

Akkreditierungsagentur für Studiengänge  
im Bereich Gesundheit und Soziales  
Accreditation Agency for Study Programs  
in the Area of Health and Social Sciences



## **Assessment Report**

**for the Application of  
Taibah University,  
Faculty of Applied Medical Sciences  
Department of Medical Laboratories Technology,  
for the Accreditation of the Study Program  
“Clinical Laboratory Science” (Bachelor of Clinical Laboratory Sciences)**

On-site visit	December 12 and 13, 2022
Expert group	Prof. Dr. Dr. Anja Bosy-Westphal Dr. Mathias Maximilian Dilger Prof. Dr. Johannes Keogh Prof. Dr. Gerd Mikus Prof. Dr. Waldemar Zylka
Decision	February 16, 2023

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## 1 Introduction

The Accreditation Agency for Study Programs in Health and Social Sciences (AHPGS) is an interdisciplinary and multi-professional organization. Its mission is to evaluate Bachelor and Master's programs in the fields of health and social sciences, as well as in related domains, such as law or economics. By implementing accreditation and recommendation procedures, the AHPGS contributes to the improvement of the overall quality of teaching and learning. However, the higher education institutions remain responsible for fulfilling the quality assurance, too.

Since 2004 the AHPGS has been a member of the European Consortium for Accreditation (ECA). In 2006, the AHPGS also joined the ENQA and became a member of the International Network for Quality Assurance Agencies in Higher Education (INQAAHE) in 2009. Since 2012, the AHPGS has been a member of the Network of Central and Eastern European Quality Assurance Agencies in Higher Education (CEENQA). Starting from 2009, the AHPGS has been listed in the European Quality Assurance Register (EQAR).

In carrying out accreditation procedures, the AHPGS follows the requirements of the Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG). In the present case, the decision regarding the accreditation of the study program is carried out by the AHPGS Accreditation Commission based on the following accreditation criteria<sup>1</sup>:

1. Program aims and learning outcomes
2. Curriculum design
3. Personnel
4. Facilities and learning resources
5. Study process and student assessment
6. Program and quality management
7. Gender equality and equal opportunities

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<sup>1</sup> Approved by the AHPGS Accreditation Commission

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 self-evaluation report 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 Sections 2-5), which is to be approved by the University and subsequently made available for the expert group, together with all other documentation.

### **II. Written review**

The main documents are reviewed by the expert group assigned by the accreditation commission of AHPGS. This is done in order to verify the compliance of the study program with the above-mentioned criteria. 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 at the University. During this visit discussions are held with members of the University, which include University and department administration, degree program management, teachers and students. This provides the expert group with details about the study program beyond the written documents. The task of the experts during the on-site visit is to verify and evaluate the objectives of the program and its projected study results, its structure, staff, material resources, course of studies and methods of assessment (selection of students, assessment of achievements, students' support), as well as of the program management (program administration, external assurance of study quality).

Following the on-site visit, the expert group issues the expert report. This report is based on the results of the visit, the written review of the study programs, and the documents submitted by the University. Finally, the report is made available to the University so that it can issue a response opinion.

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

#### **IV. The AHPGS accreditation decision**

The accreditation commission of the AHPGS examines the documentation made available in the process of application, namely the University's self-evaluation report, its annexes, the summary comprised by the AHPGS, the expert report, as well as the University's response opinion. These documents represent the basis for the commission's decision regarding the accreditation of the study program.

## **2 Overview**

### **2.1 Procedure-related documents**

The Taibah University delegated the task of accrediting its Bachelor study programs “Clinical Laboratory Sciences”, “Clinical Nutrition”, “Nursing” as well as “Diagnostic Radiology Technology” to AHPGS.

The self-evaluation report for accreditation (without the awarding of the official seal of the Accreditation Council of the Foundation for the Accreditation of Study Programs in Germany) of the above-mentioned study programs (hereinafter the Self-evaluation report) of Taibah University (hereinafter the University) was submitted to the Accreditation Agency in Health and Social Science (AHPGS e.V.) in electronic format on February 14th, 2022. The decision regarding the accreditation of a study program is carried out by the Accreditation Commission of AHPGS. The contract between Taibah University and the AHPGS was signed on June 16th, 2021.

On June 9th, 2022 the AHPGS forwarded the open questions and explanatory notes (hereinafter OQ) pertaining to the Application for accreditation for the study programs to the University. On July 21st, 2022 the University submitted the answers to the open questions and explanatory notes (hereinafter AOQ) to the AHPGS in electronic format.

The present document presents the summary of the AHPGS for the Bachelor study program “Clinical Laboratory Sciences”. The first cohort for this program was admitted in 2008.

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

Specific documents for the study program Bachelor “Clinical Laboratory Sciences”:

<b>Annex</b>	<b>Description</b>
1	Teachers' CV
2	Teaching Matrix
3	Module Descriptions
4	Program and Course Specifications
5	Program Tree
6	Field Experience Specification
7	Program Learning Outcome Assessment Plan
8	Internship Guide
9	Field Experience Annual Report
10	Internship Student Survey
11	Employers Satisfaction
12	Course Specification Graduation Project
13	Grade Project Course Report
14	CLS Program Benchmark
15	Program Catalog
16	Course Evaluation Survey
17	Alumni Survey and Alumni Unit
18	Guide for Counseling Services and Academic Unit Report
19	Skills Record and Skill Development Unit Report
20	Course Reports of Modules taught from other Departments
21	Course Report Graduation Project
22	Statistics and Information Unit Report & Alumni Unit Report

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



<b>Annex</b>	<b>Description</b>
A	Rules and Regulations of Undergraduate Study and Examinations
B	Preparation Manual Academic Plans and Academic Programs
C	National Qualification Framework for Higher Education
D	University Enrollment Guide
E	Digital Transformation Program
F	Admission and Registration Guide
G	Quality Assurance System
H	Students' Rights and Obligations
I	Covid19 Adaptations
J	Directory College of Applied Medical Sciences
K	Student Disability Center Guide
L	Saudi Arabia Academic Accreditation and Assessment Certificate
M	Handbook of Safety Instructions in Labs
N	College of Applied Medical Science Strategic Plan
O	Agreement letter with MOH
P	System and regulations of Higher Education Council
Q	Regulations Saudi Staff
R	Regulation of Non-Saudis Staff
S	Taibah University Strategic Plan
T	Ethical Professional Code
U	Statistics and Information Unit Report and Alumni Unit Report

The application, the open questions (OQ) and the answers to the open questions (AOQ), as well as these additional documents, together 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

University	Taibah University
Faculty	College of Applied Medical Sciences
Department	Medical Laboratories Technology
Cooperation partner	Ministry of Health
Title of the study program	"Clinical Laboratory Sciences"
Degree awarded	Bachelor of Clinical Laboratory Sciences
Form of studies	Full-time, on-campus
Organisational structure	5 Days a week (Sunday to Thursday) 8 am to 4 pm for 156 weeks Each trimester has 13 weeks Each year has 3 trimester = 39 weeks
Language of Studies	English
Period of education	4 years / twelve trimesters (preparatory year included) + 1 year noncredit internship
Credit Hours (CH) according to the internal Credit Hour System	136 Credit Hours (equals 231 ECTS Credit Points)
Hours/CP	1 Theory Credit Hour = 1 Hour 1 Lab/Practical Hour = 2 Hours 1 Hospital Training/Field Training Hour = 3 Hours
Workload	Total: 6,272 hours Contact hours: 2,124 hours Individual Work: 2,428 hours Internship: 1,720 hours
Launch date of the study program	2008
Time of admission	Fall Semester
Number of available places in the program	163 (for 2022)
Number of enrolled students to date	859; (506 females; 353 males)

Number of dropouts to date	33; 15 females; 18 males (for the last 10 years)
Number of graduates to date	358; 201 females, 157 Males
Particular enrollment conditions	Saudi Arabian Secondary School Certificate (science section) or its equivalent; General Aptitude Test (GAT) (provided by the National Centre for Assessment in Higher Education).
Tuition fees	Free

Table 1: Structural data of the study program

### 2.2.2 Qualification objectives and employment opportunities

The vision of the University is to be an internationally recognized, comprehensive institution which is dedicated to excellence in teaching, research and community service. Therefore, it has set up the mission to contribute to society building that promotes sustainable development, knowledge economies through education, research and community partnership in a stimulating environment for learning and creativity.

According to the university, the program's learning objectives are to: (SER 1.3.2)

- provide a high-quality education in Medical Laboratory Technology
- provide sufficient knowledge and skills to meet the accreditation requirements
- contribute to the development of knowledge and understanding in Medical Laboratory Technology at national and international levels
- prepare the students to the application of health, safety and quality assurance practices
- introduce advanced technical procedures in the treatment of prevalent diseases and health problems in the Saudi Arabia
- bring the students to become highly qualified professionals prepared to work in biomedical laboratories in hospitals, private clinics, educational institutions, biomedical research, forensic science, pharmaceutical biotechnology, water analysis or food industries

- provide a good training in scientific research to prepare the students for postgraduate studies
- prepare the students to become professionals with distinct Islamic moral being able to contribute to human and cost-effective health care
- offer additional activities allowing the students to develop knowledge, values and skills and letting them find out talents, creative works and traits of leadership
- form the students to be critically thinking, independent learners and experienced in the evidence-based assessment of problems

An advisory committee and program curricular committee were formed to design the program objective, learning outcomes based on the National Qualification Framework that provides five learning domains (Knowledge ; Cognitive Skills ; Interpersonal Skills & Responsibility ; Communication, Information Technology, Numerical ; Psychomotor). CLS program learning outcomes were built in agreement with domains and in alignment with university mission. These learning outcomes were approved by the university vice presidency for educational affairs. (SER 1.3.3)

After graduating, students can get jobs in governmental and non-governmental medical labs. The following labs can offer them a job: Pharmaceutical quality control labs ; Forensic labs ; Pharmaceutical industry ; Food factories and water analysis plants ; Custom Ports ; Labs of drugs and toxins information centers ; Food and Drug Administration ; Medical devices corporate ; Academic work in colleges of Applied Medical Sciences ; Departments of the Ministry of Health and administrations of health affairs. (SER 1.4.1)

According to the Saudi Commission for Health Specialists, the average population growth in Saudi Arabia is 2,7% whereas the laboratory technicians to population ratio is 1 to 1500. Therefore, the Saudi Lab technologists attrition rate is 5% and the local and abroad students' attrition rate is 10%. (SER 1.4.2)

### 2.2.3 Modularization and exam system

The program comprises 53 modules, out of which 10 modules are in the unified scientific track and 43 are specific modules. All modules have to be completed within one trimester.

The 53 modules that have to be completed by the students are categorized in the following table :

Requirement	Obligatory/ Elective	Number of modules
University requirements	Obligatory	14
	Elective	2
Program requirements	Obligatory	33
	Specialized Elective	2
Free Elective Courses		2
Total Program modules		53

There are 32 program-specific modules. One modules is offered by the College of Medicine and one module is offered by the College of Pharmacy. 18 modules are studied together with students from other study programs.

To ensure that the objectives of modules taught from other departments meet the needs of the students from this program, the module specification and course report cycle are regularly reviewed. A continuous collaboration, coordination and consultation is also assured with the other departments as well as a continuous consideration of the feedback from the course report and students.

To assure the organization of the modules studied together with other study programs of the university, several measures are taken. Specific classes for CLS students are created and specific teaching staff and time schedules are allocated. Besides that, the students can take courses from the general university modules for example Islamic studies. (SER 1.2.2)

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

Level	Course Code	Course Title	College / Department
	GS 111	Arabic Language Skills (1)	Centre of general requirement

<b>Unified scientific track Level 1</b>	ENG 101	English Language Skills (1)	Centre of general requirement
	CHEM 101	Introduction to Chemistry	Centre of general requirement
<b>Unified scientific track Level 2</b>	MATH 101	Introduction to Mathematics	Centre of general requirement
	BIOL 101	Introduction to Biology	Centre of general requirement
	GS 151	University Life Skills	Centre of general requirement
	GS 101	Islamic Studies (Faith & Worship)	Centre of general requirement
<b>Unified scientific track Level 3</b>	PHYS 101	Introduction to Physics	Centre of general requirement
	ENG 102	English Language Skills (2)	Centre of general requirement
	GS 152	Computer Skills	Centre of general requirement
<b>Level 4</b>	GS 102	Islamic Studies (Features of the Prophet`s Biography)	Faculty of Arts
	ANAT 151	Human Anatomy	Faculty of Medicine
	PHSL 122	Human Physiology	MLT dept.
	FE 1	Free Elective Course (1)	University
<b>Level 5</b>	MLT 211	Introduction to Biochemistry	MLT dept.
	MLT 233	Histology & Cytology	MLT dept.
	MLT 222	Medical Microbiology	MLT dept.
	MLT 212	Medical Biochemistry (1)	MLT dept.
	GS 112	Arabic Language Skills (2)	Faculty of Arts
<b>Level 6</b>	MLT 248	Hematology (1)	MLT dept.
	MLT 234	Histological Techniques	MLT dept.
	MLT 236	Human Pathology	MLT dept.
	MLT 255	Patients & Occupational Safety & Medical Ethics	MLT dept.
	MLT 257	Communication Skills & Critical Thinking and Leadership	MLT dept.
<b>Level 7</b>	FE 2	Free Elective Course (2 )	University
	MLT 311	Medical Biochemistry (2)	MLT dept.
	MLT 331	Molecular & Medical Genetics	MLT dept.
	MLT 325	Medical Bacteriology	MLT dept.
	MLT 347	Hematology (2)	MLT dept.

<b>Level 8</b>	MLT2	Specialized Elective Course (2)	MLT dept.
	MLT 324	Medical Parasitology	MLT dept.
	MLT 334	Molecular Biology	MLT dept.
<b>Level 9</b>	MLT 321	Medical Mycology	MLT dept.
	MLT 312	Clinical Biochemistry (1)	MLT dept.
	GS 103	Islamic Studies (Human Rights in Islam)	Faculty of Arts
	MLT 326	Medical Virology	MLT dept.
	MLT 362	Clinical Practice (1)	MLT dept.
<b>Level 10</b>	MLT 473	Research Methodology and Biostatistics	MLT dept.
	MLT 411	Clinical Biochemistry (2)	MLT dept.
	PHT 413	Basics of Pharmacology	Faculty of Pharmacy
	MLT 423	Medical Immunology	MLT dept.
	GSE 2	University Elective Course (2)	Centre of general requirement
<b>Level 11</b>	GS 104	Islamic Studies (Islamic Values & Morals)	Faculty of Arts
	MLT 463	Clinical Practice (2)	MLT dept.
	MLT 474	Graduation Project	MLT dept.
	MLT 448	Blood Bank	MLT dept.
	MLT 438	Forensic Medicine & Toxicology	MLT dept.
<b>Level 12</b>	MLT 465	Clinical Practice (3)	MLT dept.
	MLT 412	Body Fluids Analysis	MLT dept.
	MLT 458	Quality Assurance and Lab. Management	MLT dept.
	MLT 464	Clinical Practice (4)	MLT dept.

Teaching strategies used are the following : lectures, seminars, computer-based learning, poster presentations, experimental and group work, assignments, laboratory tasks and practical sessions, case studies and specific biostatistics and computer skills teaching. (SER 1.2.4)

The university initiated a “Digital transformation” which led to the launch of several platforms providing learning programs, E-library portals and administrative portals. The Blackboard platform offers for example innovative possibilities to learn like virtual classes, quizzes or virtual reality training as well as a way to communicate for students and staff. Microsoft Teams is used for meetings, workshops and classes. (SER 1.2.5)

For the work placement coordination, there is an internship unit in the college composed of 8 faculty members which is responsible for the coordination of the students schedule with the governmental hospital. The internship unit also supervises the internship year with regular meetings with the students and the clinical instructors. Moreover, staff members from the department have to plan, conduct, supervise and coordinate with CLS specialists in hospitals who train the interns during the internship training period. An Internship Coordinator is nominated by the college to organize the setting of the internship training together with the clinical Instructor, the cooperative trainer and the students. (SER 1.2.6)

According to the University, the program was designed according to the international standards and the courses are continuously updated. All specialized courses are taught in English. (SER 1.2.8)

There are no special agreements with other universities abroad regarding completion or sharing of the program. (SER 1.2.9)

The research activities are monitored by the Vice-Deanship of Female Students Affairs and by the Graduation Project Units. The College Research and Ethics Committee reviews the research proposals submitted from all faculty in the college to ensure the alignment and achievability of the research. Students learn basic research skills gradually through essay assignments during the program. Advanced research courses are also included in the program. The course of Biostatistics and Research Methods prepares the students to conduct the Graduation Project while the Skills Development Unit organizes workshops to improve scientific writing, plagiarism and referencing. The students have to conduct research before they write the final draft of their thesis. Students can also participate in staff's funded research as full-time or part-time research assistants. (SER 1.2.7)

The week of assessment should be announced to all students at the first lecture in the trimester. The number, type and timing of the program-specific modules are shown in the following tables:

<b>G Schedule of Assessment Tasks for Students During the trimester (FOR PRACTICAL COURSES)</b>			
#	Type of assessment task	Week	Total Grades



1	Continuous assessment	Weeks 1-10	10%
2	Midterm examination (written)	Week 6	15%
3	Assignment submission	Week 9	5%
4	Final practical exam	Week 12	30%
5	Final written examination	Week 13	40%
<b>Schedule of Assessment Tasks for Students During the trimester (FOR THEORETICAL COURSES)</b>			
#	Type of assessment task	Week	Total Grades
1	Continuous assessment	Week 1-10	30%
2	Midterm examination (written)	Week 6	20%
3	Assignment submission	Week 9	10%
5	Final written examination	Week 13	40%

The students are allowed to repeat an exam in case of an absence when an institutionally approved excuse is provided within two weeks. This is applied for quizzes, midterm and final exams. All excuses must be uploaded on the electronic platform and approved by the head of the department. The timing is then arranged between the teaching staff and the student.

The grading scale is as follows:

%Marks	Grade	Grade Code	Grade Weight out of (4)	Grade Weight out of (5)
95- 100	Excellent +	A +	4	5
90- < 95	Excellent	A	3.75	4.75
85- < 90	Very Good +	B+	3.5	4.5
80- < 85	Very Good	B	3	4
75- < 80	Good +	C+	2.5	3.5
70- < 75	Good	C	2	3
65- < 70	Pass +	D+	1.5	2.5
60- < 65	Pass	D	1	2
60<	Fail	F	0	1

The Deanship of Student Affairs services has a department which is specialized in supporting students with disabilities. Anyways the students have to be physically well to be accepted in the program. (SER 1.2.3)

According to the university, the committee of equalization of subjects at the MLT department includes the most senior staff concerned with the decision of transfer of credit points after acceptance of the transfer of students which follows rules and regulations of the university. (SER 1.5.3)

Regulations, in terms of timeline and formal guidelines for studies, concerning the compensations for students with disabilities and chronic illnesses you will find in the Student Disability Center Guide (Annex K).

#### **2.2.4 Admission requirements**

Admission policies and procedures along with the requirements are listed in the “Admission and Registration Regulations” (Annex F). In order to be accepted to the study program, students must:

- complete Saudi higher school certificate (sciences branch) or equivalent
- be Saudi national. (Foreigners admitted under exceptional circumstances)
- not have attained a high school or equivalent for more than five years. (except if there are convincing reasons)
- have good conduct and be medically fit
- obtain the approval of his/her reference to the study if he/she works in any governmental or private entry (SER 1.5.1)

### **2.3 Study conditions and quality assurance**

#### **2.3.1 Human resources**

The teaching staff has 58 members and is composed as shown in the following table :

	<b>Professor</b>	<b>Associate Professor</b>	<b>Assistant Professor</b>	<b>Lecturer</b>	<b>Technicians/ demonstrators</b>	<b>Total</b>
Male Section	1	8	16	1	10	<b>36</b>
Female Section	0	1	13	1	7	<b>22</b>
Total Number	1	9	29	2	17	<b>58</b>

(Male + Female)						
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The full-time students register 13 credit hours per trimester. Each trimester has three cohorts of students which makes a total of 48 credit hours. There are 13 special courses in the first trimester, which means that the total staff number required for the first trimester is  $13 \times 2 = 26$ . In the second trimester there are 14 special courses, which means that the total staff number required is  $14 \times 2 = 28$ . The diversity of the courses offered in the program explains the necessity to have 16 female and 26 male teachers in the MLT department.

In all HEI in Saudi Arabia the teaching load per professor is as follows (in week hours per trimester): 10 hours for a professor, 12 hours for an associate professor, 14 for an assistant professor and 16 for a lecturer. There are currently no adjunct professors teaching in the study program.

100% of the courses are taught by assistant professors and associated professors (PhD holders). The Lecturers (MSc holders) are teaching the practical classes as assistants.

There are 417 students for 41 students. Therefore, the faculty/student ratio in the MLT department is  $417/41=1:10$ . (SER 2.1.1)

Workshops are organized yearly by the Deanship of University Development to develop the capacities of the university staff, raise the efficiency and provide a suitable work environment for excellence and creativity. College additional workshops are also organized for undergraduate students and teaching staff, technicians and administrators. The staff is encouraged to participate in national and international conferences. Moreover, the heads of the department complete an evaluation form for each staff member covering the academic performance, the attendance, the activities inside and outside the college, the collaboration with staff members and students and the complaints received from other members or students. (SER 2.1.3)

The administration staff is responsible for the student registrations. The faculty members, beside teaching, are assuring the coordination and organization of the administrative work in the program and in the college.

For the study program coordination, the courses have been assigned to 5 main scientific tracks led by a supervisor from the teaching staff:

- Clinical and Molecular Biochemistry (10 members)
- Medical and Molecular Microbiology (14 members)
- Hematology and Immunology (10 members)
- Histopathology (6 members)
- Other specialized courses (all MLT staffs)

These supervisors keep an eye on the teaching process of the courses and submit reports to the head of the department.

Additionally there are several units designed to ensure the proper monitoring of the performance of other important parts of the program: Academic advisory unit; Quality and Development unit; Skills Development Unit; Alumni unit; Internship unit; Educational affairs unit; Unit of student activity; Graduation project unit Scientific research and ethical approval unit; Unit of lecturers, teaching assistants and scholarships. (SER 2.2.1)

### 2.3.2 Facilities

The premises are as follows (SER 2.3.1):

Male			Female		
Room	Assigned for	Capacity	Room	Assigned for	Capacity
G 18	Classroom (level 5-6)	30 seats	121 A	Classroom (level 5-6)	45 seats
G 28	Classroom (level 7-8)	30 seats	121 B	Classroom (level 7-8)	45 seats
208	Classroom (level 3-4)	50 seats	255	Classroom (level 3-4)	45 seats
Lab G25	Histology laboratory	20 seats	Lab 323	Histology laboratory	25 seats

Lab G24	Microbiology laboratory	20 seats	Lab 179	Microbiology laboratory	25 seats
Lab G26	Biochemistry, Molecular and serology laboratory	20 seats	Lab 183	Molecular and serology laboratory	25 seats
			Lab 363	Biochemistry laboratory	25 seats
Lab G19	Hematology laboratory	20 seats	Lab 364	Hematology laboratory	25 seats
Lab G18	Research laboratory	-	Lab 259	Research laboratory	-

The needed resources for teaching and research are submitted to the Head of the Department who is submitting it to the Deanship of Libraries. The University bookstore also sells books with low costs. The library is open from 8:00 am to 5:00 pm. Integrated automated library software has been acquired to allow on campus and off campus searches. Moreover, access has been provided to all universally known online databases. The e-library portal is accessible to all students and faculty members anytime which allows access to the Saudi Digital Library, to the Web of Science and many journals. (SER 2.3.2)

The colleges and departments have their own public-access computers and keep a complete inventory of all equipment. The university-wide information kiosks are managed by the Deanship of information technology which provides technical support. Security systems are there to protect the sensitive personal and institutional information and avoid externally introduced viruses. Every classroom and laboratory is equipped with computer terminals and free Wi-fi is available in all university facilities. The college provides a professional screen for documentation and has its own official social media to assure a good communication with students, staff and community. (SER 2.3.3)

All researchers are eligible to fund and can apply through the Vice-Presidency of Post-graduate studies and research. Research groups are provided with financial support for the supply of required equipment and research materials. Moreover, a researcher who publishes his/her work in an acknowledged journal can obtain incentives and a reward of excellence. The Deanship of Scientific Research supports researchers with the University Scientific Excellence Prize, with research centers facilities and with the Taibah University Initiatives. (SER 2.3.5)

### **2.3.3 Quality assurance**

The University follows the quality concept and the National Center for Academic Accreditation and Assessment (NCAAA) from which Taibah University has recently got full accreditation for 7 years (2019-2026). That means that all sectors of the university have to be committed to its quality assurance standards. Represented by Deanship of Quality, the University has set up a quality assurance system (Ejadaa) to ensure that all colleges and programs perform all quality measures and rules provided by the NCAAA. This insurance can be achieved through incalculating the best practices related to the educational process and research, following up and evaluating their application as well as locating strengths and weaknesses. (SER 1.6.1)

The quality assurance measures of the study program are divided in two cycles: the course report cycle and the program report cycle. The course reports are assured by the course coordinators at the end of the trimester and submitted to the head of the department. The head of the department then reviews all reports and thereafter prepares the yearly program reports, taking all key performance indicators (KPIs) into consideration. All reports are discussed during the departmental board meeting along with the marks and grade distribution. The student evaluations of the individual courses are discussed to list the most important improvement and strength points. The results of this board meeting are then used to prepare an action plan for the next year and improve the program. The Quality & Academic Accreditation Unit is there to improve the culture of quality and to encourage practices of the Total Quality Assurance Management, working on their application, evaluation and improvement. The Unit is also there to supervise all practices required for an institutional and a program academic accreditation at the college level. (SER 1.6.2)

All course instructors are required to follow the approved course's specifications. An evaluation has to be completed by the students at the end of the trimester. The course outcome is then analyzed by the course coordinator based on students' grades, teaching staff comments and course evaluation survey. Depending on the results and the difficulties faced from the students and the teachers, the coordinator implements an action plan to

improve the course. The student council meetings at program level also play an important role in the evaluation of the program. (SER 1.6.3).

The practical courses are evaluated through a field experience survey, the Alumni survey and an internship evaluation form. The college has also designed a survey in which the employers can describe their satisfaction on the graduates' performance. The quality and data unit (previously statistics and information unit) analyzes the results and evaluates the related KPIs. Feedback is obtained from stakeholders (employers, hospital trainers of interns and head of corresponding departments) and from the Advisory committee at college and program level. The results are then evaluated by the Vice-Dean for Development and Quality, by the University Data Management Office and by the Statistics and Information Unit. (SER 1.6.4)

According to the academic achievement of students (GPA), the students are supposed to have between 8 and 13 credit hours per trimester, and a maximum of 6 hours for the summer courses. In some cases the student can register for one more course over the maximum amount of credit hours allowed per trimester while a lower workload can be approved for students in special situations. (SER 1.6.5)

The statistics on enrolment applications are as follows (SER 1.6.6):

*Female students:*

Years Student Categories	3 Years Ago 2018/2017	2 Years Ago 2019/2018	1 Year Ago 2020/2019	Current year 2021/2020
1. Total cohort enrollment	UST	45	38	36
2. Retained till year end		38	32	36
3. Withdrawn		7	6	0
4. Cohort graduated successfully		38	32	36

5.Total graduated successfully		38	32	36
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\* Unified scientific track

*Male students:*

Years Student Categories	3 Years Ago 2018/2017	2 Years Ago 2019/2018	1 Year Ago 2020/2019	Current year 2021/2020
1. Total cohort enrollment	UST	33	33	32
2. Retained till year end		32	33	31
3. Withdrawn		1	0	1
4. Cohort graduated successfully		32	33	31
5.Total graduated successfully		32	33	31

An introduction week is organized at the beginning of every year to give all information and rules to the students. The University electronic services system gives students all information about the study program, requirements and regulations. All the updated course specifications are available on the websites Student Important links, College of Applied Medical Sciences website and Deanship of Student Affairs services. Complaints can be made through the Student Administration Office. (SER 1.6.7)

The university counseling center, founded in 2010, includes academic, psychological and social mentors and offers individual and group counseling service as well as therapeutic intervention. Every student is linked with an academic advisor from the department faculty members who is there to assist the students facing academic or non-academic difficulties. Meetings are organized with every student to discuss ongoing issues or difficulties eventually faced during the trimester. The students are also assisted in the registration/dropping of courses and in the control of their academic performance. Any problem in courses' registration that cannot be solved is referred to the academic affairs which can communicate with the deanship of admission and registration. 4 office hours per week are reserved for the students in the timetable of each faculty. (SER 1.6.8)

A report on gender equality is attached in Attachment 20. A nursery is available at the campus and the students get a special discount on children day care (available in the week from 7am to 4pm). The university counseling center helps students with special living situations. The Deanship of Student Affairs supports students who have a high GPA (4.5 or more) for 3 trimesters by



offering a financial reward of 1000 Saudi Riyals and by offering sports competitions, cultural or social activities. The Medical Center provides free health services to the students and their family. All essential lab investigations are provided and the pharmacy is also there to provide the prescribed medications. (SER 1.6.9).

The university facilities are planned to provide a barrier free environment for physically challenged students. Students with chronic non-infectious diseases might be admitted in the program following special reports and guidelines for accepted disabled students announced on the web site. The Student Disability Center is there to serve the students with disabilities. (SER 1.6.10)

## **2.4 Information about the University**

The Taibah University was founded in 2003 by merging the two branches of King Abdulaziz University and Imam Mohamed bin Saud Islamic University in Madinah. There were more than 60. 000 students enrolled in 2020. The University has 23 active colleges and 139 active departments and offers 120 undergraduate and graduate programs. From the 23 colleges, 15 are located on the main campus while the 8 others are in Yanbu, Al-Ola, Khaibar, Hnakiyya and Badr. The University has a total of 153 buildings with 208 student labs, 67 research labs, 17 research centers, 163 computer labs and 15 university libraries.

In order to improve the quality of education, the ministry of higher education has set up 8 strategic goals to align with the 2030 vision in higher education. The University has aligned its strategic planning with the national vision and already achieved projects, for example the NCAAA institutional accreditation and the digital transformation initiative. (SER 3.1.1)

The Department of Medical Laboratories Technology of the College of Applied Medical Sciences was opened to female students in 2006/2007 and to male students in 2008/2009. There were 163 students enrolled in the Medical Laboratories Technology Studies in 2019-2020. The College currently has 3 departments :

- Department of Medical Laboratories Technology
- Clinical Nutrition Department

- Department of Diagnostic Radiology Technology

The college is aligning with the “Taibah university program transformation initiative”. Specifically, the program is currently under revision to ensure the alignment of the courses with criteria required by the Saudi Commission for Health Specialties (SCHS). Some modifications have already been made such as the restructuring of the university deanships and the removal of some vice deans from the college. (SER 3.2.1)

As part of a national initiative, led by the Saudi Arabian ministry education, all Saudi Arabian public universities are moving from a semester system (2 semesters per academic year) to a trimester (3 trimester per academic year). As demonstrated in the table below, the number of weeks dedicated for teaching per trimester are to be changed from 15 to 12. To compensate for the change in the number of weeks per trimester, the duration of a single lecture will be increased from 50 to 60 minutes, whilst the duration of practical sessions will be increased from 100 minutes to 120 minutes per session. It is however, important to highlight that this change has just been applied in the beginning of this academic year (28<sup>th</sup> of August 2022).

	Semester system	Trimester system
Number of semesters per year	2	3
Number of teaching weeks per semester	15	12
Number of weeks dedicated for exams	2	1
Overall duration of a semester (weeks)	17	13
Duration of a single lecture (min)	50	60
Duration of a single practical (min)	100	120

According to the University, this change will not affect any of the related accreditation criteria nor standards. Rather, the proposed changes will allow the transition from a semester system to a trimester system without impacting the program learning outcome, nor program’s study plan, as program administrative teams have rearranged courses over 12 level rather than 8 levels for 4-year programs.

### **3 Expert report**

#### **3.1 Preliminary remarks**

The Accreditation Agency in Health and Social Sciences (hereinafter AHPGS) was commissioned by Taibah University (hereinafter the University) to accredit the study program “Clinical Laboratory Sciences” (Bachelor of Clinical Laboratory Sciences).

The on-site visit evaluation of the study program “Clinical Laboratory Sciences”, as well as the study programs “Nursing”, “Diagnostic Radiology Technology” and “Clinical Nutrition” offered at the Taibah University, was carried out on December 12 and 13, 2022 at Medina, Saudi Arabia.

The documents of the University, the feedback from the experts to the documents and the results of the discussions with the representatives of the University during the on-site visit serve as a foundation for the statements made in the Expert Report.

The following experts were appointed by the Accreditation Commission of AHPGS for the evaluation of the study program.

##### **Prof. Dr. Dr. Anja Bosy-Westphal**

Christian-Albrechts-University Kiel, Germany  
Institute for Human Nutrition and Food Science  
Head of the Department of Human Nutrition  
Spheres of professional activity: clinical nutrition and dietetics

##### **Dr. Mathias Maximilian Dilger**

Albert-Ludwigs-University Freiburg, Germany  
licensed physician and currently student of dentistry

##### **Prof. Dr. Johannes Keogh**

Fulda University of Applied Sciences, Germany  
Professor of Nursing Sciences  
Former program leader for Nursing at the Faculty of Nursing and Health at Fulda University of Applied Sciences  
Research and science in Nursing, Nursing Education, Public Health, Preventive Care and Health Promotion

Qualification as nurse, midwife, community nurse and in psychiatric patient care

**Prof. Dr. Gerd Mikus**

Ruprecht-Karls-University of Heidelberg, Germany

Professor and former Deputy Medical Director of the Department of Clinical Pharmacology and Pharmacoepidemiology at the Ruprechts-Karls-University of Heidelberg

Deputy head of the Ethics Committee of the Landesärztekammer Baden-Württemberg, Member of the Expert Committee of controlled substances of the Federal Ministry of Health, Germany

**Prof. Dr. Waldemar Zylka**

Westphalian University, Campus Gelsenkirchen, Germany

Professor of Physics, Medical Engineering and Medical Physics at the Faculty of Physical Engineering

Dean of the Study Program "Medical Radiology Technology" (Bachelor of Science)

Founding member of the Westphalian Institute of Health

Member of the Germany Physical Society (DPG), Germany Society of Biomedical Engineering (DGBMT)

According to the Rules for the Accreditation of Study Programs and for System Accreditation (determined by the decision of the Accreditation Commission, of December 8, 2009 in the version of February 20, 2013, Drs. AR 20/2013), the task of the experts in the accreditation procedures is to evaluate the education concept of a specific study program as well as to estimate the possibility of its successful implementation. This concerns, in particular, qualification objectives of the study program, its conceptual integration into the system of education, the concept of the study program, feasibility of the content and scope of studies, the examination system, study-relevant collaborations, personnel, material and space resources, transparency and documentation, application of the results of quality assurance for further development of the study program (it is especially important to present the analyses and evaluation results of student workload, academic accomplishments and employment of graduates, which are to be documented and taken into account within the framework of continuous development of the study program), as

well as the provision of gender equality and equal opportunities.

The on-site visit of the experts is carried out in accordance with 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). After the announcement of the accreditation decision, the expert report will be published as a part of the Final Report.

### **3.2 Basic information about the study program**

The main objective of the Bachelor study program “Clinical Laboratory Sciences” offered at the College of Applied Medical Sciences of Taibah University is to provide the community with scientifically and skillfully qualified clinical laboratory technologists through a stimulating educational and research environment that contributes to the development and service of the community.

The study program requires the obtainment of 136 credit hours (CH) according to the internal credit hour system. One Credit Hours is equal to one contact hour of lectures, two hours of lab/practical hours and 3 hours of hospital training/ field training hours per week. The program applies the University’s internal credit system. Thus, students’ performance is evaluated based on the results of a Grade Point Average (GPA) and the Cumulative Grade Point Average (cGPA). GPA is calculated by dividing the sum of the grade points (with 5 being the best achievable grade and 0 being the worst) received in all courses registered during one semester by the total credits received from all courses a student has completed since joining the program by the sum of the credit hours of these courses. According to the University regulations, students with a GPA of at least 2.00 are considered to have successfully completed the respective course. To successfully complete the whole program, students have to pass all obligatory examinations with the minimum grade of 2.00 cGPA score.

The total workload of the program constitutes of 6,272 hours, of which 2,124 hours are contact hours, 1,720 hours are training/internship hours and 2,428 are hours of independent study. It is a full-time study program with a regular duration of 4 years/12 trimesters plus one year of rotary internships. As part of a national initiative led by the Saudi Arabian ministry of education, all Saudi

Arabian public universities had to move from a semester system to a trimester system. Therefore, the number of weeks dedicated for teaching per trimester were changed from 15 to 12. To compensate for the change in the number of weeks per trimester, the duration of a single lecture was increased from 50 to 60 minutes, whilst the duration of practical sessions was increased from 100 minutes to 120 minutes per session. This change has been applied in the beginning of the academic year 2022.

The program curriculum consists of 53 modules, out of which 10 mandatory courses are taught in the unified scientific track while 43 modules are in the Clinical Laboratory Sciences program.

Admission requirements of the program include a general school certificate or an equivalent document not later than 5 years as well as an Aptitude Test Certificate (ATC) administered by the National Center for Assessment in Higher Education. Upon completion of the study program, students are awarded with the academic title “Bachelor of Clinical Laboratory Sciences”.

The average students’ intake is 160 students per year. Admission takes place every September. The first batch of students has been admitted to the program in the academic year 2007/2008. Up to now, 358 students have graduated from the program. The main language of instruction is English. No tuition fees are charged to Saudi nationals. Students also receive monthly governmental stipends until they graduate.

### **3.3 Expert Report**

The on-site visit was carried out on December 12 and 13, 2022, according to the previously agreed schedule. Representatives from the head office of AHPGS accompanied the expert group.

The expert group met on December 11, 2022 for preliminary talks prior to the on-site visit. They discussed the submitted application documents and the results of the written evaluation as well as questions that had been raised. Furthermore, they prepared the plan of the on-site visit at the University.

During the on-site visit, experts conducted discussions with the University management, representatives of the College of Applied Medical Sciences, the Chair, Vice Chair and the teaching staff of the program “Clinical Laboratory

Sciences” as well as with students currently studying in the program and graduates. Furthermore, they inspected the learning premises, such as lecture halls, seminar classrooms, library, and computer classes. Moreover, experts had the opportunity to see the equipment and the capacity of the laboratories.

The expert report is structured in compliance with the international accreditation criteria from AHPGS which are based on the “Standards and Guidelines for Quality Assurance in the European Higher Education Area” (ESG), established by the European Association for Quality Assurance in Higher Education (ENQA). The study program will be described and analyzed in a comprehensive manner below. The documents submitted by the University, the experts’ feedback to the documents, the observations made during the on-site visit, the results of discussions with the representatives of the University, and members of the Faculty of Applied Medical Sciences serve as the foundation for the statements made in the expert report.

### **3.3.1 Program aims and their implementation**

Taibah University is one of the biggest universities in Medina region and aims to be an internationally recognized, comprehensive Saudi university dedicated to excellence in teaching, research and community service. To achieve this vision, the University has set up a strategic plan with the following directions:

- 1) Excellence in teaching and learning
- 2) Utilizing research & graduate studies for community development
- 3) Building active partnership with the community
- 4) Continuous improvement of administrative & financial management
- 5) Diversifying income resources
- 6) Creating an appealing & inclusive environment
- 7) Enhancing university ranking national, regionally & internationally

During the on-site visit, the experts inquire about the university's internationalization strategy. The university management reports that collaborations with France, the UK, and other countries are planned and partly already implemented. Furthermore, the Ministry of Education has also set up a "Human Capability Development" program, which will make it easier for international students to study in Saudi Arabia in the future. Among other things, a so-called "academic visa" is to be introduced to make the visa process

much easier for foreign students. Furthermore, full scholarships for international students are planned. As a consequence, the admission regulations (e.g. being Saudi national) are going to change, which the experts positively acknowledge. The experts welcome these developments and are convinced that the commitment and engagement are given, as many of the faculty completed their master's degree and PhD programs abroad, which brings nationals in contact with other research strategies and a broader spectrum of experiences from which the University might profit. From the experts' point of view, the assessment of the Bachelor study program "Clinical Laboratory Sciences" according to international standards was also an important first step.

The experts further inquire regarding the research strategy at Taibah University as well as within the "Clinical Laboratory Sciences" program. The experts gained the impression that research as a topic seemed to be deemed very important for all faculty as well as students involved in the study program. The experts learned that there are already plans for the implementation of a master's program at the College of Applied Medical Sciences within the department of Clinical Laboratory Sciences to further expand the research activities. The experts take a positive note of the vision and strategic development plans. As they were not visible in the provided documents, the experts recommend to present the vision of the College and the department more actively, as this will make it more attractive for future students and could also open career paths for students seeking future positions such as managers or even teaching staff. Furthermore, the urgency for completing the University Hospital was mentioned by all stakeholders involved. From the experts' point of view, this would also open up future research possibilities, especially within the master's program. Therefore, the completion of the teaching hospital should be pushed. Lastly, in order to enhance the research skills of students in the "Clinical Laboratory Sciences" program, the experts recommend implementing a bachelor thesis as a final proof of academic competencies.

The Bachelor program "Clinical Laboratory Sciences" pursues specific qualification objectives. The program's goal is to prepare students to become highly qualified professionals who are able to work in biomedical laboratories



in hospitals, private clinics, educational institutions, biomedical research, forensic science, pharmaceutical biotechnology or water analysis or food industries.

The learning objectives of the “Clinical Laboratory Sciences” program are based on standards within the national qualification framework for Saudi Arabia developed by the National Center for Academic Accreditation and Assessment (NCAAA). The five domains namely are knowledge; cognitive skills; interpersonal skills and responsibility; communication, information technology, numerical; and psychomotor. The experts confirm that the study program focuses on specific qualification objectives. These objectives cover professional and interdisciplinary aspects and particularly refer to the domain of academic competences, competences necessary for a qualified employment, skills of social commitment and personal development.

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

### **3.3.2 Structure of the study program**

The Bachelor study program “Clinical Laboratory Sciences” is a full-time study program with a regular duration of four years / 12 trimesters plus one year of rotary internships. The curriculum consists of 53 modules, out of which 10 are to be absolved in the preparatory year. (unified scientific track).

The first year of the study program aims to familiarize students with the academic environment and set the foundation for the further courses with topics like English language, university life skills, natural and related science. Also, students absolve courses like Arabic language and Islamic culture. These courses are shared between all students of Taibah University. In total, there are 18 courses within the “Clinical Laboratory Sciences” program which are shared with other colleges like the College of Medicine and College of Pharmacy. Furthermore, the teaching staff reports on collaborations on the research level regarding graduation projects, where the students have the chance to work in interdisciplinary teams. The experts take positive note of the interdisciplinary collaboration between the health-related study programs at Taibah University. The experts see the planned teaching hospital also as a great opportunity to intensify interdisciplinary cooperation among students and teachers.

The curriculum was designed to provide solid knowledge and skills, progressing gradually over the study years. In particular, the level of knowledge and skills in the second year ranges from an intermediate to proficient level whereas the learning outcomes in the third and fourth year are prominently at the proficient level, with few at the advanced or the intermediate level.

Practical skills are gained during the clinical courses as well as the mandatory internship year which must be completed after the four years of study. During the internship the students work on a full-time basis (52 weeks, 5 days/week, 8 hours/day) at local or regional governmental and private hospitals. The experts appreciate that the internship students are supervised from both sides, the academic coordinator as well as the clinical instructor to ensure that the objective of the clinical training is met. All interns and supervisors are guided by the policies and procedures contained in the 'internship logbook'. Furthermore, the 'internship and clinical training unit' is responsible to coordinate and facilitate the students' training process between the College of Applied Medical Sciences and the affiliated hospitals. The University ensures that the internship is also regularly evaluated by the students, stakeholders as well as the clinical instructors. If there are any difficulties during the internship, the responsible staff within the "Clinical Laboratory Sciences" program are assisting the students in solving the problem or even shifting the internship place. This is also verified by the students, which the experts positively acknowledge.

Furthermore, the experts acknowledge the very detailed course files with its contents and aims, which allows a high level of transparency. In the experts' opinion, the structure of the curriculum seems to make the workload manageable (*see also criterion 'admission and feasibility'*).

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

### **3.3.3 Admission and Feasibility**

The admission policies and procedures along with the requirements are properly documented and made publicly available. Admission requirements include:

- Saudi higher school certificate in sciences branch or equivalent (not older than five years),
- Saudi nationality (foreigners can be accepted under exceptional circumstances)
- Candidate should not have attained a high school or equivalent for more than five years.

As the first year of study comprises medical foundations as well as basic knowledge in university life and communication skills to compensate deficiencies from secondary school, the experts determine the admission procedure and requirements to be appropriate. They correspond to the standards of the study program.

The experts draw attention to the relatively high number of exams to be passed during the “Clinical Laboratory Sciences” program. The University states that the system of midterm and final exams is determined by the government. In order to prepare students for the level of difficulty and volume of exams, the type as well as the time of the different examinations is defined and communicated to the students transparently at the beginning of each course. The experts confirm that the University takes measures to guarantee the feasibility of the study program despite the high workload. The organization of the education process ensures the successful implementation of the study program.

On site, it became obvious that the teaching staff follows an “open-door-policy”. In the first week of each year, students undergo an orientation which familiarizes them with available support services and where the colleges and departments are introduced. The experts positively highlight that senior students are also involved in organizing the orientation week and guiding the new students.

As another support mechanism, an academic advisor is responsible for a small number of students from the beginning of each semester. Students are supported through advisors, course coordinators or personal tutors with their registration process, selecting a study program, financial and personal issues and their performance during the semester. If the students have problems besides academic issue, a social support unit is installed at the University. The

experts find the support services at the University to be exemplary and conducive to the health and success of the student body.

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

#### **3.3.4 Examination system and transparency**

The University uses a continuous assessment process to ensure the quality of education for its students. This is achieved by evaluating the performance of the students through a series of exams and quizzes that are scheduled during the academic trimesters. Students in the "Clinical Laboratory Sciences" program are not required to write a Bachelor thesis. Instead they have to conduct a research project called graduation project. Students will choose their supervisor based on the topic of the graduation project, which also needs to be approved by a committee. The experts positively highlight that specific workshops regarding the presentation and finalization of the graduation project are offered. The evaluation of the graduation project is done by presenting a poster or a dissertation. All of the graduation projects are presented during a research day at the University. Usually, there are two or three students responsible for one graduation project, which can also be done at hospitals or other institutions. The experts understand that this is also the mean difference compared to a Bachelor thesis, where the students have to apply simple research methods by their own. As already stated in *Criterion 1*, the expert recommends to establish a thesis instead of the graduation project as this is also internationally more recognized.

Furthermore, the students are encouraged to write research proposals, papers and give presentations. The University presented a range of initiatives which should help the students to be interested in research and also take part in writing and publishing papers, which the experts positively acknowledge.

In the experts' opinion, the study program includes a very high number of exams which causes a high workload not only for students but also for the teaching staff. The transparent information of examination methods and of the examination schedule at the beginning of each term makes the great number of assessments during and at the end of each trimester manageable. An examination can be repeated once. Students who cannot attend the test due to health issues or other unforeseen circumstances are allowed to take the test

on another agreed day. If the examination is failed twice, students must redo the course in the following semester. Thus, the experts conclude that the examinations, although numerous, serve to determine whether the envisaged qualification objectives have been achieved or not and are focused on students' knowledge. The requirements to students' performance in examinations are regulated and published. The frequency of examinations, as well as their organizations, is appropriate.

During the round of talks, the University reports on an electronic exam system introduced at Taibah University as part of digital transformation 2019. This enabled the university to maintain its course of studies as far as possible even during the Corona pandemic. Through the digital transformation system all of the course information as well as academic support mechanisms, e.g. add and drop courses or academic advising are provided. The University also offered training programs for students and teachers to get familiar with e-learning, which the experts positively acknowledge.

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

### **3.3.5 Teaching staff and material equipment**

The "Clinical Laboratory Sciences" program is carried out by one male professor, 8 male and one female associate professor, one male and one female lecturer, 16 male and 13 female assistant professors as well as 10 male and 7 female technicians/demonstrators. Considering the total of 417 currently enrolled students, the student-to-faculty ratio is 1:10. The experts positively acknowledge the good ratio.

Regarding the employment process, the qualification and experience of the teaching staff is closely evaluated prior to the appointment decision. Overall, the teaching and academic staff of the College of Applied Medical Sciences shows a very high level of commitment and potential for the execution as well as further development of the study program they are responsible for. The expert group concludes that there is a strong corporate identity and positive group dynamics among the University and faculty administrations.

The experts find the number of human resources allocated to the program to be sufficient to carry out its functions. The teaching staff within the Bachelor

program "Clinical Laboratory Sciences" is in possession of academic and technical credentials and experience adequate to their responsibilities. The University informs its employees about opportunities for personal and professional development in clear ways, and actively encourages their participation in workshops, training courses and conferences intended to further their ability which is confirmed during the talks with the staff on site. New teaching staff is thoroughly briefed about the program and their teaching responsibilities before they can start working. Student evaluate the performance of all teaching and other staff periodically.

On-site, the experts were shown around the College of Applied Medical Sciences' premises at the campus as well as the skills labs, where students within the "Clinical Laboratory Sciences" program gain their practical skills. The experts were satisfied with the quality of the laboratories and clinical areas used to train students in the Bachelor program "Clinical Laboratory Sciences". The laboratories consist of a histology laboratory, microbiology laboratory, molecular and serology laboratory, hematology laboratory as well as a research laboratory for the female section as well as for the male section. According to the experts, the skills labs are equipped with all relevant devices and simulators. It was ascertained by the experts that the Bachelor study program "Clinical Laboratory Sciences" has ample available teaching facilities at its disposal. In addition to using the laboratories for the practical courses, the experts recommend using external cooperation opportunities even before the internship, on the one hand to get to know current equipment and on the other hand to evaluate the opportunities of the labor market.

The central library of the University is located on the main campus building. The library offers a collection of study and research material for clinical laboratory sciences student. The total number of printed materials related to clinical laboratory sciences in the central library is 550 items. Electronic library is available for all students. The University deanship of library affairs manages the central library and its branches, as well as the electronic library. The college library opening periods is currently from 8:00 am to 6:00 pm.

The experts state that the learning resource materials and associated services are consistent with the requirements of the programs and the courses offered by them.

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

### **3.3.6 Quality assurance**

The University follows the quality concept of the National Center for Academic Accreditation and Assessment (NCAAA) from which Taibah University has recently got full accreditation for seven years until 2026.

According to the experts, Taibah University has a well-structured system of quality assurance spread across all its units. The University has established a quality assurance hierarchy which connects from the deanship to quality to all colleges and study programs. The quality assurance measures of the "Clinical Laboratory Sciences" program are divided in two cycles: The course reports are gathered by the course coordinators at the end of the trimester and submitted to the head of the department. The head of the department then reviews all reports and thereafter prepares the yearly program reports, taking all key performance indicators (KPIs) into consideration. All reports are discussed during the departmental board meeting along with the marks and grade distribution. The student evaluations of the individual courses are discussed to list the most important improvement and strength points. The results of this board meeting are then used to prepare an action plan for the next year and to improve the program. The experts conclude that University has a well-established, documented and published concept of quality assurance regarding the education process, teaching and research, which serves as the basis for the quality-oriented development and implementation of its study programs and, therefore, also for further development of the "Clinical Laboratory Sciences" program. As the University states during the on-site visit, the student council meetings at the program level also plays an important role in the evaluation of the "Clinical Laboratory Sciences" program, which is confirmed by the students.

The results of the internal quality assurance management are applied to the continuous development of the study program. In doing so, the University takes into close consideration the quality evaluation results as well as the analyses of students' workload, their academic accomplishments and feedback from graduates as well as other relevant stakeholders.

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

### **3.3.7 Gender equality and equal opportunities**

The College of Applied Medical Sciences, where the “Clinical Laboratory Sciences” program is located, has both female and male students and assures that it provides equal admission, education, examination and participation opportunities for both groups of students. The Taibah University demonstrates its commitment to the provision of equal opportunities for all students, within the cultural boundaries of the local society and shows openness for diversity and social developments. A nursery is available at the campus, where students get a special discount on children day care. The university counseling center helps students with special living situations. It was founded in 2012 and includes academic, psychological and social mentors and offers individual and group counseling service as well as therapeutic intervention. Furthermore, the medical center provides free health services to the students and their families.

The experts positively emphasize the handling of students with chronic illnesses and/or disabilities. Prior to admission, a medical examination will be conducted and an interview with the academic council and admission committee will be held to discuss whether the student can be admitted to the program. The University has implemented the student disability center. The accessibility of the campus was assured on site. It was well noted that the University was also able to immediately give examples of students benefiting of the support program for disabled or chronic diseased students.

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

### **3.4 Summary**

The experts sum up that the overall impression of the Taibah University is very positive. The experts welcome the internationalization plans in KSA and at Taibah University. Research motivation at the university can also be further strengthened with the help of the development of master's degree programs and the completion of the teaching hospital. Digitalization at the university is working well and is positively noted by the experts. The University presents itself convincingly as an open-minded and dynamic institution with willingness to import new ideas and recommendations for further enhancement.



A number of additional favorable characteristics and achievements of the study program “Clinical Laboratory Sciences” were demonstrated by the management of the University, the representatives of the College of Applied Medical Sciences, those of the departments as well as of the study body, such as a strong commitment to quality assurance and a very well-functioning support mechanism system. Moreover, the experts highlight the thorough and comprehensive curriculum of the study program. Hence, the objectives meet the requirements of the current job market of the Kingdom of Saudi Arabia.

Based on the information from written documents and the results of the on-site visit, the experts conclude that the study program “Clinical Laboratory Sciences” offered at the Taibah University fulfills the above-described criteria. Hence, the experts recommend that the Accreditation Commission of AHPGS makes a positive decision regarding the accreditation of the study program.

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

- The University should present the vision of the College of Applied Medical Sciences and the Department of Clinical Laboratory Sciences regarding implementing a Master study program more actively.
- The completion of the teaching hospital should be pushed and the resulting opportunity to intensify interdisciplinary cooperation among students and teachers should be utilized.
- A bachelor thesis as a final proof of academic competencies should be implemented.
- In addition to using the laboratories for the practical courses external cooperation opportunities should be used even before the internship, on the one hand to get to know current equipment and on the other hand to evaluate the opportunities of the labor market.



## **4 Decision of the accreditation commission**

### **Decision of the Accreditation Commission of February 16, 2023**

This resolution of the Accreditation Commission of the AHPGS is based on the application, as well as the expert review and the on-site visit covered in the expert report.

The on-site visit of Taibah University took place on December 12 and 13, 2022 according to the previously agreed-upon schedule.

The accreditation decision is based on the “Accreditation Criteria for International Program Accreditation” which have been developed in close accordance with 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 regulated study period in the program “Clinical Laboratory Sciences” is four years / twelve trimesters + one-year internship (not credited). The study program requires the obtainment of 136 credit hours (CH) according to the internal credit hour system. The study program consists of 53 courses out of which 10 courses are absolved during the unified scientific track and 43 are study program specific. The language of instruction is English. The bachelor study program “Clinical Laboratory Sciences” is completed with awarding of the academic degree “Bachelor of Clinical Laboratory Sciences”. Admissions take place every fall semester. The first batch of students was admitted to the study program in the academic year 2008/2009.

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

The study program “Clinical Laboratory Sciences” is accredited for the duration of five years, until September 30, 2028.

For further development and enhancement of the study program, as well as of the University as a whole, the Accreditation Commission of the AHPGS supports the recommendations articulated in the expert report. Additionally,

the Accreditation Commission recommends to translate the internal credit hour system into the European Credit Transfer System (ECTS) and attach it as an appendix to the diploma to ensure international compatibility.