

**Accreditation & Quality Assurance Commission for Higher
Education Institutions**

**Guide for Quality Assurance Criteria for the
Information Technology Program**

2021

Preface

This Guide for quality assurance criteria and procedures for the Information Technology program presents guidelines for the Jordanian Information Technology faculties which apply for the Quality Assurance Certificate issued by the Jordanian Accreditation & Quality Assurance Commission for Higher Education Institutions. This Guide encompasses the approved set of quality assurance criteria for the Information Technology program and the guidelines issued by the Commission in this respect. This will help the Jordanian Information Technology faculties conduct the self-evaluation study, which is an important part of the procedures for obtaining the Jordanian Quality Assurance Certificate.

In addition, Jordanian Information Technology faculties can get further information about quality assurance by participating in workshops that are periodically conducted by the Commission for those in charge of the self-evaluation study, or through communicating with the Commission's Quality Assurance Directorate.

It is our hope that those in charge of the self-evaluation study at the Jordanian Information Technology faculties will provide the Commission with their comments and suggestions on the content of this Guide to enable the Commission to modify and update it in future editions.



His Majesty King Abdullah II Bin Al Hussein



His Royal Highness Prince Hussein Bin Abdullah II

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1. Criterion One: Strategic Planning

Strategic planning is the process through which future objectives are identified, policies and strategies are laid down and means and methods appropriate for achieving these objectives are specified. It also includes studying the opportunities and the organizational challenges and developing strategic responses to them.

1-1. Sub-criterion One: The Faculty's Vision, Mission and Objectives

1.1.1 Elements of Sub-criterion One:

1. Vision
2. Mission
3. Objectives
4. Values

1-1-2 Indicators of Sub-criterion One:

1. The Faculty's vision and mission shall state the scientific and teaching goals and values that are conducive to qualifying graduates with high scientific and training proficiency, and shall include learning and teaching, scientific research and partnership with the local community.
2. A large group of concerned people, such as the Faculty's Dean, department chairpersons, faculty members, department and student councils and representatives of the local community, Information and Communications Technology companies as well as other concerned institutions shall participate in formulating the Faculty's vision, mission, aims and values.
3. The Faculty's goals and values shall be compatible with its vision and mission, and shall be based on its human, physical and financial resources.
4. The Faculty's vision, mission and objectives shall be clear, declared and well-known to all concerned.
5. The Faculty shall document the procedures for the preparation and review of its vision, mission, objectives and values.
6. The Faculty's mission shall be consistent with the educational institution's mission.
7. The mission shall identify the direction of the development of the Faculty's programs in harmony with its nature and its students' labour market needs.
8. The mission shall be periodically reviewed and confirmed or amended as needed. Any changes made to it shall be declared.

1-1-3 Evidence and Documents Required for Sub-criterion One:

- √ Minutes of meetings, decisions, recommendations and surveys related to the formulation of the faculty's vision, mission, objectives and values;
- √ The committees, forms and mechanisms followed in preparing the Faculty's vision, mission, objectives and values;
- √ The vision, mission and objectives shall be coherent and cohesive
- √ Workshops, training courses and seminars;
- √ Publicizing the Faculty's vision and mission through all means available;
- √ Meetings, surveys and tools followed for the purpose of review and evaluation, including:
 - Documents on the follow- up of enrolled students
 - Documents on following up graduates and their employment circumstances,
 - Documents showing the level of satisfaction of the Faculty's students, graduates and staff,
 - Documents showing the level of employer satisfaction with the graduates

1-2 Sub-criterion Two: The Strategic Plan

1-2-1 Elements of Sub-criterion Two

1. Analysis of the internal and external environment
2. Domains of the strategic plan
3. Strategic goals
4. Implementation plan (plan of action)
5. Risk management plan
6. Performance indicators
7. Benchmarking

1-2-2 Indicators of Sub-criterion Two

1. Planning shall be strategic and shall include development priorities and an appropriate sequence for each action that must be done in order to get the best results, both short term and long term.
2. The plans shall take into consideration, in a full and realistic manner, internal and external factors that influence the demand for graduates and the skills they need.
3. The planning processes shall allow for the participation of major and directly concerned stakeholders, including teaching staff members, students and employers as well as other parties, and allow exchanging views with them at appropriate levels.
4. The planning process shall focus on the students' intended leaving outcomes, syllabus content, and learning and evaluation strategies that reflect both students' background and the theories and research about different methods of learning and on getting more information about program review and planning for new programs.
5. The major stakeholders shall be well informed of the program's plans. The effects of these plans and what they require of all parties concerned with the program shall be explained.
6. The implementation of plans shall be monitored; the level of achievement of both short and medium term objectives shall also be monitored and the results evaluated.
7. The planning process shall include regular preparation of reports about key performance indicators. These reports shall be submitted to the higher management of the institution.
8. Plans shall be reviewed, developed and amended; corrective decisions shall be taken as needed in response to developments that take place at the time of implementation and in response to the results of constructive evaluation or changing circumstances
9. Risk assessment and management processes shall constitute a major component of the planning strategies, and appropriate mechanisms shall be put in place to assess risks and alleviate their effects when they materialize.

1-2-3 Evidence and Documents Required for Sub-criterion Two:

- √ Mechanism for identifying the elements of the internal and external environment
- √ Evidence of staff participation in the preparation of the implementation plan

- √ Minutes of meetings, mechanisms and means related to the follow up of the strategic plan

2- Criterion Two: Governance

Governance comprises the methods and mechanisms used for identifying and implementing objectives, and for managing the Faculty as regards academic programs, financial affairs, faculty members and administrative staff affairs. These methods and mechanisms aim at maintaining the desired balance within the Faculty through modern management, transparency, accountability and participation.

2-1 Sub-criterion One: Legislations

2-1-1 Elements of Sub-criterion One

1. Policies
2. By-laws
3. Regulations
4. Principles, procedures and criteria

2-1-2 Indicators of Sub-criterion One:

1. Issuing the by-laws provided by laws
2. Issuing the regulations provided by -laws
3. There shall be declared policies on the Faculty's work areas.
4. Compatibility of principles, procedures and criteria with the by-laws and regulations.
5. Policy guides, regulations and related documents shall be kept within easy access and readily available for all faculty members, other staff and students to whom these guides are important, including members of the various committees.
6. Decisions issued by committees about procedural and academic matters shall be documented and used as a reference to be consulted when future decisions are made to ensure consistency.
7. By-laws and guidelines on frequent procedural and academic issues shall be developed.
8. All polices, regulations, and the scope of powers and responsibilities relevant to the Faculty's management shall be reviewed and amended as required in light of changing circumstances

2-1-3 Evidence of Sub-criterion One:

- √ Legislation manuals
- √ Files and minutes of meetings on the implementation and development of legislation / laws
- √ Evidence of publication of the Faculty's laws.
- √ Documents specifying the policies, authorities, roles, responsibilities and implementation procedures for the Faculty's key committees and the administrative posts.
- √ Minutes of meetings, decisions, recommendations and surveys of program management at the Faculty
- √ Results of surveys of the views of faculty members and other staff regarding procedures followed at the Faculty.
- √ Information provided through websites, advertisements and publications

2-2 Sub-criterion Two: Leadership and Academic Management

2-2-1 Elements of Sub-criterion Two

1. Organizational structure
2. Governance Council
3. Tasks and responsibilities
4. Job description
5. Performance evaluation and accountability

2-2-2 Indicators of Sub-criterion Two

1. The Faculty's Dean shall be dedicated to the academic and administrative work on a full-time basis.
2. The Faculty shall provide a department chairperson in the field of specialization with a minimum of two years' teaching experience. A special office shall be provided for the chairperson with a full-time secretary for the department business.
3. The responsibilities of those in charge of the Faculty's management shall be clearly identified in the Faculty's job descriptions.
4. There shall be an adequate degree of flexibility at the level of the department or the Faculty offering the program. This degree of flexibility shall allow for the timely response to evaluating courses, programs, and changes in the requirements of the learning outcomes.

5. The Faculty's management shall anticipate issues and their chances occurrence, and shall take appropriate initiatives to cope with them.
6. The Faculty's management shall ensure completion of the required procedures within its responsibility effectively and in time.
7. Those in charge of the Faculty shall be given adequate authority to ensure compliance with the policies and procedures approved or agreed at the educational institution or at the Faculty.
8. Those in charge of the Faculty shall encourage initiatives from faculty members and other staff.
9. Those in charge of the Faculty's management shall shoulder the responsibility for the high quality and effectiveness of activities, and tasks falling within their responsibilities, whether implemented by them or by others reporting to them.
10. The department chairperson shall submit annual reports about the performance of the faculty members and administrative staff.
11. The administrative performance and administrative policies shall be reviewed periodically and appropriate amendments shall be made to ensure achievement of the Faculty's vision, mission and objectives in an effective and efficient manner.
12. Delegating authority within the faculty shall be officially specified through signed documents, and shall clearly show the limits of the delegated responsibilities, and the responsibility for submission of reports on the decisions taken.
13. Proposals for the Faculty's development and recommendations regarding the issues and policies related to it shall be submitted to those concerned with decision making in a manner that clearly specifies those issues which require taking action and making decisions, and the consequences of not doing so

2-2-3 Evidence and Documents Required for Sub-criterion Two

- √ The organizational structure of the Faculty
- Evidence of the University administration's commitment
- Minutes of meetings of governance boards
- Job description files (tasks, responsibilities and authorities of the departments and their chairpersons and staff)
- Performance and Accountability files (records of actual cases at the Faculty).

2-3 Sub-criterion Three: Integrity

2-3-1 Elements of Sub-criterion Three

1. Transparency
2. Fairness
3. Incentives and disciplinary penalties.

2-3-2 Indicators of Sub-criterion Three

1. The faculty teaching staff members, other staff and students should commit themselves to the rules of moral practices and conduct when doing and publishing research, in the field of education and evaluation, in performance evaluation, when committees take decisions and when carrying out administrative and service activities.
2. Disclosure of financial interests, wherever they exist, should be made and any conflict of interests in all dealings of teaching staff members and other staff belonging to the programs should be avoided.
3. Advertisements used in promoting the faculty should reflect a factual image, should avoid using expressions that may be misunderstood or any exaggerated claims and should avoid any unfavourable statements about other educational institutions or programs.
4. Terms of reference should be laid down showing the roles, responsibilities and the executive procedures related to the faculty's major committees and administrative jobs.
5. The faculty's procedures and decisions should not be subject to external dictations without heeding to the regulations and legislations in force at the faculty.

2-3-3 Evidence and Documents Required for Sub-criterion Three

- √ Files of appointment, promotion and termination of services of administrative and technical staff
- √ Proofs of follow-up on the cases of grievance
- √ Sabbatical leave files
- √ Files on scholarships and training courses

3. Criterion Three: Academic Programs

This criterion encompasses determining the requirements for launching academic programs together with their procedures with a view to graduating students who are competent in the required field of knowledge, and maintaining the high quality of these academic programs, and evaluating them continuously for improvement and development, bearing in mind amending procedures, plans, resources and components in response to changing circumstances and the needs of the community and its institutions.

3-1 Sub-criterion One: Teaching and learning policies

3.1.1. Elements of Sub-criterion One

1. Introduction and development of academic programs
2. Admission, equivalence of courses, and transfer policies
3. Teaching and learning methods
4. Number of students

3.1.2. Indicators of Sub-criterion One

1. Policies on introducing, developing, and terminating academic programs through a study plan committee authorized to design curricula and study plans compatible with the Faculty's vision, mission, objectives and values
2. Admission and graduation policies and procedures
3. Policies and procedures on transfer of students and equivalence of courses
4. Continuous improvement of learning and teaching methods
5. Integrated relationship between faculty members, and staff working at the library and databases
6. The role of councils and their responsibility for implementing and following up teaching and learning policies.
7. Publishing intended learning outcomes of all the academic programs offered

8. Taking into account the Faculty's student capacity when determining the number of students it intends to accept: The ratio of students to faculty members shall not exceed (25:1) for the Bachelor's degree and (15-1) for the Higher Diploma, Master's and Doctoral degrees. The number of students registered in all graduate programs shall be commensurate with the number, and ranks of faculty members, taking into consideration international standards.

3-1-3 Evidence and documents required for sub-criterion One

- √ Procedures and evidence used for initiating, developing, and terminating academic programs
- √ A guidance plan that provides students with the necessary information when needed
- √ Forms and files of student admission, graduation, transfer, and equivalence of courses.
- √ Studies and surveys on program effectiveness
- √ Minutes of meetings of committees and councils
- √ Correlation matrix of goals and learning outcomes
- √ Evidence of Disseminating learning outcomes

3-2 Sub-criterion Two: Study plans

3-2-1 Elements of Sub-criterion Two:

The study plans include two key elements:

- A Bachelor's program
- A Graduate program

3-2-2 Indicators of Sub- criterion Two

3-2-2-1 Indicators in respect of the Bachelor's Program:

1. The faculty shall prepare the study plan of the Bachelor program so that it provides students with basic knowledge, skills and competence required for Information Technology specializations, in addition to providing them with new horizons of general knowledge and excellent skills in programming. The minimum number of credit hours required for getting a Bachelor's degree in Information Technology shall be (132) credit hours covering all university and faculty requirements as well as the compulsory and elective requirements of the specialization.
2. There shall be an uninterrupted eight-week practical training period students must spend at an institute related to the specialization (of information technology) after successful completion of (90) credit hours. Training shall be documented in the field-training record, and there shall be actual follow-up of students during the training period, and evaluation of training outcomes and their effect on realizing the program's aims.
3. Three credit hours shall be allocated for the graduation project distributed over two consecutive semesters (1 + 2). Students shall register these three hours after completion of a minimum of (90) credit hours.
4. The program shall be designed in a manner that ensures clear and practical consistency between the theoretical and practical subjects in accordance with national and global standards. The practical applications of theoretical subjects shall reflect all knowledge fields of the specialization.
5. The subjects included in the study plan shall constitute the basic knowledge, skills and competencies of the fields of knowledge that constitute the major themes of the specialization.
6. The Faculty's programs' study plans must take into consideration keeping pace with developments in Information Technology and scientific technologies in addition to the needs of society for introducing the concept of scientific knowledge and other modern concepts, and tools and their application. Modern methods of teaching must also be available.
7. The study plans shall include a significant number of academic domains of Information Technology specializations that have specific outcomes, in addition to requirements for competencies related to written and verbal communication skills, quantitative mental processing, critical analysis, logical thinking and the skills of research and production of knowledge in

- such a way that leads to qualifying a graduate who is well versed in the discipline to perform his/her role in an effective manner.
8. The subjects included in the study plan shall provide students with skills of teamwork; exchange of advice; leadership, management and supervision; shouldering responsibility; decision making and bearing pressure. These objectives shall be made clear in the study plan.
 9. The level and nature of the graduate program shall be consistent with the Faculty's vision, mission and goals.
 10. The graduate programs offered by the Faculty shall be based on objective, appropriate and clear aims, and shall be of a level much different from that of undergraduate programs as the former require more depth and a higher degree of mental and creative capacities on the part of both teaching staff members and students.
 11. The doctoral programs shall be of a level much higher than that of the academic programs of the first and second university degrees. Various excellent resources as necessary for these programs shall be provided and shall be of a quality different from that provided for the first and second university degrees, including human resources (faculty members holding the rank of full professor and associate professor who are distinguished in their teaching, research and scientific performance and who have clear contributions to the advancement, development and extension of knowledge), material, spatial, tools and equipment, laboratories and both paper and electronic libraries and educational resources.
 12. The Faculty shall design the study plan of the Master's program so that the minimum number of study hours required for obtaining a Master's degree is (33) credit hours for the two tracks of the Master's program (Comprehensive examination, and thesis tracks).
 13. The study plan for the Doctoral program shall be designed so that the minimum number of credit hours for obtaining the degree is (54)
 14. A clear course description for the individual courses included in the study plan shall be developed. Upon admission to the program, a student may be required to take a maximum of (9) credit hours of remedial courses at the bachelor's and / or masters level. The grades of these courses shall not be included in the student's cumulative average, nor can they be counted within the credit hours required for obtaining the Doctorate degree.
 15. Supervision of Master's theses shall be limited to faculty members who hold academic ranks not lower than Associate Professor. An Assistant Professor may supervise or discuss a Master's thesis provided that he has at least two research papers published or accepted for publication in his

field of specialization in refereed scientific and recognized journals after obtaining the Doctorate degree or its equivalent, and provided that his research is not copied from the Master's or Doctoral thesis.

16. Preparing and marking the qualifying examinations and discussing doctoral dissertation and research shall be limited to faculty members holding the rank of full Professor. Preparation of a PhD thesis must be supervised by at least two faculty members, one of whom is a full professor (the senior supervisor) and the second an associate professor, provided that both of them have supervised Master's or Doctoral theses.
17. There shall be an adequate number of full-time qualified faculty members, commensurate with the areas and levels of offered programs. The senior supervisor of university theses shall be a full-time faculty member. Under the same conditions, faculty members from outside the department or the university may be called upon to supervise graduate theses. Faculty members on sabbatical leave may continue supervising a student's thesis at his home university or take part in supervising it , subject to approval by the council of deans on the submission of the competent committee or department council, and a recommendation of the Faculty council
18. The thesis discussion committee shall include at least one member from outside the university fulfilling the university's supervision requirements.
19. Adherence to the time period specified for the offered programs
20. • Assistantships and grants offered to graduate students

3-2-3 Evidence and Documents Required for Sub-criterion Two

- √ Samples of the study plans and their objectives
- √ The tools and procedures used in developing study plans
- √ Student guides
- √ Minutes of meetings of committees and councils
- √ Statistics on the number of the teaching staff members, their academic ranks and specializations
- √ Instructions and procedures of tests and distribution of grades

- √ Forms used in student academic guidance
- √ Evidence of follow-up on the quality assurance of the programs offered
- √ Statistics on the number of students benefiting from student exchange programs with other universities
- √ Graduate program guides
- √ Guides on preparing dissertations and theses
- √ Regulations and procedures for testing and grading in respect of graduate studies
- √ Evidence and procedures for holding qualifying, and comprehensive examinations, samples thereof and documentation of their results
- √ Statistics on the number of students benefiting from grants and scholarships offered to post-graduate students

3-3 Sub-criterion Three: Evaluation of Learning Outcomes

3-3-1 Elements of Sub-criterion Three

1. Student performance evaluation
2. Evaluation of faculty members' performance
3. Graduates and the labour market

3-3-2 Indicators of Sub-criterion Three

1. The mechanisms for student performance evaluation shall be consistent with the required learning patterns.
2. The Faculty shall specify the competencies that students should acquire upon graduation.
3. There shall be learning outcomes such as knowledge and skills that are measurable, verifiable, documented and circulated and are consistent with the academic program's declared objectives.
4. Learning outcomes shall be based on national, regional, and global benchmarks, and there shall be mechanisms and tools for measuring the

- learning outcomes and benefiting from them in the review and evaluation processes of academic programs.
5. Identification of intended learning outcomes after studying the views of the concerned academic and professional experts.
 6. Understanding and comprehending learning outcomes by faculty members and students
 7. The extent of achieving the learning outcomes by graduating students
 8. Compatibility of students intended learning outcomes with the national qualification requirements and with approved standards in the related field of specialization, including the requirements of the professions students are being prepared to practice.
 9. Use of appropriate mechanisms for program evaluation, including surveys of the views of graduates, graduate employment data, employer views and the subsequent performance of graduates, for providing evidence and proofs of the appropriateness of the learning outcomes.
 10. The results of review and evaluation shall be employed in improving the learning outcomes including knowledge, skills and competences.
 11. Student evaluation procedures shall be explained at the beginning of teaching the syllabus. The mechanisms for the verification of students' level of achievement shall be appropriate, valid and reliable in comparison with the relevant benchmarks at the internal or external levels.
 12. The quality of work required for allocation of grades shall be consistent, constant and equivalent for all courses offered within the program at the Faculty, and at the whole institution and commensurate with what is offered at other distinguished institutions (verification procedures for levels of achievement may include measures like: review of random samples of students' work by faculty members from other educational institutions, conducting independent comparisons between the levels of achievement attained by students with other corresponding institutions within the Kingdom and at the global level).
 13. When marking student tests, homework and projects, examination specifications tables or any other means shall be utilized to ensure coverage of all areas of planned intended learning outcomes.
 14. The necessary arrangements shall be made within the institution to train faculty members in evaluating students in the theoretical and practical aspects.
 15. Policies shall include procedures that can be followed for dealing with the cases of inadequate student achievement levels or in the case of unequal evaluation.
 16. Effective procedures shall be used to ensure that work submitted by students is their own work.
 17. On-going feedback about students' performance and the results of their evaluation during each term shall be immediately given to them, accompanied with mechanisms for assistance if needed.

18. Evaluation of students' work shall be carried out fairly and objectively.
19. The academic grievance benchmarks and processes shall be well-known to the students and shall be applied with all fairness.
20. The evaluation tools used shall be effective, and diversified in order to reflect the diversity of academic courses included in the study plans, and the objectives, competencies and skills that the program seeks to be achieved by the students. These tools shall be effective.
21. The tools used for evaluation shall measure the different achievement levels (knowledge, understanding, application, analysis and synthesis) and shall help in discovering the individual differences among students, and the skills, competences and knowledge they acquired.
22. There shall be clear policies and procedures with respect to approving the grades achieved by students.
23. The Faculty shall have accurate and comprehensive academic records and shall follow procedures that ensure safeguarding and protecting these records.
24. The Faculty shall make available specific procedures for appealing the evaluation results and reviewing them.
25. Evaluation results shall be used for making the necessary amendments to the learning outputs and evaluation methods.

3-3-3 Evidence and Documents Required for Sub-criterion Three

- √ The learning outcomes of the programs offered by the faculty
- √ A Survey of the Faculty's students' opinions concerning the educational outcomes.
- √ A Survey of the teaching staff members' opinions concerning the teaching outcomes
- √ Samples of student evaluation methods and connecting them with measuring student achievement of learning outcomes.
- √ Studies on the labour market and satisfaction of graduates and employers.
- √ Plans for on-going improvement
- √ Samples of agreements and partnerships
- √ Reports of external examiners

4. Criterion Four: Scientific Research, Scholarship and Innovations

- Identification of the policies, regulations and means required for supporting scientific research, innovation and granting scholarships in order to deepen knowledge and develop, spread and apply it in serving the community and enhancing its status.
- Training students in using systematic methods for acquiring knowledge and conducting research
- Supporting the methods and means that help faculty members acquire expertise and skills in developing their teaching and research performance, and that also help them maintain their teaching effectiveness, and encourage them and continue to excel in their areas of specialization.

4-1. Sub-criterion One: Scientific Research

4-1-1 Elements of Sub-criterion One

1. Scientific research projects
2. Scientific conferences, seminars and workshops
3. Publication of research papers and books
4. Incentives, rewards and prizes

4-1-2 Indicators of Sub-criterion One

1. The faculty shall identify its research needs and priorities, including the interests of its teaching staff, in addition to possible fields of cooperation with various local and global organizations and institutions. Such priorities shall be consistent with the faculty's vision, mission and objectives.
2. The faculty should have a policy on strengthening relationship between scientific research and education.
3. Teaching staff members shall have a primary role in promoting scientific research in consistency with the Faculty's vision, mission and objectives.
4. The Faculty shall document research means and priorities.
5. Interaction between education activities and research shall be reflected on the curriculum and teaching methods in use.
6. The study plan shall include subjects that contribute to the preparation of students to play a role in research and research development.
7. Provision of financial, physical and administrative support as required for promoting scientific research within the Faculty.

8. Faculty teaching staff members shall participate in the development of research capabilities.
9. The program shall support research for serving the community and its human and applied needs.
10. The program shall provide concrete and symbolic incentives for urging faculty members' to develop their professional academic and research performance, and continued self-learning.
11. Faculty members shall actively participate in activities of continued learning, scientific research and attending training courses, specialized workshops, conferences and seminars.
12. Faculty members shall publish books, and research papers in refereed scientific periodicals and in international indexed journals

4-1-3 Evidence and documents required for Sub-criterion One

- √ Availability of an annual plan for scientific research
- √ Criteria and forms used in supporting scientific research projects and following up their implementation
- √ Criteria and forms used in supporting publication of research papers and writing books
- √ Annual statistics of supported research projects and their expenditure
- √ Annual statistics of the number, nature and areas of research papers published in refereed and specialized journals and conferences
- √ Annual statistics of published research papers copied from higher education dissertations
- √ Statistics on the number of annual scientific conferences, seminars and workshops in which the Faculty participates and the University holds.
- √ Agreements concluded with universities and research centres inside and outside Jordan
- √ Minutes of meetings of concerned committees and councils
- √ Samples of the Faculty members' research papers and books published or accepted for publication, and mechanisms for documenting them within the university
- √ The annual expenditure on each element of scientific research
- √ The annual expenditure on prizes and incentives

4-2 Sub-criterion Two: Scholarship

4-2-1 Elements of Sub-criterion Two

1. Scholarship for Master's and Doctoral degrees
2. Research and developmental training courses

4-2-2 Indicators of Sub-criterion Two

1. The Faculty shall have a program that facilitates regional and global exchange for faculty members and students, and suitable resources shall be provided for that.
2. The Faculty shall have agreements on scientific exchange concluded with scientific institutions whether in respect of faculty members, students, or exchanging training experience and expertise, and organizing workshops, conferences and seminars.
3. The Faculty shall have clear policies and specific procedures for scholarships and academic missions, and shall be committed to following them
4. The Faculty's budget shall include clear provisions for supporting scholarships and educational exchange.

4-2-3 Evidence and Documents Required for Sub-criterion Two

- √ Policies, regulations and procedures for scientific research and innovation as well as for holding conferences and seminars
- √ Documents showing cooperation agreements at the local, regional and global levels concluded between the Faculty and other scientific institutions, together with evidence of their implementation.
- √ Academic committees formed for pursuing and following up scientific research
- √ Samples of faculty members' research papers and innovations
- √ The criteria and procedures used in evaluating faculty members published research
- √ The Faculty's policies on scholarships or innovations for students and faculty members

- √ A summary of studies, scientific research and innovations actually achieved by faculty members and students, together with their quality and the names of the periodicals in which they were published.
- √ A summary of faculty members' role in the preparation and follow-up of the policies and practices on scholarships, innovations, scientific research, conferences and seminars
- √ Number of lectures, seminars and workshops faculty members attended or participated in at the local, regional and global levels
- √ Number of scientific conferences faculty members attended or participated in at the local, regional and global levels
- √ Statistics on the number of students on scholarships, their exact specializations and their progress in their academic studies
- √ The balance sheet and the budget of scientific research for the last three years together with their regulations.
- √ Lists of expenditure on supporting research carried out by faculty members and students in the last five years
- √ A summary of the most prominent innovations, scientific activities and research done by faculty members, the prizes they won, the patents they registered and the number of projects they carried out in partnership with other researchers at the local, regional and global levels in the last five years

4-3 Sub-criterion Three: Innovations

4-3-1 Elements of Sub-criterion Three

1. Patents
2. Scientific prizes and outstanding achievements
3. Leading pilot academic and scientific sites

4-3-2 Indicators of Sub-criterion Three

1. The Faculty shall demonstrate a clear commitment to the policies and procedures related to scientific research, participation in local and global conferences and encouraging innovation. It shall also support participation in joint projects and research with local and global strategic partners
2. There shall be a specific policy for the Faculty to develop faculty members to the level of experts, and to provide in-service training and learning

opportunities for them, to upgrade their university performance in learning, teaching, evaluation, scientific research skills, supervision and training, and shall provide them with the opportunity to attend local, regional and global workshops, seminars, lectures and conferences.

3. Faculty members shall compete for getting local, regional and global awards
4. Faculty members shall obtain local, regional and global competitive awards.
5. There shall be patents registered for the faculty members
6. Faculty members shall be given academic freedom to conduct research and scientific studies in a manner that serves the Faculty's vision, mission and objectives and reflects on planning, development and improvement.

4-3-3 Evidence and Documents Required for Sub-criterion Three

- √ Criteria and forms used to document patents
- √ Statistics on patents registered annually at local and global levels
- √ Annual expenditure on each element of innovation
- √ Mechanisms for follow-up on the implementation and evaluation of innovations of all types
- √ Minutes of meetings of committees and councils
- √ Samples of patent certificates and other innovations

5. Criterion Five: Financial, material and Human Resources

The importance of this criterion is due to the fact that it constitutes the environment hosting all activities and tasks undertaken by the academic institution such as teaching, learning, scientific research and community service. It also comprises the environment hospitable to human resources that make up the university family/ community including students, academicians, researchers, administrators and service staff. Therefore, the healthy condition and good quality of this environment are one of the foundations on which the university must develop efficient plans for sustaining, monitoring, improving and implementing measures that ensure implementing these plans and monitoring them on a regular basis.

Perhaps one of the main criteria for ensuring a sound and high quality university environment is to ensure availability of financial resources required for this environment, in addition to good management in terms of sound financial planning

and drafting clear budgets for the activities of the institution and its tasks. This shall be consistent with the institution's vision and mission to develop plans that can secure financial resources through academic or non-academic resources, and to lay down plans for managing potential risks. The institution shall ensure accountable and transparent financial management that follows established financial procedures.

When considering the financial and human resources provided by the institution, it is not enough to look for the adequacy of these resources in terms of number and availability, but focus must be on efficiency and expertise which should be used in achieving the tasks undertaken by the university, whether they are academic, research or community service. Emphasis shall be on the plans laid down by the institution to monitor the performance of these resources and to assure their quality and the procedures followed by the institution for on-going improvement, both in terms of on-going modernization of material resources or upgrading human resources through programs for the development of their skills and competence. This is in terms of the quality of financial, material and human resources of the university in general. At the level of Faculties and academic programs, consideration must be given to allocating budgets, and distributing resources, to the Faculties in a manner that ensures the high quality of their academic programs and achievement of their objectives.

There are three sub-criteria that fall under this criterion, each of which focuses on one aspect of these resources. Below we will discuss each criterion separately in terms of its elements, indicators, evidence and documents necessary for achieving it.

5-1 Sub-criterion One: Financial Resources

5.1.1. Elements of Sub-criterion One

1. Financial Planning and Budgeting
2. Financial Management and Budgeting

5.1.2. Indicators of Sub-criterion One

1. Financial planning policies and procedures: Clarity of the policies and effectiveness of the Faculty's financial planning procedures.
2. Budget preparation policies and procedures: Are there clear policies on preparing the Faculty's annual budget, the degree of the Faculty's independence in preparing its own budget and its relationship to the university budget.

3. Financial allocation policies and procedures: Clarity of policies and procedures, the percentage of allocations the Faculty gets out of the originally requested budget and the extent of achieving the Faculty's needs and programs through these allocations.
4. Policies and procedures governing revenues and disbursements (and investments, if any): Are revenue and disbursement policies and procedures centralized or otherwise? How flexible are the disbursement policies, and does the faculty have its own investments or intellectual property rights)

5-1-3 Evidence and Documents Required for Sub-criterion One

- √ Financial planning and budgeting records
- √ Proofs of financial allocation for the budget items
- √ Financial forms: (used in financial planning and budgeting)
- √ The Faculty's budget for several previous years, the percentage of allocations received by the Faculty and entered into its budget. (percentage of allocations to the amounts requested in the budget)

5-2 Sub-criterion Two: Material Resources

5-2-1 Elements of Sub-criterion Two

1. Academic elements
2. Research elements
3. Administrative elements
4. General services
5. Sources of information

5-2-2 Indicators of Sub-criterion Two

In addition to the requirements for subject accreditation in terms of availability of certain numbers of material resources, consideration shall be given to the following points:

1. Availability of general and specialized computer labs as required for the achievement of program objectives and learning outcomes for all faculty specializations
2. Availability, effectiveness and coverage of the computer network (in terms of number of students, geographical area and band width) as well as the degree of using it in the educational and administrative processes at the Faculty,
3. Accessibility and efficient use: Are resources accessible to all students in accordance with their specializations and needs, resource accessibility times and how heavily they are used?
4. Quality and appropriateness: Quality of equipment and labs and their appropriateness for the specializations offered by the Faculty, and modernity of resources in line with the rapid and steady development in the field of information technology
5. Safety and security policies and procedures: Taking safety resources into consideration with respect to infrastructure, conditions of use, clarity of safety procedures for students and users, and carrying out periodic procedures to verify the security and safety conditions at the resources.
6. Appropriateness of facilities to persons with special needs
7. Improvement and development plans and procedures: How the process of improvement and development is carried out (regularly or upon request), and clarity and effectiveness of procedures.
8. Facility and services management, control, and improvement
9. Maintenance procedures and their effectiveness
10. Employer satisfaction with facilities
11. Diversity of learning resources such as books, databases and periodicals

5-2-3 Evidence and Documents Required for Sub-criterion Two:

- √ Files of material resources
- √ Follow-up, supervision, occupancy rates and utilization records
- √ Safety and security instructions and guidelines
- √ Guides for persons with special needs
- √ Annual statistics and surveys on satisfaction with facilities and services, and their follow-up and improvement.
- √ Internet subscription contracts
- √ Subscription contracts concerning electronic global libraries and journals

- √ Annual statistics on the use of the library, information resources, and media
- √ Annual statistics on the use of the internet and portals.
- √ Specialized research laboratories and equipment
- √ Maintenance request forms and records

5-3 Sub-criterion Three: Human Resources

5-3-1 Elements of Sub-criterion Three

1. Academic staff
2. Research staff
3. Administrative staff
4. General services staff
5. Information resources staff

5.3.2: Indicators of Sub-criterion Three

In addition to the requirements for subject accreditation in terms of availability of the required number of qualified human resources for each of the Faculty's departments, due consideration shall be given to what the Faculty does in respect of each of the above five elements of human resources, including:

1. Attraction, appointment and employment policies and procedures
2. Tenure and promotion policies and procedures
3. Policies and procedures on sabbatical and research leaves
4. Efficiency and expertise of the academic and research staff
5. Professional and career development of human resources
6. Care and services provided to human resources
7. Maternity benefits
8. Human resources satisfaction with the offered services: (appointment, training, and certification, services and privileges)

5-3-3 Evidence and Documents Required for Sub-criterion Three

- √ Documents showing appointment policies and procedures at the educational institution
- √ Records of participation of academic and research staff in local and global conferences

- √ Records of training courses and development of human resources. Statistics of holding training courses, records of attendance, and questionnaires of attendees satisfaction.
- √ Service and support committee files and statistics on numbers of beneficiaries
- √ Surveys on staff satisfaction and their follow-up
- √ Records of the benefits offered (sabbatical leaves, housing, savings, maternity benefits ...), and statistics about them and about their beneficiaries
- √ Leave forms

Criterion Six: Student Services

Student services are the Faculty's essential pivot for achieving the goals of academic processes through the Faculty's taking care of its students and providing them with an interactive and stimulating learning and teaching environment. This is the environment that places the interest of students at the core of its goals and promotes them academically, professionally, socially, culturally and skills-wise in its quest to achieve student academic and personal integration. Guidance and counseling of students, sponsoring and motivating outstanding students, supporting and counseling students facing academic problems, getting students engaged in the Faculty's activities, communication with graduates and other support services help in achieving the desired professional, psychological and social integration of students (so that they get engaged in the academic life), expand their perception and knowledge, develop their character and prepare them for the labour market through the various programs, facilities and services offered by the Faculty, which in turn contribute to promoting their personal growth and academic progress.

The University covers many student services in general, but this criteria at the level of the Faculty, its departments, and programs underpins the special care, and academic and professional services the Faculty provides to its students within the framework of the university's general services. There are three sub-criteria that fall under this criterion. Below is a description of the elements of these criteria and the indicators, evidence and documents which are necessary for achieving them.

6-1 Sub-criterion One: Student Guidance and Counselling

6-1-1 Elements of Sub-criterion One

1. Raising student awareness
2. Academic counselling
3. Professional training
4. Psychological and social counselling

6-1-2 Indicators of Sub-criterion One

1. Policies and procedures for raising student awareness: Clarity of policies and procedures, students awareness of their rights and responsibilities, awareness-raising workshops for new students, manuals and bulletins, and re-activation of means of communication between students and the Faculty
2. Academic counselling procedures: Clarity and effectiveness of counselling policies, how outstanding students are identified and sponsored and how students facing academic achievement problems are identified and helped
3. Psychological and social counselling procedures: Clarity, accessibility and privacy
4. Professional counselling procedures: information and training workshops, workshops on raising students' competence in professional communication with those in the labour market's different fields and in joint activities with businesses and field visits
5. Training courses oriented toward students
6. The role of committees and councils in student guidance and counselling
7. Plans for developing and following up all aspects of student guidance and counselling in order to be consistent with the Faculty's vision, mission and objectives

6-1-3 Evidence and documents required for Sub-criterion One

- √ Availability of organizational units or offices concerned with student guidance and counselling
- √ Regulations related to student guidance and counselling
- √ Minutes of meetings of committees and councils concerned with student guidance and counselling, and records of annual activities
- √ Annual statistics on the number of those benefiting from:

- Raising student awareness
 - Academic counselling and vocational training
 - Psychological and social counselling
 - Forms used in student guidance and counselling
- √ Student evaluation of the student guidance and counselling activities
- √ Annual reports on student guidance and counselling and the extent of benefiting from them.

6-2 Sub-criterion Two: Support Services

6.2.1. Elements of Sub-criterion Two

1. Scientific societies at the faculty
2. Financial support
3. Student Facilities
4. Extra-curricular activities

6-2-2 Indicators of Sub-criterion Two

1. Regulation for scientific societies at the faculty: The relationship between these societies and the Faculty's administration, support offered to and their activities and roles in supporting ancillary services and extra-curricular activities
2. Regulation on and procedures for student grants and loans
3. Regulation and procedures followed in the provision of support services
4. Follow-up and development of support services

6-2-3 Evidence and documents required for Sub-criterion Two

- √ Policies on and procedures for scientific societies and student clubs at the Faculty: subscription, membership, elections, and the societies relationships with the Faculty
- √ Number of scientific societies and student clubs at the Faculty and their objectives and nature
- √ The Faculty's Policies and procedures for student grants, annual statistics on the number of beneficiaries, sources of grants and the method of their distribution.
- √ Surveys of student views toward support services
- √ Annual statistics on extra-curricular activities and their number of participants
- √ Minutes of meetings of the committees and councils concerned with support services
- √ Mechanisms for looking into student complaints and how they are benefited from

6-3 Sub-criterion Three: Communication with Graduates

6.3.1. Elements of Sub-criterion Three

1. Graduate data
2. Representation on governance boards
3. Means of communication with the graduates

6-3-2 Indicators of Sub-criterion Three

1. Procedures for the Faculty's communication with the graduates and their effectiveness
2. Graduates' representation on governance boards
3. Coordination and cooperation with employers and employing parties

6-3-3 Evidence and documents required for Sub-criterion Three

- √ Minutes of meetings of the Faculty's concerned committees and councils
- √ Records of graduates of former years and their places of employment
- √ Annual statistics on alumni clubs activities and the number of participants therein
- √ Opinion polls oriented toward graduates and employers

7. Criterion Seven: Community Service and External Relations

The importance of this criterion is due to the fact that it is the main factor that governs the relationship between the university with all its faculties and the external community, whether at the local, national or global levels. It involves organizing the relationship between the university and the various bodies such as the institutions, communities and individuals within an institutional framework that allows and encourages exchange and sharing in scientific, cognitive, humanitarian and other relevant areas.

There is no doubt that each of the faculties of the university has its own role in strengthening the University's relations with the local and external community as per its specializations. Due to its different specializations, the Faculty of Information Technology can undertake to enhance the university's relationship with its local community by holding courses and training workshops for community members, providing advisory services to community institutions, and encouraging students to interact with them.

The Information Technology Faculty can also strengthen its relations with professional institutions related to its specialties, whether through having members of these institutions represented on Faculty councils, or by providing training opportunities for students in these institutions or by holding regular meetings to enhance students' ability to engage labour markets.

Relationships established by the Faculty with international academic and professional institutions, such as distinguished universities, research and development centers and leading international companies in the field of information technology are essential for improving the Faculty's status and the quality of its graduates and enhancing their compatibility with the needs of the labour market or available research areas.

There are two sub-criteria that fall under this criterion, each of which includes two elements and a number of indicators, as well as many examples,

evidence and documents that support the evaluation process of this criterion. This criterion focuses on two major criteria: community service and external relations at the national and global levels. Below, we will discuss each criterion separately with respect to its elements, indicators, evidence and documents required for achieving it.

7-1. Sub-criterion One: Community Service

7.1.1. Elements of Sub-criterion One

1. Areas of local community development
2. Representation on governance boards

7.1.2. Indicators of Sub-criterion One

1. Policies and plans on the nature of the relationship with the community
2. Activities implemented by the Faculty to serve the community (training and awareness-raising courses and workshops)
3. Joint initiatives and development projects
4. Financial and physical support for meeting the development needs of the local community
5. Faculty staff members and students contribution to the community service and development

7.1.3. Evidence and documents required for Sub-criterion One

- √ Documents showing the policies, plans and procedures related to the local community
- √ Reports on the activities performed (and to be performed) by the Faculty in service of the local community (training courses, workshops and seminars)
- √ Annual statistics on joint initiatives and development projects and the extent of benefiting from them
- √ Statistics on the actual annual expenditure on all activities of local community service

7-2. Sub-criterion Two: External Relations

7.2.1. Elements of Sub-criterion Two

1. Relations at the national level
2. Regional and global relations

7.2.2. Indicators of Sub-criterion Two

1. The policies governing building relationships at all levels
2. Procedures and mechanisms of cooperation at the local, regional and global levels
3. Grants and assistance offered by national, regional and global institutions and organizations
4. Joint projects and studies
5. Joint training courses, conferences and workshops
6. Marketing graduates at open career days and fairs
7. Mechanisms and activities related to attracting and recruiting students

7.2.3. Evidence and documents required for Sub-criterion Two

- √ Documents showing the policies, plans and procedures associated with cooperation at the national, regional and global levels
- √ Samples of signed memoranda of understanding and agreements, and the mechanisms for their approval and signing
- √ Annual statistics on grants and assistance provided to the Faculty from inside and outside Jordan
- √ Annual statistics on joint projects, studies, training courses, conferences and workshops
- √ Annual statistics on the number of graduates who benefited from career days
- √ Evidence of attracting and recruiting students from inside and outside Jordan.

8. Criterion Eight: Quality Assurance

Quality assurance management is one of the basic pillars of the successful management model in the academic education field, as the quality assurance management process at academic institutions aims at:

1. Applying advanced methods for quality assurance and continued improvement and development through periodic evaluation of the performance of all departments of the institution in accordance with local and global standards,
2. Developing solutions to overcome the problems discovered through the evaluation process,
3. Developing detailed and time-governed plans for improvement and development that guarantee upgrading the performance of these departments.

This also includes the development of performance indicators to monitor and measure the implementation of these plans. One of the cornerstones of the success of quality assurance management at the level of the educational institution in general is the integration of the performance of all academic and administrative departments and its consistency at all stages and steps of quality assurance (regular periodic evaluation, planning, implementation and follow-up).

There is no doubt that University Faculties of Information Technology can play a key role in this field, not only at the level of the Faculty itself, but at the level of the university in general. In fact the Faculty can play a leading role in the automation of quality assurance processes at the university and can provide the university management with computer systems that help the administration to manage quality assurance at the university level.

There are four sub-criteria that fall under this criterion. Following is a description of the elements of these criteria, their indicators, evidence and documents required for achieving them.

8-1 Sub-criterion One: Institutional commitment to improving quality

8.1.1. Elements of Sub-criterion One

1. Leadership
2. Resources
3. Institutional participation

8.1.2 Indicators of Sub-criterion One

1. Commitment by the Faculty's Deanship to quality assurance
2. Availability of material, human and financial resources
3. Dissemination of the culture of quality assurance.
4. involving all staff in the institution
5. Commitment to the areas of improvement
6. Benefiting from feedback in the improvement process

8.1.3. Evidence and documents required for Sub-criterion One

- √ Level of responsibility and representation: The quality assurance committee at the Faculty and minutes of its meetings
- √ Quality assurance management improvement plans
- √ Evidence of dissemination of the culture of quality assurance: published guides and bulletins
- √ The periodic reports issued about the performance of the various units of the Faculty
- √ Reports on the effectiveness of the academic and administrative development programs
- √ Integration and comprehensiveness of the institution's quality reports and documents
- √ Training programs related to improvement of the level of quality
- √ Procedures of the quality cycle (evaluation, planning and implementation)

8-2 Sub-criterion Two: Scope of Quality Assurance

8.2.1 Elements of Sub-criterion Two

1. On-going periodic evaluation
2. Quality assurance processes shall cover all Faculty academic and administrative activities, services, and facilities.
3. Quality assurance processes shall cover all inputs, processes and outcomes

8.2.2. Indicators of Sub-criterion Two

1. Application and follow-up of the Faculty's quality assurance management. Evaluation of inputs, processes and outcomes
2. Quality control and improvement, and dissemination of related results

8-2-3 Evidence and documents required for Sub-criterion Two

- √ Committees concerned with quality assurance and minutes and their meetings
- √ Evidence and procedures followed in quality assurance management
- √ Reports on on-going periodic evaluation in respect of the various Faculty's technical and administrative departments, centres and units

8-3 Sub-criterion Three: Indicators, standards and benchmarking

8.3.1. Elements of Sub-criterion Three

1. The Faculty's key performance indicators and their relations to the university indicators
2. The performance indicators of the Faculty's various technical and administrative departments, centres and units
3. Benchmarking standards for the quality of institutional performance
4. Feedback and how it is processed
5. Verification of learning outcomes

8.3.2. Indicators of Sub-criterion Three

1. Inclusiveness of key performance indicators and their integration and their being measurable in an objective manner in all Faculty's technical and administrative departments, centres and units
2. Selection of secondary performance indicators for following up the performance of the Faculty's various technical and administrative units

3. Identification of standard benchmarking criteria for the quality of institutional performance.
4. Verification of the learning outcomes achieved by students, and comparing them with the requirements and needs of the labour market
5. The self-assessment processes of the quality of performance shall be based on multiple sources of relevant evidence and proofs whenever possible. This includes feedback through surveys of users and beneficiaries (stakeholders), such as: students, faculty, employees, graduates and employers (of the institution's graduates).

8-3-3 Evidence and documents required for Sub-criterion Three

- √ Regular periodic reports on key and secondary performance indicators and the areas of their application
- √ Studies or reports related to benchmarking of the quality of performance the Faculty and all its academic and administrative units

8-4 Sub-criterion Four: Independent verification of evaluation

8-4-1 Elements of Sub-criterion Four:

1. Multiple sources of evidence and proofs
2. Feedback obtained through surveys
3. Verification of learning outcomes

8-4-2 Indicators of Sub-criterion Four:

1. Independent verification of the learning outcomes achieved by the students in comparison with the national qualification requirements and the levels achieved by similar educational institutions
2. Independent verification by knowledgeable and experienced persons of the performance of the Faculty and its academic and administrative departments

8-4-3 Evidence and documents required for Sub-criterion Four:

- √ A verification matrix of the teaching and learning outcomes (compatibility between outcomes and content) in respect of degrees awarded by the Faculty, and their relevance to:
 - The institution's vision and mission
 - The objectives of the academic degree
 - Labour market requirements
 - Degree's content and curricula
- √ Comparisons between the institution's learning outcomes and those of other similar institutions
- √ Surveys of students, faculty members, graduates and employers views, and related improvement plans
- √ Study of the self-assessment
- √ Study of graduates and employers
- √ Plans for improvement of the quality assurance process