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Department of Accreditation
National Council for Accreditation of Programs Colleges and Institutes of Health and Medical Techniques



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National Standards for Accreditation of Programs of Colleges and Institutes of Health and Medical Techniques in Iraq

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National Standards for Accreditation of Programs of Colleges and Institutes of Health and Medical Techniques in Iraq

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Republic of Iraq
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وزارة التعليم العالي والبحث العلمي
جهاز الإشراف والتقويم العلمي
دائرة ضمان الجودة والاعتماد الاكاديمي
قسم الاعتماد

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((أمر وزاري))

استناداً الى الصلاحيات المخولة لنا بموجب الامر الوزاري (ق / ش/ ١٢٨٢/١ في ٢٠٢٢/١١/١٠) والحاقاً بالأمر الوزاري ج د / أ/ ١٣٠٨ في ٢٠٢٣/٤/٥ ، تقرر اعادة تشكيل المجلس برئاسة وعضوية الذوات المبينة أسماؤهم في أدناه وعلى النحو الاتي :

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Introduction :

Higher education institutions in Iraq are witnessing serious policies for the development of education. The Ministry of Higher Education and Scientific Research/ Scientific Supervision and Evaluation Office for the Quality of Education and Academic Accreditation is keen to have an active role in supporting the programs of colleges and technical institutes and to verify the requirements of the health and medical programs of the departments intending to obtain program accreditation in accordance with the national standards for program accreditation in health and medical technical education in Iraq.

Therefore, the National Council for Accreditation of Programs of Colleges and Institutes of Health and Medical Techniques presents the first version of the guide "National Standards for Accreditation of Programs of Colleges and Institutes of Health and Medical Techniques" based on international standards of World Federation for European Medical Education the (WFME-2020). The WFME Programs of the World Federation for European Medical Education are specific to the definition of international standards for accreditation in European medical education launched in 1998. The objective of these standards was to provide a mechanism for quality improvement in medical education in a global context, to be implemented by national institutions, organizations and authorities responsible for Medical education. Also World Health Organization (WHO) and the ASIC Accreditation Organization. Our national standards will be explained in this guide for Health and Medical Colleges and Technical Institutes (public and private), in addition to the various criteria that can be followed to apply program accreditation to their programs. The guide aims to acquaint the program officials and their employees with the programs characterization and help them evaluate their components and develop their performance to ensure their quality and prepare for national accreditation of programs of health and medical techniques.

Prof. Dr. Shukriyia Sh. Chyad

Chairman of the National Council for Accreditation of Programs of Colleges and Institutes of Health and Medical Techniques

Vision of National Council for Accreditation of Programs of Health and Medical Techniques in Iraq:

The Medical Technical Education is an important path in progress and development as various fields of knowledge as dictated by the terms and summaries of technological development and its increasing importance according to our scientific and global hierarchy. Since its establishment in the fifties of the last century and its formation within the Ministry of Higher Education in 1987, the Technical Education Authority has sought to overcome difficulties and solve problems facing students and teachers. Statistics indicate an increase in the number of students after the establishment of Technical Universities in Iraq. Therefore, colleges and technical institutes must be leaders in the field of education and skills that serve the labor market according to the requirements of modern technology. To cover technical diploma programs and colleges of health and medical techniques, the Quality Improvement Council for Colleges and Institutes of Health and Medical Techniques was founded in 2017, according to Ministerial Decree (NO. q/7/5/1200) dated 14/3/2018, amending the name of the Council due to Ministerial Decree (NO. q/g/1/886) dated 29/8/ 2021 to the current name (National Council for Accreditation of Colleges and Institutes of Health and Medical Techniques) based on Ministerial Decree (NO. d/q /1/1101) dated 27/10/2021, (NO. d/q /1/1308) dated 5/4/2023.

Therefore, the national standards were prepared by the National Council based on the standards of the World Health Organization (WHO) and the programs of the World Federation for European Medical Education (WFME). The National Council includes all health and medical specializations of the following colleges and technical institutes (Medical Laboratory Techniques, Radiology and Ultrasound Techniques, Optics techniques, Physiotherapy techniques, Community Health techniques, Health Care technologies and people with special needs, Props and Prosthetics techniques, Anesthesia techniques, Dental industry techniques, Dental protection techniques, Healthy nutrition techniques, and Pharmacy techniques), that work to develop health and medical educational programs of institutes and colleges in accordance with international standards within the directives of the International Accreditation Department at the Supervision and Scientific Evaluation Apparatus in the Ministry of Higher Education and Scientific Research.

The National Council seeks to improve health and medical technical education at the level of colleges and technical institutes and to strengthen relations between institutions concerned with the quality of higher education....

National Standards for Accreditation of Programs of Colleges and Institutes of Health and Medical Techniques

I- The First Standard: Program Strategic Plan

The Health and Medical Techniques Programs must have a clear and appropriate mission that is consistent with the mission statements of the college/institute and department, and support its application. The mission must guide program planning and decision-making processes. The program goals and plans must be linked to it, and periodically reviewed.

The Strategic Plan themes:

1-1: Vision, Mission and Goals of the Program.
1-2: Applications and procedures of the Program Plan.
1-3: The Academic Independence of the Program.

The Strategic Plan Goals

- Determining the basic needs that serve the program outputs.
- Upgrading and developing the program activities.
- Localizing the institution's relationship with the employers concerned with the program.
- Achieving the requirements of faculty members, students and the labor market.
- Preserving the rights and property of the program and its employees.
- Developing skills of students by providing the necessary requirements for health and medical training.
- Raising the level of the graduate.

Program Strategic Plan Standard KPIs:

NO	1- Program Strategic Plan Standard KPIs
1-1	Vision, Mission and Goals of the Program
1-1-1	The program has a clear, appropriate, approved, and widely publicized mission that is consistent with the mission of the college/institute and department, and is consistent with the needs of the society and the national guidelines.
1-1-2	The program goals are linked to its mission, consistent with the goals of the college/institute, and characterized by being clear, realistic and measurable.
1-1-3	The program mission and goals guide all its operations and activities (e.g., planning, decision-making, resources allocation, curriculum

	development).
I-1-4	The program goals and its needs implementation are linked to appropriate operational plans that are consistent with the plans of the Colleges and Institutes of Health and Medical Techniques.
I-1-5	Those responsible for the program monitor the extent to which its goals are achieved through feedback on specific performance indicators, hence take the necessary actions for improvement.
I-1-6	The program mission and goals are reviewed periodically with the participation of relevant stakeholders, and are developed accordingly.
I-1-7	Faculty staff, students, and employers participate in formulating program goals. Any changes to them will be announced.
I-1-8	Each program of those colleges and institutes refers to all kinds of health and medical skills and medical research.
I-1-9	The vision and goals must take into account the local and global perspective in higher education and technical education in the field of curricula and scientific research.
I-2	**Applications and Procedures of the Program Plan**
I-2-1	The program applies a clear and documented plan for emergency and crisis management.
I-2-2	The program plans are appropriate with the resources available to colleges and institutes of health and medical techniques.
I-2-3	The program plans keep pace with local and global educational and scientific activities that serve the community and the labor market.
I-2-4	The program plan should implement research innovations and develop skills of students by providing all equipment and supplies for health and medical techniques.
I-2-5	The program plan is implemented in terms of its ability to allocate the main resources, projects, decisions and proposals related to it.
I-2-6	Developing the procedures of program plan through self-evaluation and periodic observations in order to improve the educational process and develop it with high quality.
I-3	**The Academic Independence of the Program**
I-3-1	The program provides a special policy for management and faculty members in departments, colleges, and institutes of health and medical techniques.
I-3-2	The program gives a high degree of freedom in designing curricula according to the labor market, and in allocating the necessary resources for its implementation.
I-3-3	Effective contribution of faculty members to the development of

	theoretical and practical curricula and to what relate to the educational process.
1-3-4	The program provides financial independence for all scientific, educational, health and medical resources and activities.

2- The Second Standard: Curriculum

Curricula must comply with the professional requirements of the Health and Medical Techniques Program that includes (Medical laboratory techniques, community health techniques, optics techniques, anesthesia techniques, radiology and ultrasound techniques, physiotherapy techniques, special needs care techniques, dental industry techniques, dental protection techniques, Healthy nutrition techniques, pharmacy techniques, braces and prosthetics techniques). The curricula must also take into account the objectives of the program, its educational outputs, and the scientific, professional and technical developments in the field of specialization. Ensuring the development and upgrading of curricula is a primary goal for every educational program that seeks to provide expertise and development. This is considered the ultimate goal that must be applied to prepare and qualify the future generation to be able to work and build, as it is the best way to develop community service. Curricula are developed according to specific and well-established standards that ensure the achievement of the objectives for which they are set. Curricula are prepared for each of the following:

- Curricula for Bachelor & Diploma in Medical and Health Colleges & Institutes Techniques'

: Curricula Themes

2-1: Curriculum strategy.
2-2: Curriculum content.
2-3: Organization, design and installation of curricula.
2-4: Teaching methods and scientific experiences.
2-5: Implementation of curriculum.
2-6: Evaluation and development of curriculum.
2-7: Study program duration of the health and medical techniques specializations.

Curriculum Goals:

- The general goal is to train highly qualified graduates to practice the profession effectively.
- Upgrading the scientific and professional levels of the student and preparing there appropriately.
- The program's response to the community's health, medical and progression needs with high efficiency.
- Focus on professional conduct and practice values for health and medical technologies.
- Employing the curriculum outcomes in community service.
- Improving the future vision through the development of the medical and health technical programs of these institutes and colleges.
- Focus on sustaining professional skills development.
- Activating internal and external agreements to develop curricula.

Curriculum Standard KPIs

No	2- Curriculum Standard KPIs
2-1	Curriculum Strategy
2-1-1	The program adheres to policies, standards, and procedures in designing, developing, and modifying the curricula of colleges and institutes of health and medical techniques.
2-1-2	The curriculum takes into account the achievement of the program's goals, educational outcomes and scientific, technical and professional developments in the field of specialization, and is reviewed periodically.
2-1-3	Course description and curricula achieve a balance between the general requirements and the requirements of the specialization, and between the theoretical and practical aspects, and takes into account the progression and integration between the academic courses.
2-1-4	The program takes into account the suitability of the curricula to the labor market and development requirements.
2-1-5	The curriculum takes into account experience in employing the skills a student acquires through study in the career field or completion of postgraduate studies.
2-1-6	The curriculum includes integrated classes and extracurricular activities that contribute to the achievement of learning outcomes.
2-1-7	Teaching and learning strategies and assessment methods used are consistent with the intended learning outcomes at the program and course level.
2-1-8	Teaching and learning strategies are student-centered, encouraging

	active learning.
2-1-9	Teaching and learning strategies and assessment methods in the program vary in proportion to its nature and level, enhance the ability to conduct scientific research, and ensure that students acquire thinking and self-learning skills.
2-2	**Curriculum Content**
2-2-1	The course content includes all teaching and learning processes planned from the beginning to graduation, which can be divided into different parts (e.g., majors, topics, units, stages, classes), depending on the structure of the curriculum.
2-2-2	Curriculum content and courses must be consistent with the program's philosophy and techniques, the achievement of its mission and goals, and the needs of students and the community.
2-2-3	The content takes into account the course description and curricula of the program, outlining the appropriate requirements for the different disciplines, in accordance with international practices and corresponding programs.
2-2-4	The learning outcomes of the content in the courses are related to the learning outcomes of the program (distribution of the content of the learning outcomes of the program across courses).
2-2-5	Curriculum content should focus on clinical knowledge and skills which include relevant professional awareness and skills required for the student to assume appropriate responsibility for patients care after graduation.
2-2-6	Curriculum content focuses on health systems knowledge, which includes population health and local health care delivery systems in the specialization of community health techniques, health care techniques for people with special needs, physical therapy techniques, and orthotics and prosthetics techniques.
2-2-7	The content of the curriculum for field experience activities is consistent with the learning outcomes of the program. Appropriate training, assessment and training places (teaching hospitals, health care centers) are identified to achieve these outcomes.
2-2-8	The program introduces the full components of the curriculum content for each course in terms of the system followed (semester, annual, or course system).
2-2-9	Curriculum content focuses on professional behavioral sciences relevant to Iraqi context and culture, and includes principles of professional practice including ethics.

2-2-10	The program ensures identical application of the course descriptions and curricula of program.
2-3	**Organization, Design and Installation of Curricula**
2-3-1	The organization of content (knowledge and skills), disciplines, and experiences are linked within the curricula. There are many options, variables, and selected educational methods, starting from integration models to traditional stages, including varying degrees, and all are related to the mission of the program of the health and medical techniques, to its desired results, resources and general context.
2-3-2	Linking theoretical and practical academic knowledge and practical training with the field of specialization.
2-3-3	The prescribed curricula emphasize the skills of developing scientific thinking and self-learning.
2-3-4	The program provides a documentary file for the academic courses that include (course description, student assignments, graduation projects, exam papers, grade distribution, etc.).
2-3-5	The curriculum must convey basic actual knowledge and required skills, develop analytical ability, and promote professional behavior and technical learner core values relevant to Iraqi culture.
2-3-6	The syllabus must show the appropriate core modules into which the syllabus is divided to ensure the competencies required in terms of knowledge, skills and profession for the practice of health and medical techniques.
2-3-7	The curriculum should provide opportunities for self-learning, and the exposure to a wide range of institutional and societal experiences.
2-3-8	Students must spend a minimum of two academic years of their training in teaching hospitals, health centers and medical laboratories; in direct contact with individuals, families and the community with increased supervised clinical responsibility. Students should know patients and the community as quickly as possible.
2-3-9	The curriculum should enable students to acquire appropriate knowledge, skills and profession in relation to disease prevention, health promotion and community health, and conducting appropriate tests.
2-3-10	Ethics of medical and health technical student should be an integral part of the curriculum.
2-3-11	The teaching of basic sciences should be closely linked to the overall goals of medical and health colleges and institutes. This link should be clear to faculty members and students. Thus, courses in these sciences

	must demonstrate the importance of the principles being taught for understanding health and disease, both at the individual and societal levels.
2-3-12	The practice of health and medical techniques must be taught in a way that promotes scientific principles and fundamental human values.
2-3-13	There must be an appropriate level of horizontal (synchronous) and vertical (asynchronous) integration in order to achieve the educational goals.
2-3-14	Colleges and institutes of health and medical techniques must inform students, faculty members, and practicum locales of the standards expected and required of the student at the end of each year.
2-4	**Teaching Methods and Scientific Experiences**
2-4-1	These include instructional methods and experiences of teaching and learning techniques designed to deliver appropriate learning outcomes and to support students in their learning. These experiences may be official or nonofficial, collective or individual, and may be located within health and medical techniques colleges and institutes, in the community, or in secondary care institutions. The choice of educational experiences is determined by the curricula, Iraqi cultural issues in education, and the available human and material resources.
2-4-2	Teaching methods in different settings (lectures, tutorials, field visits, exercises) should use strategies that promote student-centered rather than teacher-centered learning, encourage active inquiry about students, stimulate analytical thinking and knowledge organizing, and enhance lifelong learning skills.
2-4-3	Colleges and institutes must emphasize the awareness of students about the importance of information technology and health informatics and provide opportunities for their learning and practice.
2-4-4	Skillfully designed, used, and supported virtual learning methods (digital, distance learning, or e-learning) can be taken into account, presented, and advocated as an alternative or complementary educational approach under appropriate circumstances, including community emergencies.
2-4-5	Professional skills of health and medical techniques should be introduced early in the curriculum and integrated with basic techniques. Workspaces for skills should be developed and used to prepare students for their first day of practice.
2-4-6	All through program, students should be exposed to a range of settings where health care is provided and health promotion practice is

	practiced. In addition to teaching hospitals and primary health care centers, students should also have the opportunity to work in the community, with families, in community health centers, in rural hospitals, in general practice, in chronic health care centers, and in the workplace to address health.
2-4-7	It is recommended that students be given the opportunity to undertake supervised elective studies in areas such as social or environmental work and community service with specific goals and for a limited time, which are then evaluated by the college/institute.
2-4-8	The student must submit at least one research project during the study period. Students should be exposed to issues and concerns related to the ethics of research in health and medical technologies, and be guided, by supervisors, in the development of ethical and professional conduct in research.
2-4-9	The program applies mechanisms to support and stimulate excellence in teaching and encourage creativity and innovation among faculty members.
2-4-10	At the beginning of teaching each course, students are provided with comprehensive information about it, including: (learning outcomes, teaching and learning strategies, teaching methods, their deadlines and scheduling, and what is expected behind the course.
2-4-11	The program provides feedback to students on their performance and evaluation at an appropriate time so that they can improve their performance.
2-4-12	The program applies clear and publicized procedures to verify the quality and credibility of assessment methods, such as (specifications, diversity, and comprehensiveness of learning outcomes, grade distribution and accuracy of correction) and to ensure the level of student achievement.
2-5	**Implementation of the Curriculum**
2-5-1	The program must provide implementation mechanisms that allow identification and evaluation of the general content and balance of the curricula in relation to the stated goals of colleges and institutes of health and medical techniques.
2-5-2	There must be a committee of curricula, authorized to plan and supervise all curricula and be able to exercise sufficient control over the curricula and their goals and improvement.
2-5-3	Evaluating courses periodically to verify the effectiveness of their implementation within teaching and learning strategies and assessment

	methods, and submit reports on them.
2-6	**Evaluation and Development of the Curricula**
2-6-1	The curriculum takes into account the recent developments and trends related to the field of specialization of each program for health and medical techniques.
2-6-2	There should be a periodic follow-up from the curricula development committees.
2-6-3	The presence of advisory committees linked to the ministerial bodies whose role is to develop and review the curricula to keep pace with local and global developments and to provide advice to the program, with the aim of reviewing and evaluating.
2-7	**Study Program Duration of the health and medical techniques specializations.**
2-7-1	In Iraq, the duration of the program to take a medical technical diploma in institutes of health and medical techniques is two years (equivalent to 64 weeks) to meet the common needs in theory, practice and application in educational hospitals and health care centers.
2-7-2	For bachelor degree, the duration of the program is four years (equivalent to 128 weeks) to meet the common needs in theory and practice and application in educational hospitals and health care centers.

3- Third Standard: Students

The criteria and requirements for student admissions in the program must be clear and publicly disclosed, and must be applied fairly. The information about the program and the requirements for completion of the study must be available, and students must be informed about their rights and duties. The program must provide effective guidance and counseling services, and extracurricular and enriching activities to its students. It must provide students with opportunities to contribute to local and international scientific and cultural activities, to acquire skills, and have a personality that enhances their mission to build society. The program must evaluate the quality of all services and activities offered to its students and improve them. The program must follow up its graduates.

Students Standard Themes:

3-1: Students admission and selection policy.
3-2: Students' assimilation.
3-3: Students Support and guidance

3-4: Student Representation in decision making
3-5: Students activities.
3-6: Students-oriented services
3-7: Graduates.

Students parameter goals:

- Introducing student to the program.
- Scientific advancement of the student's level and correcting the course of the teaching process.
- Improving the future vision of the program.
- Achieving sobriety at work and preserving students' rights.
- Taking into account the individual differences between students.
- Achieve the scientific requirements and the special needs of the student.
- Building a conscious generation that is aware of the rights and duties and serves the community.
- Encouraging the student to make decisions.
- Follow up graduates, develop their skills in order to benefit from them in the program feedback.

Students Standard KPIs

No	3- Students Standard Core KPIs
3-1	Student Admission and Selection Policy
3-1-1	The Health and Medical Techniques Program adopts the criteria and conditions for admission announced to students upon registration, in line with the nature of the program and its fair application. They are updated periodically.
3-1-2	Accepting students according to the plan of the program to ensure the integrity of the educational process and provide a good learning opportunity.
3-1-3	Conducting a medical test for students to ensure their academic and mental readiness.
3-1-4	The program provides basic information to the student such as: study requirements, services, and financial costs.
3-1-5	The program applies fair and approved policies and procedures to transfer to it, and equalize what students have previously learned.
3-1-6	Commitment to issues of equality and diversity when accepting and selecting students.
3-1-7	Establishing re-admission and registration policies for students from other courses.

3-1-8	Develop appropriate solutions to urgent problems in selection and acceptance of students (such as: selection requirements, stages of the admission process selection, mechanisms for submitting offers, mechanisms for submitting and accepting complaints).
3-2	**Students' assimilation**
3-2-1	There should be a correlation between the number of students to be accepted in the program and the needs of the labor market and the available resources (e.g. faculty staff, classrooms, available equipment, laboratories, and infrastructure available for learning).
3-2-2	The capacity of students absorption must be determined by the continuous review with the labor market concerned with the program to meet the needs of the community in a balanced manner.
3-2-3	Periodic meetings with employers to ensure a proper planning of inputs in absorbing student admission, developing human resources, facilitating the training mission and conducting graduate research in the public health sector.
3-3	**Students Support and guidance**
3-3-1	The program provides a complete guide to support and guide students, including the support for developing academic skills, health, physical, mental and wellbeing problems, career guidance, and management of the disabilities they face.
3-3-2	The program provides a comprehensive preparation for new students, ensuring their full understanding of the services and possibilities available to them.
3-3-3	The program acquaints students with their rights, duties, rules of conduct, procedures of complaint through various means, applying them fairly through the suggestions and complaints box, and announcing them on the student bulletin board.
3-3-4	The program puts appropriate solutions for students who need support and guidance in emergency situations, personal trauma, specific crises, or personal guidance, taking into account how to announce these matters and how to access them in strict confidence.
3-3-5	Providing support and guidance services to students is done through qualified and adequate staff.
3-3-6	Existence of effective follow-up mechanisms to ensure students care and evaluate the quality of services provided to them.
3-3-7	Developing periodically the support and guidance services in consultation with student representatives.

3-4	Student Representation in decision making
3-4-1	Presence of students representative in the Department and College councils and committees related to students issues .
3-4-2	Students representation and appropriate participation in the design, management and evaluation of curricula, as well as issues of interest to graduates because the student is in a continuous learning phase.
3-4-3	Encouraging students to participate and make decisions through organizations of students.
3-5	**Student Activities**
3-5-1	Appropriate mechanisms are applied to identify talented, creative, distinguished and other students, who fall behind in the program. Particular appropriate programs are available to nurture, motivate and support each category of them.
3-5-2	The program provides students with extra-curricular activities in many social and recreational fields to develop their abilities and skills, and the program takes appropriate measures to support and motivate their participation.
3-5-3	The program provides students with additional activities for their professional development, in line with targeted learning outcomes and labor market developments.
3-5-4	Students are encouraged to participate in voluntary campaigns within the program specialization that serves the community.
3-6	**Student Services**
3-6-1	The program applies operative mechanisms to ensure students regular attendance and active participation in course activities and field experience.
3-6-2	The program applies effective procedures to monitor progress of students and verify that their graduation requirements are met.
3-6-3	The program takes into account the special needs of students (such as: those with special needs, and international students).
3-6-4	There is a portfolio for each student that contains his academic level and behavior.
3-6-5	The presence of students guidance in order to familiarize them with the department and its general facilities.
3-6-6	The presence of special services for students (such as: students club, sports halls, internet service, and adequate equipment).
3-6-7	The program explores opinions of students in relation to evaluating the teaching process.

3-6-8	The program explores opinions of students in relation to the quality of teaching and learning.
3-6-9	Exams of students are aligned with the courses.
3-6-10	Conducting various tests for students, not only written tests.
3-6-11	Existence of an open implemented mechanism to deal with complaints of students about results of exams through an objections committee.
3-6-12	Applying the retribution system to students in cases of behavioral violations.
3-6-13	Existence of appropriate administrative systems to respond to inquiries of students.
3-6-14	Existence of effective mechanisms to assess the adequacy and quality of services provided to students, measure their satisfaction, and benefit from their results in developing and improving the program through the survey.
3-7	**Graduates**
3-7-1	The program applies an effective mechanism to communicate with alumni, involve them in events and activities, solicit their opinions, benefit from their expertise, support them, and to provide updated and comprehensive databases for them.
3-7-2	The existence of an organizational unit for graduates in each department that encompasses an integrated database for them.
3-7-3	Determining the percentage of graduates who got jobs over the total number of the assessment year.
3-7-4	The Graduate Unit works on field studies that give indications of potential job opportunities.
3-7-5	The Graduate Unit conduct training courses for graduates who are not engaged in professional development.

4- Fourth Standard: Academic Staff

The Academic program must have sufficient numbers of qualified teaching staff with the necessary competence and experience to carry out their responsibilities. The teaching staff must be aware of the current academic and professional developments in their specialization, and must participate in research, community service, and in improving the program and institutional performance. Teaching staff performance must be evaluated according to specific criteria, and the results of these evaluations must be used to improve the performance and the continuous development for academic staff.

Academic Staff Themes:

4-1: Academic Staff Recruitment Policy
4-2: Academic staff to Students Ratio
4-3: Academic Staff Activities
4-4: Academic Staff Development.

Goals of Academic Staff Standard:

- Identifying the main needs of the teaching staff to serve the educational process.
- Obtaining good outcomes from the performance of faculty members.
- Developing the capabilities of the teaching staff and investing their expertise in the program.
- Providing professional safety for teaching.
- Scientific improvement of the student through various scientific methods by the help of the teaching staff.
- Consolidating the educational process through the scientific activities of the faculty members and their scientific and practical achievements for the program.
- Upgrading the program through the publications of faculty members (such as: patents, academic writings, scientific researches, and scientific participation).

Academic Staff Standard KPIs:

No	4 - Academic Staff Standard KPIs
4-1	Academic Staff Recruitment Policy
4-1-1	The program must implement appropriate policies and procedures for selecting faculty members in the program and retaining the distinguished among them. There must also be a balance between the academic staff and students. Their responsibilities must be determined.
4-1-2	The academic program has an adequate number of specialized faculty members in all health and medical sciences.
4-1-3	The recruitment policy must include the presence of a sufficient number of academic experts with a high scientific rank to provide and develop the curricula and a sufficient number of researchers of high quality in various disciplines.
4-1-4	The faculty members have to show the necessary competency (e.g., qualifications, certificates, expertise), and effective teaching skills; appropriate mechanisms are to be applied for verification.
4-1-5	Circulating a unified ministerial work contract form from the Department of Private/Non-Governmental University Education/

	Ministry of Higher Education and Scientific Research to all private colleges, ensuring the rights and duties of their teaching staff, teaching load, vacations, and all faculty member-oriented matters in accordance with University Service Law, similar to governmental colleges.
4-2	**Academic staff to Students Ratio**
4-2-1	The ratio of the teaching staff to students is 1:20 (one PhD professor to 20 students).
4-2-2	Providing statistics related to the teaching staff to the scientific degree, (Emeritus Professor, Professor, Assistant Professor, Lecturer, Assistant Lecturer).
4-2-3	The number of permanent faculty members in the academic program or scientific department shall not be less than (5 Ph.D. holders), of at least (Professor and Assistant Professor) degree.
4-2-4	Availability of at least one faculty member for each specialization, taking into account the overlap of specializations of two or more fields.
4-2-5	Balance of faculty members would include those with joint responsibilities in the basic and clinical sciences in the university and health care facilities, and those with dual engagements.
4-2-6	Determining the teaching load for the teaching staff by their scientific degrees (professor, assistant professor, lecturer, assistant lecturer) due to the number of theoretical and practical lecture hours and hours of graduation research supervision. This load must be equal in all academic programs of governmental and private/non-governmental colleges and institutes.
4-3	**Academic Staff Activities**
4-3-1	The teaching staff regularly participate in academic activities (e.g., scientific conferences, seminars, research projects, viva-voce examination committees, and evaluating scientific researches according to their academic degrees and competencies) in the field of their specializations. Such participation in these activities and such scientific production are the bases for the evaluation and promotion of teaching staff members.
4-3-2	Faculty members effectively participate in research activities, patents, and scientific production. This participation is considered one of the criteria for their evaluation and promotion.
4-3-3	Teaching staff participate in community-service activities. This participation is considered one of the criteria for their evaluation and promotion.
4-3-4	Academic staff participate in assessment and development activities of the program.

4-3-5	Distinguished academic staff members are to be honored and granted particular rewards, promotions, and appreciation letters for their acknowledged academic activities and for their efforts directed to the academic program or the college.
4-4	**Academic Staff Development**
4-4-1	The program of Colleges and Institutes of Health and Medical Techniques must have a working policy that balances educational capabilities with research and development.
4-4-2	The program development policy must include the ratio of teachers-to-students number. Representing members of teaching staff should be taken into in the establishments and organizations related to the academic health and medical specializations.
4-4-3	The program provides an appropriate orientation for new and adjunct teaching staff to ensure their understanding of the program nature, their rights, tasks, responsibilities, and work load.
4-4-4	The teaching staff participate in professional and academic development programs in accordance with a plan that meets their needs and contributes to the development of their performance.
4-4-5	Effective mechanisms are applied to evaluate the adequacy and quality of the services provided to the teaching staff and to measure their satisfaction about these services.
4-4-6	The performance of the teaching staff is regularly assessed according to specific and known criteria; feedback is provided to them; and the results are used in improving the performance.
4-4-7	Providing advanced teaching, training and evaluation methods and techniques.

5- Fifth Standard: Educational Resources and Equipment

Learning resources and equipment must be sufficient to meet the needs of the program and its courses; and must be available to all beneficiaries using an appropriate arrangement. Teaching staff members and students must participate in identifying such resources based on their needs, and in assessing their effectiveness, as follows:

Educational Resources and Equipment Themes:

5-1: Teaching and Learning Equipment and physical facilities
5-2: E-learning and information technology resources.
5-3: Libraries.
5-4: Developing and improving educational resources.

5-5: Laboratories

Learning Resources and Equipment Standard Goals:

- Diversity of resources of knowledge to improve the student's scientific and professional level.
- Facilitating the learning process for students and making reliable the learning process.
- Developing of students and faculty members according to the field of specialization.
- Developing students skills by keeping pace with modern technology and modern teaching methods.
- Educating students and teaching staff about the importance of e-learning, distance learning, and digital systems within the educational process of the program.
- Providing a suitable environment for studying that keeps pace with the development of students and teachers in terms of classroom equipment, smart halls, libraries, laboratories, necessary equipment, and necessary devices within the program's field of specialization.
- Upgrading the equipment level and the high quality of the program.
- Providing model laboratories that keep pace with modern developments.
- Providing modern laboratory equipment inside the laboratories.
- Training students in using modern laboratory equipment.
- Training students to conduct medical and chemical tests and examinations in laboratory.

Learning Resources and Equipment Standard KPIs

No	5-Learning Resources and Equipment Standard KPIs
5-I	Teaching and Learning Equipment and physical facilities
5-1-1	The program implements clear policies and procedures that ensure the adequacy and appropriateness of learning resources and services provided to support student learning.
5-1-2	The program implements effective procedures for the management of resources and reference materials needed to support teaching and learning processes.
5-1-3	The program has laboratories, computer and technology equipment, and materials that are suitable to the specialty and sufficient to conduct research and scientific studies according to the program goals; appropriate mechanisms are to be applied to maintain and update them.
5-1-4	The teaching staff, students, and employee under the program have the

	appropriate orientation and technical training and support for the effective use of resources and means of learning.
5-1-5	The program has suitable classrooms and facilities for its needs.
5-1-6	All health and professional safety requirements are available in the facilities, equipment, and the educational and research activities.
5-1-7	Standards for safety, environment protection, and hazardous wastes are applied efficiently and effectively.
5-1-8	The program has a sufficient number of qualified technicians and specialists for the operation and preparation of laboratories.
5-1-9	The program has the appropriate resources, equipment, and services for students with special needs, employee, and faculty members.
5-1-10	The program evaluates the effectiveness and efficiency of learning resources, facilities, and equipment of all types; the results are used for development and improvement.
5-2	**E-Learning and Information Technology Resources**
5-2-1	The program has specialized e-learning resources and information technology: digital references, multimedia, software and appropriate databases.
5-2-2	Providing electronic systems that allow beneficiaries to access information, research materials and scientific journals from within or outside the institution.
5-2-3	The program has the appropriate technologies, services, and conditions for courses offered through distance or e-learning according to specific standards.
5-2-4	The program has a sufficient number of technicians and specialists in the field of information technology to train students.
5-2-5	The program has a specialized digital library.
5-2-6	The program has a synchronous and an asynchronous design for learning courses.
5-2-7	The program has a procedural guide for how to use the learning platform (learning management system) and deal with digital content.
5-3	**Libraries**
5-3-1	A specialized library should be available for each academic program or scientific department within the college.
5-3-2	The library has a sufficient number of various resources that are easily accessible and appropriate to the needs of the program and the number of students. It should be available in appropriate times for all students and should be updated periodically.
5-3-3	The library has a full staff specialized in library management, as well as

	another technical staff.
5-3-4	Arranging sufficient library space for students and suitable equipment for library activities.
5-3-5	Managing good lighting and ventilation in the library.
5-3-6	Providing the library with audio-visual aids and computers.
5-3-7	Supplying the library with Internet and information technology services.
5-3-8	Supplying the library with paper and digital records to determine its beneficiaries.
5-3-9	Supplying the library with educational resources for program courses.
5-4	**Developing and Improving Educational Resources**
5-4-1	The existence of a system for receiving complaints from students and teachers about the services provided for the purpose of improving them.
5-4-2	Implementing a self-evaluation process to ensure a continuous improvement of all learning resources and their services.
5-4-3	Students and faculty members participate in evaluating the services provided in the program.
5-4-4	Periodic maintenance of all learning resources according to advanced foundations.
5-5	**Laboratories**
5-5-1	Health and medical laboratories should be characterized by high quality in headship, management and commitment according to the specialization of each laboratory for each academic program.
5-5-2	Each laboratory must have a specialized staff: a specialized laboratory supervisor, holding a postgraduate certificate and has a academic title (professor, assistant professor, lecturer); and a specialized director (lecturer or assistant lecturer).
5-5-3	Each laboratory shall have a specialized technician within the laboratory staff.
5-5-4	The laboratory should contain protection systems and guiding signs for staff, students and faculty members.
5-5-5	The program provides an early warning system for each laboratory with a high quality of notice to the employees of any possible danger to the laboratory.
5-5-6	The program provides a ventilation system through air vacuums, cooling and heating for each laboratory.
5-5-7	The program provides a microscopic suction system (hood) for microscopic emptying and sterilization in medical laboratories (such as microbiology laboratories).
5-5-8	The program provides the autoclave system (sterilization and

	destruction system by pressure and temperature) for medical laboratories.
5-5-9	The program provides a firefighting system (firefighting) represented by the presence of fire extinguishers according to the specialization of each laboratory (CO2 extinguishers, powder extinguishers, foam or foam extinguishers).
5-5-10	The program provides warning signs: obligating each laboratory to provide warning signs with internationally and internationally agreed symbols indicating the type of danger and avoiding it.
5-5-11	The program provides directional signs; each laboratory is required to provide directional signs to the work site, i.e. identification signs for laboratories.
5-5-12	The laboratory should have of space sufficient for a number of no more than (25 students), and with a typical design according to the map of the laboratory, which is characterized by a typical three-room division (i.e. general laboratory room with a large area for the movement of students, their education and conducting their experiments and workers; and a room for the management of the laboratory; an inner room for preparing samples of laboratory experiments), and with emergency exits to avoid risks.
5-5-13	The laboratory must have all devices, equipment, laboratory medical models and specialized medical models, holding a unified coding system known for public and private universities and colleges with certain special codes according to the laboratory, as in (anatomy lab, general chemistry lab, blood lab, molecular biology lab, biology lab, medical microscopy, medical technology laboratory, medical tissue and physiology laboratory).
5-5-14	Providing medical materials for laboratory experiment and detergents for the purposes of the cleanliness and sterilization of the laboratory, laboratory containers, and first-aid boxes.
5-5-15	Each laboratory has the equipment for procedural methods (records and documents, an integrated work environment, preventive measures, internal audit procedures). These procedures are to be met by all laboratories, due to specialization.
5-5-16	The presence of specialized scientific supplies for each laboratory: smart board, smart screens, laboratory vest or work suit.
5-5-17	The presence of protective medical supplies for students and laboratory personnel, such as gloves, (protective) masks, goggles.
5-5-18	Providing calibration software for laboratory equipment.
5-5-19	Providing periodic maintenance programs and manifests.

5-5-20	The availability of plans to train laboratory workers and improve their capabilities through specialized training courses and workshops, for example (internal audit courses, ISO courses, courses in GLP by laboratory specialization, and other specialized courses by laboratory specialization).

6- Sixth Standard: Scientific Research.

The program must develop a strategy for scientific research in line with the vision, mission and goals of the programs of colleges and institutes of health and medical techniques. The scientific research process includes the discovery and continuous transmission of new information, through developing clear strategies to achieve the mission of scientific research and periodic evaluation of the effectiveness of these goals. The program must also offer the equipment, facilities, laboratories and research centers necessary to support scientific research activities, whether for faculty members or students. The institution must provide evidence of the annual evaluation of the achievements and developments of the research headship in the field of the scientific research program. It must also appreciate the research achievements of the faculty members through encouragement, rewards and promotion.

Scientific Research Themes:

6-1: Scientific Research Policy.
6-2: Scientific Research Environment.
6-3: Publication of Scientific Research and International Indexed Journals.
6-4: Scientific Research Services.
6-5: Developing Scientific Research.

Scientific Research Goals:

- Determining the requirements that serve scientific research.
- Raising the level of the academic program through scientific research.
- Employing scientific research outputs in community service.
- Developing the capabilities of faculty members in the field of scientific research.
- Keeping pace with scientific progress and publication to develop curricula through scientific research strategies.
- Reliability of scientific research and preservation of rights of researchers.
- The program of Colleges and Institutes of Health and Medical Techniques must achieve a high level in the field of scientific research.

Scientific Research Standard KPIs:

No	6- Scientific research Standard KPIs
6-I	**Scientific Research Policy.**
6-1-I	The program adopts a clear and open strategy in the department to follow up the researching plan.
6-1-2	The research plan is compatible with financial and human resources.
6-1-3	The program documents its research plan in the meetings of the department council.
6-1-4	The program builds a central database for scientific research.
6-1-5	Active participation of faculty members and students in the field of scientific research, and in supervising graduation projects of students.
6-1-6	The program encourages innovative research that opens new scientific and applied horizons.
6-1-7	The program provides an annual evaluation of the scientific research achievements within the college or institute and of the extent of benefit.
6-1-8	Full documentation of laboratories, devices, equipment, and activities of faculty staff and students.
6-1-9	The program provides a periodic evaluation of applied research and the extent to which it is used in community service.
6-2	**Scientific Research Environment**
6-2-I	The program provides a suitable environment for scientific research by encouraging faculty members to conduct researches that serve the community and labor market.
6-2-2	The program provides laboratories with sufficient space for the necessary equipment, devices, and techniques according to the program's specialization.
6-2-3	The program supports research centers that serve the requirements of faculty members and students.
6-2-4	The program offers motivational means for faculty members and students, and supports and nurtures them in the field of scientific research.
6-2-5	Encouraging research innovations, discoveries and patents.
6-2-6	Encouraging students to pursue scientific research by submitting scientific and applied graduation projects.
6-2-7	The program provides security systems to ensure health and safety of researchers and their activities
6-2-8	Provide periodic maintenance for laboratories, devices and equipment.
6-3	**Publication of Scientific Research and International Indexed**

	Journals
6-3-1	The program encourages researchers to publish research in international indexed journals.
6-3-2	Motivating researchers to do collaborative research with local and international researchers.
6-3-3	Research participation in international conferences, symposiums and workshops to develop the skills of faculty members and to be familiarize them with the latest developments in scientific research.
6-3-4	The program provides financial support for the publication of researches of faculty members and students in international indexed journals.
6-4	**Scientific Research Services**
6-4-1	The program gives priority to field researching that has scientific, material and economic profits to the researcher and the institution.
6-4-2	Creating a spirit of competition among researchers through applied scientific research competitions of reliable scientific quality.
6-4-3	Appreciating the achievements of faculty members and students for their distinguished researches through awards, rewards, and promotions.
6-4-4	The program achieves a cooperation agreement with corresponding institutions and other ministries such as the Ministry of Health to facilitate the procedures and application of scientific research.
6-4-5	The program offers the necessary support for researchers to solve important issues related to community service.
6-4-6	Offering development services to community and other institutions in the field of scientific research.
6-5	**Developing Scientific Research**
6-5-1	The program benefits from the results of scientific research in developing curricula.
6-5-2	The program annually provides training courses, seminars and workshops to develop the skills of faculty members and students in the field of scientific research.
6-5-3	The program provides consultations to public and private community institutions in the field of scientific research.
6-5-4	The program sets a future improvement and development plan in crisis management and in emergencies in the field of scientific research.
6-5-5	Faculty members are encouraged to include part of their research in their courses, in addition to important developments in their field of specialization.
6-5-6	The program attempts to achieve twinning with authentic international

	colleges and universities in the field of scientific research.

7- Seventh Standard: Community Service.

The program must have substantial and appropriate contributions to community service, by directing the experiences and skills of some faculty members and students with their initiatives to meet the needs of the community, in addition to the programs organized by the college or program management officials. These activities must be documented and announced in the college and in the community. The program's contributions to community service should include activities and services that help individuals, organizations or local communities. These participations in research and development projects and community education programs are achieved through the following:

Community Service Themes:

7-1: Program Policy on Relations with the Community.
7-2: The Program's Interaction with the Community.
7-3: Social Responsibility.
7-4: Services.

The community Service Standard Goals:

• Consolidating the program's relationship with the community.
• Spreading health awareness and contributing with civil society organizations to deal with social diseases such as drugs and smoking.
• The interconnection between the program and the humanitarian services for the community according to the curriculum items.
• Increasing financial resources, training students, and promoting community service at the lowest cost.
• Increasing students skills through providing services to the community.
• Contribution to solving community problems by the program.
• The program's contribution to the economic development of the community.

Community Service Standard KPIs:

No	7- Community Service Standard KPIs
7-1	Program Policy on Relations with the Community
7-1-1	The program's commitment to community service must be clearly defined and consistent with the college policy and the expertise and skills of its faculty members and students.
7-1-2	Submitting periodic reports on the ongoing community service activities.

7-1-3	The program defines the services it is committed to provide to the community in a manner that takes into account the needs of the community and reflects the skills of the faculty members in the program.
7-1-4	The program submits annual reports on the services it provides to the community.
7-1-5	The program coordinates with the concerned units and departments in the college regarding community service initiatives.
7-1-6	The criteria for promoting faculty staff and evaluating their performance include the services they provide to the community.
7-2	**The program's Interaction with the Community**
7-2-1	The program encourages faculty members and personnel to participate in seminars in which important issues in society are discussed and its development plans are reviewed.
7-2-2	The program establishes relationships with the locals and employers to help provide community service programs. This may achieve part of identifying issues that need to be analyzed through student projects, partial employment of students, or student registration in expertise programs.
7-2-3	The program invites employers and professionals associated with the program to join the appropriate advisory committees in the program.
7-2-4	The programs serves other programs that are held in the institution in order to serve the community (financial or moral support), through certain committees, such as (community service committee) to facilitate the mission of the program.
7-3	**Social Responsibility**
7-3-1	The academic program for Colleges of Health and Medical Techniques in all its specializations must adhere to the principle of social responsibility in carrying out all its tasks, education, services and research.
7-4	**Services**
7-4-1	The program has continuous bonds with schools and other institutions that need services (such as health, environment, schools, nursing homes or community organizations), assistance and support in fields of specialization, and provide information and health activities.
7-4-2	The program maintains communication with the graduates, informs them of the developments of the program, invites them to participate in its activities, and encourages them to provide all forms of support for the development process.

7-4-3	The program takes advantage of the opportunities available to ask for support from individuals or community organizations for the purposes of scientific research and development.
7-4-4	Maintaining a central database that includes records of community services carried out by the program's affiliates and units.
7-4-5	The program draws up a backup plan in terms of the services it provides to the community, for example (to treat addictions of drugs, smoking, etc.).
7-4-6	Cooperating with the Ministry of Health and the Ministry of Education in campaigns for early detection of diseases and other social diseases.

8- Eighth Standard: Program Management.

The program must have an effective leadership that accomplishes systems, policies, plans, implementation, monitoring and activation of accreditation systems that achieve continuous development of performance within the framework of integrity, transparency, justice and a permanent organizational environment for work. The management of the program includes financial, material and technical resources as the main supporters of the program in achieving its activities and consolidating efforts to develop its tasks. It is the main pillar and the incubating environment for all activities and tasks through which the program explores teaching, learning, scientific research and community service. Also, both financial and material resources need continuous inspection and permanent follow-up to ensure their availability, adequacy and suitability to achieve the program's mission, goals and objectives.

Program Management Themes:

8-1: Program Management, Leadership and Governance.
8-2: Program Planning.
8-3: Program Financial and Material Resources
8-4: Program Capacity Building and Development
8-5: Students and Faculty Staff Representation
8-6: Program Evaluation and Feedback.
8-7: Censorship.

Program Management Goals:

- Identifying the requirements that serve program management and governance.
- Investing experiences in the program to serve community.

- Developing the skills and proficiencies of faculty members and personnel.
- Attaining advanced ranks in the field of scientific research and education.
- Employing resources to develop the program in all areas and achieve financial returns.
- Achieving integrity at work and facilitating the employees' task to complete their work.
- Preserving the rights of faculty members and personnel.
- Enhancing the student's confidence in his educational institution.
- Achieving health, safety and accreditation requirements in the program.
- Addressing problems that affect the accreditation of the program and the product (the student).
- Preserving public money.

Program Management Standard KPIs:

No	8- Program Management Standard KPIs
8-I	Program Management and Leadership
8-1-1	There is a description of the leadership and decision-making model of the program, the organization of its committees, including: membership, responsibilities, and administration hierarchy with a description of the rights of each.
8-1-2	Developing a policy to ensure administrative support for personnel with an appropriate budget for all administrative activities of the program, and reviewing this policy periodically.
8-1-3	The administration of the program is managed by specialized councils (department council, college council) with specific tasks and rights.
8-1-4	There is a guide to policies, rights, regulations, electronic systems, laws, instructions, and related documents, all of which are to be available to program employees. Review and update are to be achieved periodically.
8-1-5	The program administration has the appropriate academic and administrative experience to achieve its mission and goals.
8-1-6	The program contains an integrated and a detailed database with statistics, and a sufficient number of administrative, academic, and technical personnel qualified to carry out administrative, professional and technical tasks, with specific tasks and rights.
8-1-7	The program administration works on an organizational and a supportive academic environment, and documents the decisions issued by the committees concerned with procedural and academic issues.
8-1-8	Providing the appropriate mechanisms for integration and effective

	participation between the different branches of the same programme.
8-1-9	The program is committed to applying educational and research controls to ensure the quality of all its aspects, including courses, educational materials, teaching mechanism, student achievement standards and services provided.
8-1-10	The program sets an appropriate plan to manage risks or emergency crises, and updates it periodically.
8-1-11	The program administration evaluates the effectiveness of educational and research partnerships, and takes appropriate decisions regarding them.
8-1-12	The program administration follows up its commitment to implement its role in the scientific research plan in light of the specified indicators.
8-1-13	The program administration follows up its commitment to implement its role in the community service plan in light of the specified indicators.
8-1-14	The presence of a sufficient amount of flexibility and rights that allow the program leaders to carry out the necessary development and change, in response to developments and the periodic evaluation process of the program and its academic courses.
8-1-15	The program administration applies performance evaluation mechanisms that guarantee integrity, justice and equality in all its academic and administrative activities.
8-1-16	Job codes of conduct are to be available.
8-1-17	Following up the implementation of the approved ministerial/university systems and procedures for program management, including grievances, complaints, and the various issues of the program.
8-1-18	The program administration implements effective systems for accreditation and its management.
8-2	**Program Planning**
8-2-1	The program sets strategic plans characterized by the development and appropriate sequencing of each work in the program in a complete and realistic manner that includes the internal and external environment factors which affect the demand and skills of graduates.
8-2-2	The planning process allows the beneficiaries to participate (employers, faculty and students) in order to exchange opinions at appropriate levels.
8-2-3	Planning processes include risk management plans as they are an essential component of the program, with the selection of appropriate mechanisms to evaluate them and reduce their effects.

8-2-4	The implementation of all plans, the extent to which their short- and medium-term goals, and the percentage of completion are to be achieved and the evaluation of results are to be monitored, too.
8-2-5	Submitting periodic reports on key performance indicators, and measuring the progress of the program's senior leadership.
8-2-6	Reviewing plans, responding to developments in implementation, and evaluating the program results.
8-3	**Program Financial and Material Resources**
8-3-1	There is a declared, certificated, and periodically reviewed financial system for the program regarding resources, expenditures, grants and incentives.
8-3-2	All financial authorities are certificated with regard to financial expenditure due to the program's organizational hierarchy.
8-3-3	Developing a declared and certificated financial budget for the program improvement plan.
8-3-4	Annual financial audits are carried out by independent government agencies.
8-3-5	The program provides a database of material resources and their needs.
8-3-6	The program provides the appropriate infrastructure and environment that has good periodic maintenance, all of which are registered by special records for an inventory of public properties.
8-3-7	The quality standards of infrastructure and its furnishing: (classrooms, laboratories, rooms of faculty members and personnel, and modern equipment and equipment necessary for the program) are to be applied.
8-3-8	The program offers safety and public health procedures.
8-3-9	The program offers technical resources: (smart halls, smart laboratories, computers, advanced technologies) that are sufficient in terms of number, quality and sustainability.
8-3-10	The program offers technical support in terms of communication and information technologies.
8-4	**Program Capacity Building and Development**
8-4-1	The program forms specialized committees to build, train and develop administrative personnel (faculty members, professional experts in the program's specialization, employees with outstanding administrative competence) in order to contribute to development and to improve performance while setting development plans.
8-4-2	Holding quality assurance training courses, workshops and seminars for the program's employees on a regular basis to develop their skills and performance.

8-4-3	The program offers the appropriate electronic systems and services to meet the basic needs of capacity development.
8-4-4	Developing appropriate plans to attract experts and specialized workers in the program to benefit from their expertise in development and capacity building.
8-4-5	The availability of documented and previously announced regulations for contracting with external parties concerned with training and developing capabilities as needed.
8-4-6	The program administration is committed to: activating the values of scientific integrity, protecting intellectual property rights, rules of ethical practices and job behavior in all fields and academic, administrative, research and service activities.
8-4-7	Providing a system for receiving and dealing with the program's administrative, academic and service suggestions and complaints of the personnel.
8-5	**Students and Faculty Staff Representation**
8-5-1	Establishing a general policy and particular procedures for the participation of faculty members, personnel, students, and employers in the main aspects of the program management, quality assessment and academic activities.
8-5-2	Determining the mechanisms for organizing the participation of faculty members and students in the management of the program, as necessary.
8-5-3	The attendance of students and the representatives of teachers and technicians in the meetings of the councils to benefit from their views on the issues that concern them.
8-5-4	The program administration encourages the initiatives and development proposals from the beneficiaries.
8-6	**Program Evaluation and Feedback**
8-6-1	The program applies an internal system for quality assurance and self-evaluation for all its academic, administrative and educational aspects, scientific and service activities, and documents the results of feedback.
8-6-2	Comparing the performance of the program with the corresponding reliable local and international programs.
8-6-3	Attracting specialized employers and external parties to evaluate the performance of the program, and to achieve integrity and transparency of work.
8-6-4	Conducting self-assessment to know the extent of the progress of administrative and leadership capabilities, identifying their achievements during the evaluation year, and benefiting from their results in the

	feedback, while documenting the development of appropriate solutions to their weaknesses.
8-6-5	Benefiting from documenting the results of the program's feedback in identifying weaknesses and working to improve them.
8-6-6	Conducting periodic evaluation of curricula and courses.
8-6-7	Developing an improvement plan to develop the self-assessment and program feedback.
8-7	**Censorship**
8-7-1	Forming of supervision ministerial committees to monitor the implementation of the program administration, its rights, and its progress.
8-7-2	Forming supervision committees to audit material resources, public property and equipment.
8-7-3	Forming supervision committees to audit the provision of buildings, laboratories, medical clinics (dental protection techniques/dental industry), research centers, laboratory equipment, and general equipment.
8-7-4	Forming supervision committees to audit financial management, grants, incentives, objects of expenditure, and objects of sources of financing.
8-7-5	Forming supervision committees to inspect and check the program's biological and chemical health and safety systems.
8-7-6	Forming supervision committees to check the protection systems for the safety of workers in the program.
8-7-7	Forming supervision committees to inspect and check health systems, especially student clubs, their services, and sports halls.
8-7-8	Forming supervision committees to review quality assurance and self-assessment.

9- Ninth Standard: Quality Management and Improvement.

Program quality assurance management is the method which ensures that all activities necessary to improve, develop and apply program quality to achieve its purpose, objectives and mission are in a highly efficient and effective manner. In addition, quality management is one of the basic and dominant management concepts. As for the quality management application of the program, it has positive consequences on the performance of the program it applies by increasing productivity, improving job performance and encouraging a high level of competition between educational institutions in attracting students and those with external interests (e.g. employers, employment, quality assessors and similar entities) in order to reach the best features and ratings in teaching, learning,

scientific research and curricular sobriety, and identifying and addressing weaknesses. In addition, getting a better quality of learning results in graduates who are able to better exercise their role in community service.

Quality Management and Improvement Themes :

9-1: Quality Assurance Management.
9-2: Quality Improving.

Quality Management and Improvement Goals:

- Evaluating the quality of the program and those responsible for it.
- Studying the strengths and weaknesses in the quality of the program.
- Developing and improving the program.
- Conducting feedback to improve the program.
- Achieving reliability of the educational process and giving an opportunity for the faculty member to develop his abilities.
- Keeping pace with modern technology according to specialization and developing serious patterns in tests and skills that serve the labor market.
- Employing activities that serve the program with high quality.

Quality Management and Improvement Standard KPIs

No	9- Quality Management and Improvement Standard KPIs
9-I	Quality Assurance Management
9-1-I	A quality assurance unit, with an integrated system and rights, is to be available in the college/institute to manage the program and implement an effective quality assurance system compatible with the program and the institutional system.
9-1-2	Taking into account the objective of the quality system management and stating its role in the programs of colleges and institutes of health and medical techniques in terms of planning and implementation.
9-1-3	Faculty members, expert administrative staff, students, and employers participate in the planning and decision-making processes.
9-1-4	The program documents and record all its data and procedures according to main performance indicators to regularly evaluate the performance of the program and ensure development and improvement.
9-1-5	The program annually analyzes evaluation data (e.g., performance indicators and measurement data, faculty members, student progress, program completion rates, student evaluations of the program, curricula and services, alumni and employer opinions). This is to be used in planning, development, and decision-making processes.

9-1-6	The program offers self-assessment system.
9-1-7	Annual plans are available based on the regular program's self-assessment results to determine strengths and weaknesses due to those results.
9-2	**Quality Improving**
9-2-1	The program conducts a comprehensive periodic assessment and prepares reports on the general level of quality with the identification of strengths and weaknesses.
9-2-2	The program sets improvement plans and monitors their implementation.
9-2-3	Offering training courses, seminars and workshops for faculty members and administrative staff to develop and improve their capabilities in the quality system.
9-2-4	Improved performance and outstanding achievements are to be appreciated.
9-2-5	Validation of inferences based on interpretations of evidence related to quality by resort to independent consultation.
9-2-6	Financial and spiritual support is available to conduct evaluation studies.
9-2-7	Developing particular plans to improve the management of appropriate program for the specialization in all its aspects, with appropriate and certificated regulations for implementation and specifying the duration of completion.
9-2-8	Developing particular plans to improve financial and material management and follow up their implementation.
9-2-9	Developing particular plans to improve management of emergency crises with a declared and certificated budget.
9-2-10	Developing particular plans to improve quality assurance and self-assessment.
9-2-11	Developing particular plans to improve and develop capabilities and leaders, with periodic updating of the plan.
9-2-12	Developing particular plans to improve planning processes and monitor their implementation and progress.
9-2-13	Developing particular plans to improve governance and administrative electronic systems, e-learning systems, distance learning, and follow up their implementation and percentage of completion.
9-2-14	Developing particular plans to improve health and safety systems and protect workers in the program.
9-2-15	Develop plans to improve maintenance and provide the necessary

	electrical equipment and laboratory equipment.

10- Tenth Standard: Learning Outcomes

Student learning outcomes must be precisely defined, and consistent with the requirements of national standards in all health and medical technology programs. In professional programs, learning outcomes must conform to job descriptions or what is required to practice a profession according to modern technology. Learning outcomes are determined in coordination with the opinions of specialized academic experts and employers in government and private hospitals who are relevant to the program.

The Main Learning Outcomes Themes :

10-1: Teaching Methods, Learning and assessment of the program General outcomes
10-2: Professional and Qualifying Skills for Students' Development.
10-3: Learning Outcomes of the Medical Health Technical Diploma.
10-4: Learning Outcomes of the Medical Health Technical Bachelor.
10-5: Evaluating Learning Outcomes.

Learning Outcomes of the Program Goals:

- Teaching and training student on patients medical documentation
- Teaching and training students on communication skills with patients.
- Teaching and training students on how to conduct medical examinations according to specialization.
- Using the self-learning method within small groups of students under the supervision of a competent instructor.
- Using modern technology and introducing it into medical technical training according to specialization.
- Teaching students to conduct field research according to specialization through statistically-recorded health problems.
- Teaching students the health and medical system in hospitals and health centers.

Learning Outcomes Standard KPIs

No	10- Learning Outcomes Standard KPIs
10-1	Teaching Methods, Learning and assessment of the program General Outcomes
10-1-1	Colleges and institutes of health and medical techniques must determine practical skills for students according to curriculum and show them upon graduation.

10-1-2	Linking the skills obtained by the graduate from the health and medical technical program with the requirements of the patient's condition.
10-1-3	Using questionnaires to get the opinions of employers on the efficiency of graduates as a feedback for the development of the program.
10-1-4	Proficiency in health and medical technologies includes: knowledge and understanding of the foundations of health and medical sciences, professional conduct and medical ethics related to the patient and staff, and skills related to specializations seen in: (the establishment of diagnoses in medical laboratory techniques, anesthesia techniques, physical therapy techniques, community health techniques, healthy nutrition techniques, radiology techniques, pharmacy techniques, dental protection techniques, dental industry techniques, special needs care techniques, prosthetic limbs and braces techniques and optics techniques). Health, rehabilitation, thinking and solving health problems are to reinforced.
10-1-5	Urging students to learn throughout learning stages and communicate throughout their career.
10-1-6	Practical application in laboratories, especially during the students summer application period in educational hospitals and health centers.
10-1-7	Directing faculty members in their teaching methods to show scientific films, movies, and videos to students according to specialization, and to apply this to dolls and training manikins or train in hospitals and health centers under the supervision of specialists according to the cooperation mechanism.
10-1-8	Writing reports and discussing them within the field of specialization.
10-2	**Professional and Qualifying Skills for Students' Development**
10-2-1	Training students on the skills of collecting samples from patients.
10-2-2	Training students on the skills of using modern laboratory equipment.
10-2-3	Training students on the skills of dealing with emergency situations in the laboratory.
10-2-4	Training students on the skills of computer applications and necessary devices for work.
10-2-5	Training students on the skills of dealing with patients and the ethics of professional conduct.
10-2-6	Training students on the skills of dealing with community issues and reducing some dangers (such as smoking, drugs, and emergency epidemics)
10-2-7	Organizing workshops to train specialized faculty members to keep

	pace with scientific developments and use modern equipment.
10-3	**Learning Outcomes of the Medical Health Technical Diploma**
10-3-1	Learning outcomes for studying the health and medical technical diploma for technical institutes are concerned with qualifying graduates in the following disciplines (medical laboratory techniques, pharmacy techniques, community health techniques, dental industry techniques, dental protection techniques, special-needs care techniques, healthy nutrition techniques, prosthetic techniques, prosthetics and orthotics techniques, visual examination techniques, rehabilitation techniques and physical therapy, radiology techniques, anesthesia techniques). They depend on the application of the common curriculum theoretically and practically, including the application period in educational hospitals and health care centers in a period of time (equivalent to 64 weeks). This considered a prerequisite for success and passing the academic stage.
10-3-2	The student will be able to apply modern health and medical knowledge and skills in health and medical technologies.
10-3-3	The student shall be able to conduct medical tests in medical laboratories and analyze and interpret their results.
10-3-4	The student shall be able to identify, solve and delimit health and medical problems.
10-3-5	The student shall be able to work in the team spirit in health centers, hospitals, or laboratories of colleges and institutes.
10-3-6	The student shall be able to safely use the technical means and equipment of modern medical devices.
10-3-7	The student is able to engage in ongoing self-directed professional development.
10-3-8	The student shall be able to understand and commit to addressing health, medical and ethical faults.
10-3-9	The student shall be committed to knowing the concepts of quality and seeking continuous improvement and development during study or work.
10-4	**Learning Outcomes of the Medical Health Technical Bachelor &institute**
10-4-1	Learning outcomes of the Bachelor degree in health and medical technology for technical colleges& institutes are concerned with qualifying graduates in the following disciplines: (medical laboratory techniques, anesthesia techniques, physical therapy techniques,

	community health techniques, therapeutic nutrition techniques, radiology techniques, dental industry techniques, optics techniques). It is implemented within a maximum period of four years (i.e. equivalent to 128 weeks) and depends on meeting the requirements of the common curriculum in theory and practice, including the application period in teaching hospitals and health care centers.
10-4-2	The student will be able to use modern equipment in practical skills in health and medical disciplines.
10-4-3	The student shall be able to conduct examinations, tests, and other specialized skills and deliver results and offer interpretations.
10-4-4	The student will be able to work efficiently.
10-4-5	The student shall be able to participate in self-directed professional development.
10-4-6	The student shall be able to work on understanding and addressing professional and ethical faults, and shall be training with the help of work mentors and supervisors.
10-4-7	The student shall adhere to the concepts of quality and seeks constant improvement.
10-4-8	The student shall be able to communicate with patients and deal according to the rules of professional ethics.
10-4-9	The student shall be able to understand medical instructions in professional conduct, public health ethics and human values before and during their participation in patient care activities.
10-4-10	The student shall be able to cooperate with the interfering specialties in treating the patient during the training period when performing the required skill.
10-5	**Evaluating Learning Outcomes**
10-5-1	To evaluate learning outcomes for health and medical technologies, colleges and institutes of health and medical techniques use a variety of evaluation outcome data, including exam results.
10-5-2	Assessment is conducted to demonstrate the extent to which students have achieved the objectives of the program of health and medical technical education and to enhance the quality of the program.