skills	2	2
	Computer Skills	2	
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 Clinical Laboratory Sciences courses that offer deep insight into the professional field and prepare students for the practical application of the acquired knowledge and skills. The 43 program courses of Study Phase II are worth of 111 credit hours out of the 138 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	Histology Techniques	2	3
	General Microbiology	4	6
	Clinical Chemistry (1)	4	6
	Introduction to Hematology	2	3
	Islamic Culture -2	2	2
	Epidemiology	2	2
Total:		16	22
5	Hematology (1)	4	6
	Clinical Bacteriology (1)	3	4
	General Immunology	2	3
	Clinical Chemistry (2)	4	6
	Arabic writing	2	2

Total:		15	21
6	Hematology (2)	4	6
	Medical Mycology	2	3
	Clinical Bacteriology (2)	3	4
	Medical Virology	2	3
	Clinical Chemistry (3)	4	6
	Islamic Culture -3	2	2
Total:		17	24
7	Histopathology (1)	3	5
	Clinical Chemistry (4)	3	4
	Medical Parasitology	2	3
	Environmental Microbiology	2	3
	Genetics and Molecular Techniques	2	3
	Islamic Culture -4	2	2
Total:		14	20
8	Hematology (3)	3	3
	Methods of scientific Researches	2	2
	Clinical Immunology	3	4
	Bacteriology and Immunology (Clinical Practice)	2	4
	Histopathology (2)	3	5
	Clinical Chemistry (Clinical Practice)	3	5
Total:		16	23
9	Hematology (Clinical Practice)	2	5
	Clinical Histopathology	4	7
	Laboratory Quality Management	3	4
	Student Research project	4	7
	Occupational Ethics	2	2
Total:		15	25
Total for the Clinical Laboratory Sciences courses:		111	162
Total for the whole program:		138	186

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 (5 days per week with 2 days-off in the course of 6 months). For one month, interns work as trainees in the following six units in one of Najran hospitals: Reception and Parasitology, Hematology, Microbiology, Serology and Immunology, Clinical Chemistry, as well as Histopathology and Cytology. For detailed information on the intended objectives of each of the internship sections, refer to Paragraph A1.18 of the Application.

The Course Description (see Annex 1) covers the following aspects: course title, semester, number of credit hours, language of instruction, and description of the course content, its educational objectives, and the methods for student's assessment. Moreover, Attachment A1 of the Application outlines the structure of the study program in correspondence with the declared learning outcomes whereas Attachment A2 of the Application presents correlation between study-program objectives (see Paragraph 2.2.2 of the present document) and corresponding courses. Only in their preparatory year and further at the *Islamic Culture* and *Arabic Language* courses do the students of the "Clinical Laboratory Sciences" Bachelor program attend classes with other students of the College of Applied Medicine (see AOO, Question 7).

As stated in Paragraph A1.16 of the Application, the study program applies such forms of teaching as lectures, tutorials, seminars, practical and clinical sessions, and a one-semester internship. The course of studies involves a variety of teaching strategies and methods, such as demonstrations, case studies, independent work over assignments, etc. as well as electronic and media teaching aids (multimedia projectors, video materials and others). However, no distance learning is possible at the "Clinical Laboratory Sciences" Bachelor study program (see Application A1.17).

As for the international aspects of the curriculum, in Paragraph A1.14 of the Application it is stated that the program seeks to achieve international standards in the study field. Out of 55 courses, 44 (80%) are taught in English and

11 (20%)—in Arabic. Besides, 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. 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.

At the moment, however, the study program cannot offer a student exchange with other universities or studies abroad as there is no collaboration with other Higher Education Institutions. Possibilities for establishing cooperation with national and international peer programs are considered. In future, the study program is also planning to have international collaborations and partnerships, use international learning materials and resources as well as enjoy international accreditation (refer to Application A1.14 and A1.15).

Regarding collaboration with national organizations, the "Clinical Laboratory Sciences" Bachelor study program has an agreement for cooperation with the National Training Department of Health Affairs for providing training inside Najran (King Khalid General Hospital, Najran General Hospital, and Maternity and Children Hospital) as well as outside the region (Asir Central Hospital and Abha General Hospital) to all students of the program during their internship period.

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 three practical training courses taught at the program in the 8th and 9th semesters, 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 Medical Laboratory Director of a corresponding hospital provides a proper training area to meet the objectives of the internship program. The role of the Hospital Medical Laboratory Coordinator is to organize an orientation program for all new Clinical Laboratory

Sciences interns as well as coordinate the implementation and assessment of the internship program together with the assigned coordinator from the College of Applied Medical Sciences. Furthermore, the Hospital Medical Laboratory Coordinator is responsible for planning the clinical placement and rotation of the interns, distribution of clinical schedules among the students and the College and study administration, maintaining all records regarding interns' performance and attendance, submitting reports and the students' final evaluation by the end of the rotation to the College of Applied Medical Sciences, and solving problems the interns may be experiencing or causing (see Application A1.18).

Besides the support from the medical institution, the interns also get mentoring from the College of Applied Medical Sciences. College internship supervisors assign the interns to different departments, provide counselling to them, follow up implementation of the policies and guidelines of the internship program, review the reports and student evaluation submitted by the Hospital Medical Laboratory Coordinator, and maintain accurately all intern's personal data and files. For a list of the College internship supervisors and their qualifications, refer to the corresponding table in Paragraph A1.18 of the Application.

The correlation of the practical content with the intended objectives of the study program is ensured by the fact that the interns' performance is assessed according to the criteria set by the Department of Clinical Laboratory Sciences of Najran University. As for the methods of quality assurance, each intern's log book that should be signed and regularly filled out is submitted to College coordinators at the end of their training period and evaluated by the academic and external clinical supervisors. Besides, all supervisors are required to deliver a Field Experience Report (FER) to the Department coordinator by the end of each semester.

The program envisages integration of research into the course of studies through the following courses in the 8th and 9th semesters: *Methods of Scientific Researches* and *Research Project*. There is a graduation project provided for at the end of the studies. As explained in Question 7 of the AOQ, at the *Research Project* course students build teams, choose titles for their projects, write proposals and conduct research. The results are then submitted to the

graduation project committee. After completion of the both study courses, the students are expected to be able to conduct an elementary scientific 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 AOO presents a list of students of the College of Applied Medical Sciences, titles of their reports and scientific conferences they have partaken in. What is more, the University intends to encourage interest in research studies among its students and enable them to apply scientific research results in the clinical settings. For instance, there is a Centre of Health Research at the university that seeks to promote research projects in order to apply them for the monitoring and prevention of epidemic diseases in Najran region (see Application A1.19).

Concerning the methods of examination applied in the program, these include continuous assessment (class participation, student discussions, and homework), quizzes, assignments, midterm and final written exams, practical exams, and clinical exams. Assessment of practical training courses implies continuous evaluation, oral mid and final practical exam at the end of the corresponding semester. The examination schedule is planned at the beginning of each semester according to the study calendar of the Kingdom of Saudi Arabia (see Application A1.13):

Examination	Time
Mid-term exam (written and practical)	(at the end of the 7 th week)
Final exam (written and practical)	(at the end of the 16 th week)

Table 5: Assessment Schedule for "Clinical Applied Sciences" Bachelor Program

There is no re-examination specific schedule; in some extraordinary cases, for instance, sickness or other emergency cases approved by the university system and regulations, re-examination is planned accordingly. 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 and AOO, Question 17).

The University mentions the following measures for assuring academic feasibility of the evaluation methods: internal review of all examination procedures by the Audit Committee, periodic staff reviews, application of examination rules enforced by the Control Unit Committee, and others. Furthermore, 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 (see Annex 4). Furthermore, the AOO gives a detailed description of policies for supporting underachieving students and honoring high-achievers (see Application A5.8 and AOO, Question 14).

The program "Clinical Laboratory Sciences" accepts only male students. Despite this fact, the University claims that in general its gender equality concept follows the regulation of the Kingdom of Saudi Arabia (see Application A5.9). 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 (see Application A5.10). In case of temporary 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 “Clinical Laboratory Sciences” Bachelor program include the following documents: an original Saudi Arabian Secondary School Certificate with a high grade (more than 2.5), student’s record during his study in the two semesters of the preparatory year, a good reputation and conduct certificate, and an original academic record for transformed students who have previously been enrolled at any other university or college (see Annex 5). The Application, Paragraph A4.1 states that prospective students’ results in the preparatory year can serve an additional criterion for their enrollment in the program. Besides this, the study program sets its own specific requirement: if an applicant has already studied at a diploma program, no more than one shall pass since his graduation from the program (see AOQ, Question 18).

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 online to the Deanship for Admission and Registration (although some documents are sent per post) 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 Deanship 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.

2.3 Conditions of studies and quality assurance

2.3.1 Human resources

The teaching staff of the "Clinical Laboratory Sciences" Bachelor program comprises in total 37 members, out of which 23 (62%) are employed on full-time basis and 14 (38%) on part-time basis. Among the full-time teaching staff there are 8 assistant professors and 15 lecturers. Among the part-time teaching staff there are 13 assistant professors and 1 lecturer. Besides, the technical-administrative staff includes 5 teaching and lab assistants.

The students of the program are expected to complete their studies at university in 9 semesters (4.5 years) followed by a six-month internship at a hospital. The full enrollment capacity of the program is 40 places; the admission is each semester. The total number of students in case of full enrolment is 720, which means the expected student-teacher ratio of 24:1, i.e. 24 students per 1 full-time teacher (with two part-time teachers taken as a full-time one). However, in correspondence with the statistics provided for the academic year 2012/2013, 89 students are enrolled in the study program. Hence, the actual student-teacher ratio can be much lower (see Application B1.2).

In accordance with the guidelines of the General Secretariat of the Saudi Arabian Higher Education Council, the program sets the following requirements for the personnel responsible for mentoring and supporting students:

- Teaching a theoretical course or a language class requires at least a Master's degree or its equivalent issued by one of the Saudi Arabian Universities or other recognized University with a very good grade.
- To be Assistant Professor, one has to hold a Doctorate degree or its equivalent with at least a very good 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 by 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.
- A college internship supervisor primarily receives an Associate's degree to enter the profession and work as lecturer-technician at the University. In addition to an Associate's degree, many medical laboratory specialists also have certificates in Clinical Laboratory Sciences issued by applied medical colleges.

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

As reported in Section B1.4 of the Application, selection of the teaching personnel for the "Clinical Laboratory 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 that include effective use of new and developing technologies are designed for both new and experienced teaching staff members.

2.3.2 Material and space resources

Najran University claims that there is no external funding: the “Clinical Laboratory 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 (see Application B3.4).

Recently, the program “Clinical Laboratory Sciences” has been moved to the new University campus. The new premises are claimed to meet the requirements for lighting, air conditioning systems, and health and safety conditions. The current teaching facilities include study rooms and laboratories. There are security systems to ensure safety for researchers and their activities. In future, the Department is planning to establish a library of its own. Table 8 gives an overview of the facilities available for male and female students of the program:

Room	Number	Capacity	Facility
Lecture rooms	5	30-40	Chairs, overhead projector, whiteboard, air conditioner, Internet connection
Meeting room	1	15	Chairs, round tables, overhead projector, whiteboard, air conditioner, Internet connection, network service, air conditioner
Laboratories	14	15-30	Book stands, chairs, computers, Internet connection, air conditioner
Workplaces for students	2	15-40	Chairs, tables, air conditioner

Table 7: Facilities of “Clinical Laboratory Sciences” Bachelor Study Program

What is more, there are 11 laboratories at the disposal of the “Clinical Laboratory Sciences” study program: 1 Bacteriology lab, 1 Parasitology lab, 1 Virology lab, 1 Molecular Biology lab, 1 Research lab, 2 Histopathology labs, 2 Clinical Chemistry labs, and 1 Hematology lab. For a detailed list of lab equipment, refer to Annex 8.

As for EDP and media equipment, teaching rooms are provided with whiteboards, show projectors mounted to the ceiling, and new computers to conform to the requirements of the study process. Access to the Internet has been provided to allow students check class schedule, teaching materials, announcements, grades, and get useful instructions online on the university website.

As mentioned above, the Department does not have its own library. However, The Prince Meshaal Library, the University central library, can offer many reference and specialized books to the students of the “Clinical Laboratory Sciences” Bachelor program. 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. The library can house 77 students at a time. The library open is from 7:30 to 14:30 from Saturday to Wednesday; online access to digital funds is possible during the day. Library funds for all study programs are managed centrally by Najran University.

Recently, the program has been relocated to the new University campus. As the University affirms, the same material and space resources are provided, with some extensions in class rooms.

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 "Clinical Laboratory 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 Framework 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 "Clinical Laboratory Scienc-

es" 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. In Paragraph C1.2 of the Application it is further stated that the Scientific Research Deanship provides financial support for the faculty researchers and encourages both staff members and students to conduct genuine and innovative research.

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 Clinical Laboratory Sciences. 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 Department of Clinical Laboratory Sciences 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. 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 AOQ, 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 Infor-

mation 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 Radiological Sciences", "Bachelor of Medical Sciences in Physical Therapy", and "Bachelor of Medical Sciences in Clinical Laboratories". The College of Applied Medical Sciences is split between the female and male campuses. For a description of the College facilities, please refer to Subsection 2.3.2 *Material and space resources* of the present document. As per academic year 2012/2013, there are 347 students studying at the College of Applied Medical Sciences: 89 Clinical Laboratory Sciences students, 121 Radiological Sciences students, and 137 Physical Therapy students. 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 students' needs for 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 and health care institutions:

Prof. Dr. Birgit Vosseler³

Professor of Nursing Science, Faculty of Social Work, Health and Nursing, University of Applied Sciences Ravensburg-Weingarten, Germany

³ People shown in italics have participated in the on-site visit assessment.

Visiting Professor at the School of Nursing at Shandong University, China 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 AHPGS 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 experts' 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.

The College of Nursing was initially managed by the Ministry of Health. 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 admitted and 27 graduate students in the program "Nursing". Hence, the College of Nursing also witnesses a considerable increase in the enrollment rates.

(1) Program aims and learning outcomes

The objective of the study program "Clinical Laboratory Sciences" is to train students to analyse laboratory test results and correlate them with relevant clinical diagnosis, to distinguish different microscopic structures using adequate technical equipment, and to determine the characteristics (chemical, haematological, immunological and histological) of various types of biological specimen. Furthermore, the program aims at developing students' abilities to work in laboratory settings, to implement safety measures in the process of collection and investigation of microscopic structures, and to write laboratory reports. Graduates are trained to work according to the principle of privacy regarding patients' test results.

The program trains students to acquire professional communication skills necessary to cooperate with patients, colleges and other members of the medical team. Graduates must be able to work with digital databases, to use different computer programs when preparing laboratory reports, material request forms and inventory lists.

The first preparatory year is dedicated to the improvement of students' English language skills and learning methods. Moreover, they attend courses in

Mathematics and professional ethics. Qualification competences and skills are further taught in the program-specific courses, which include "Hematology", "Clinical Bacteriology", "General Immunology" and other. At the same time, the program envisages the development of interdisciplinary skills, for instance through the course "Computer Applications in Health Sciences". The research project in the fourth year of studies further adds to the list of students' academic competences. 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 of a scientists working in clinical laboratories. Graduates can find employment in both public and private sectors, which include hospitals and clinics, emergency wards and clinic laboratories, governmental agencies, administrative and managerial institutions, as well as commercial companies specializing in sales and development of new products in the field of health sciences. Thus, students can pursue a career in clinical sphere, management and 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 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 "Clinical Laboratory Sciences" decidedly contributes to the realization of the University's goals. The program's principal purposes and

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

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 "Clinical Laboratory 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 "Clinical Laboratory Sciences" comprises 55 mandatory courses, of which 30 are program-specific courses and 25 are courses offered

by other departments of the University. 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 Clinical Laboratory 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 or the period of main studies in the program is dedicated to providing students with specific theoretical, practical and scientific knowledge in the chosen field of medical sciences. This period consist of all three categories of courses with the prevalence of the program-requirement courses in the final semesters.

Phase III is the internship period with a duration of 6 months. This period offers students an opportunity to integrate into the future career and gain experience of working in an authentic clinical environment. Students are admitted to do their internship only upon the completion of the requirements of all theoretical courses. During this period, students are trained in six directions: Reception and Parasitology, Hematology, Microbiology, Serology, Virol-

ogy and Immunology, Clinical Chemistry, as well as Histopathology and Cytology.

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.

In terms of recommendation for further development, the experts encourage the Department of Clinical Laboratory Sciences to introduce a larger variety of optional courses in the program to give the students the chance to start focusing on certain fields. This would give the students the possibility to continue with a master study program to delve into the subjects they focused on during the bachelor study program.

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).

Overall the expert group has the impression that the curriculum is well structured and balanced and contains all necessary subjects.

(3) Staff

During the on-site visit, the experts observed that the teaching staff of Najran University shows a great level of commitment to the implementation and further improvement of learning processes in the program as well as the specific courses they are responsible for.

The teaching staff of the study program "Clinical Laboratory Sciences" consists of 37 members, out of which 23 (62%) are employed on a full-time basis and 14 (38%) on a part-time basis. Among the full-time teaching staff, there are 8 assistant professors and 15 lecturers. Among the part-time teaching staff, there are 13 assistant professors and one lecturer. Besides, the technical-administrative staff includes 5 teaching and lab assistants.

The full enrolment capacity of the program is 40 places; the admission is each semester. The total number of students in case of full enrolment is 720, which means that the expected student-teacher ratio is 24:1, in other words 24 students per full-time teacher (with two part-time teachers taken as a full-time one). However, in correspondence with the statistics provided for the academic year 2012/2013, 89 students are enrolled in the study 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 "Clinical Laboratory 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. In addition these short-term contracts could lead to a high fluctuation of teaching staff, which could devalue the teaching evaluations of the students. 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.

To enable continuous professional growth and academic development of the teaching staff, the experts recommend the University to introduce new master'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 and the facilities in general. The University provides latest and sufficient equipment to ensure a good teaching and training.

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 Clinical Laboratory Sciences has at its disposal 3 lecture rooms with the capacity of 30-40 seats, 1 meeting room for 15 seats, 11 laboratories designed for 15-30 people, and 2 workplaces for students designed from 15 up to 40 people. In the coming years the Department is planning to establish its own library; at the moment, students of the program use the resources of 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. It is emphasized that the "Clinical Laboratory Sciences" program is financed from the University resources.

According to the experts' conclusions, the University provides appropriate quantity and quality of theoretical and practical learning material, general study and the program-specific equipment, learning resources, including literary material available in the central library, which all will be further improved, as soon as the Department provides its own library.

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 laboratories 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 asso-

ciated services are efficient and ensure maximum effective utilization of facilities provided.

To conclude, the “Clinical Laboratory 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.

During the on-site visit the experts had the chance to get a brief glimpse of the e-learning section, which created the impression of being a good basis and already providing information for the students. This could be further improved and implemented in the study progress.

(5) Study process and student assessment

The study program “Clinical Laboratory 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.

At the moment, the study program “Clinical Laboratory Sciences” is offered for male students only.

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 en-

rolment 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 program, 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 program 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 pro-

gram 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 criteria 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.

(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, the program coordinator submits a report for the discussion of program development and improvements by the program council at the end of each semester. The Development and Quality Unit studies, analyses and summarises the obtained results, which are then submitted to the

Dean of the College. Besides, the Development and Quality Unit issues an annual plan for the improvement of the college; it monitors the execution of the plan and submits follow-up reports to the Deanship of Development and Quality.

The 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, organizational structure, study plan, training plan, internship organization and other details.

Practical relevance of the study program "Clinical Laboratory Sciences" is demonstrated through the positive evaluations of the program by graduate 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 "Clinical Laboratory Sciences" offered at Najran University, Saudi Arabia, fulfills the above described and evaluated criteria.

The program has demonstrated its capacity to train specialists for working in medical laboratory circumstances. 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 "Clinical Laboratory 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 "Clinical Laboratory 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 Clinical Laboratory 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 stu-

dent 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 Clinical Laboratory 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, determined 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 "Clinical Laboratory 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 "Clinical Laboratory Sciences" is completed with awarding of the academic degree "Bachelor of Applied Medical Sciences in Clinical Laboratory Sciences".

The regulated study period in the program "Clinical Laboratory Sciences" is five years: eight semesters at the University followed by a one-year internship. The study program "Clinical Laboratory Sciences" comprises 42 courses taught during eight semesters. There are no optional or elective courses, all courses are compulsory, they have to be completed within eight semesters before the internship year starts.

The AHPGS Accreditation Commission considers that all Accreditation Criteria are fulfilled. The AHPGS Accreditation Commission accredits the study program "Clinical Laboratory 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.