



Academic Program Description Form

University Name: Mosul

Faculty/Institute: College of Agriculture and Forestry

Scientific Department: Department of Agricultural Machines and Equipment

Academic or Professional Program Name: Bachelor of Science in Agricultural Machines and Equipment.

Final Certificate Name: Bachelor of Science in Agricultural Machines and Equipment.

Academic System: Semester

Description Preparation Date: 10/3/2024

File Completion Date: 4/4/2024

Signature:

Head of Department Name:

Asst. Prof. Nofal Issa Mahmeed

Date: 4/4/2024

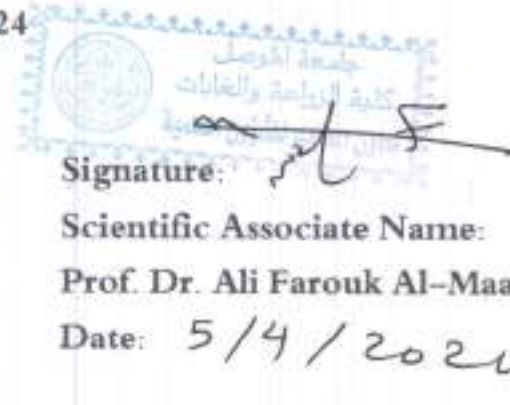


Signature:

Scientific Associate Name:

Prof. Dr. Ali Farouk Al-Maadedi

Date: 5/4/2024



The file is checked by:

Department of Quality Assurance and University Performance

Director of the Quality Assurance and University Performance Department:

Date: 4/4/2024

A.L.Oday Abdulhadi Aday

Signature:

Approval of the Dean

1. Program Vision

Excellence and sophistication in academic education, leadership in community service, and quality in scientific research in the fields of agricultural machines and equipment strive for universality.

2. Program Mission

The program aims to contribute to sustainable development by training specialized agricultural engineers who are qualified to work in the agricultural machines and equipment sector, and who are committed to professional ethics. These engineers will be highly competent in both theoretical knowledge and practical skills, capable of meeting the needs of the local, regional, and global labor markets, and serving the community at a competitive level. They will achieve this through the development of research skills and a commitment to continuous self-learning.

3. Program Objectives

1. Qualifying specialized scientific cadres who are trained and have scientific competencies in the field of agricultural machines and equipment, capable of facing the challenges of the profession and competing with their peers in serving the community and meeting the needs of the labor market.
2. Creating a modern and stimulating educational environment equipped with the latest technologies and advanced equipment enables students to compete, innovate, and excel. It fosters their desire for continuous learning, self-development, skill-building, and the ability to enhance performance, work within a team, and make decisions in the field of agricultural machines and equipment.
3. Qualifying professionals in ethical work practices and quality management in the agricultural sector, especially with regard to agricultural machines and equipment.
4. Managing and employing resources, addressing problems in agricultural facilities and projects with efficiency and good performance in the field of agricultural machines and equipment within the framework of preserving natural resources, biodiversity and sustainable development.

5. Possess skills in the fields of language and computer use to develop their abilities in using the scientific and practical method in research within the field of agricultural machines and equipment and to contribute to solving related agricultural problems,
6. Developing modern agricultural production systems in line with the general trend in production and the requirements of the resource market, which capable of dealing with those systems,
7. Optimal use of agricultural machines and equipment under different environmental conditions and according to the conditions of preserving the properties of soil and water from deterioration and pollution for the sake of a clean, sustainable environment.
8. Focuses on confronting the local and global challenges of rising prices of agricultural products to push the production wheel towards agricultural production projects and associated industries to meet the growing needs and the immediate and expected increase in investments in the private sector.
9. Develop a strategy for scientific research linked to the industry's need for development research and product development in the agricultural field and the end user to meet the needs of society.
10. Can analyze and design machines, animal barns, and environmental systems for the production, processing, storage, handling, distribution, and use of food, feed, fiber, and other biomaterials, and management of natural resources related to the mechanization aspect.
11. The department contributes to developing the uses of new and renewable energies, and contributes to reducing energy consumption and diversifying its sources in a way that ensures sustainable development that helps preserve the environment from pollution.
12. Can properly and safely use machines and equipment used in the various stages of agricultural systems.
13. Capable of managing crop grading and storage stations, planning and managing operations related to the agricultural institutions and industrial complexes and buildings.
14. Familiar with modern technology concepts in smart and precision agriculture applications.
15. Familiarity with rationalizing used water resources and taking advantage of their reserves, using modern irrigation methods.
16. Improving post-harvest crop and food processing transactions to reduce losses in the agricultural field and open markets for national agricultural products that are compatible with international quality for production systems.

4. Program Accreditation

Does the program have program accreditation? And from which agency?

No

5. Other external influences

- ✓ The family problems facing students negatively affect the students' performance in the academic program
- ✓ Extracurricular activities help students achieve greater achievements in implementing the academic program
- ✓ The economic situation of students and their involvement in work to save money negatively affects their academic performance.
- ✓ The student's learning competence from his preparatory studies is one of the most important indicators of excellence in the performance of the academic program.

6. Program Structure

Program Structure	Number of Courses	Credit hours	Percentage	Reviews*
Institution Requirements	11	20	%11.20448179	basic
College Requirements	11	33.5	%18.767507	basic
Department Requirements	38	125	%70.0280112	basic
Summer Training	Satisfactor	Satisfactor	Satisfactor	basic
Other	-	-	-	-

* This can include notes whether the course is basic or optional.

7. Program Description					
Year/Level	Course Code	Course Name	Credit Hours		Units
			theoretical	practical	
First Year/First Semester	PRFC112	Principles of Field Crops	2	3	3.5
First Year/First Semester	PRSS113	Principles of Soil Science	2	3	3.5
First Year/First Semester	TRAC134	Tractors	2	3	3.5
First Year/First Semester	MATH130	Mathmatics 1	3	-	3
First Year/First Semester	PHYS110	Physics	2	3	3.5
First Year/First Semester	DEHR100	Democracy and Human Rights	2	-	2
First Year/First Semester	COMA103	Computer Application 1	2	-	2
First Year/First Semester	ENGL101	English Language 1	2	-	2
First Year/ Second Semester	PHCH108	Physics Chemistry	2	3	3.5
First Year/ Second Semester	MATH132	Mathmatics 2	3	-	3
First Year/ Second Semester	SURV120	Surveying	2	3	3.5
First Year/ Second Semester	PRHS116	Principles of Horticultural Science	2	3	3.5
First Year/ Second Semester	ENGD118	Engineering Drawing	-	3	1.5
First Year/ Second Semester	PAEX206	Principles of agricultural extension	2	-	2
First Year/ Second Semester	WORS135	Workshop 1	-	3	1.5

First Year/ Second Semester	ARAL102	Arabic Language	2	-	2
Second Year/First Semester	STME241	Static Mechanics	2	3	3.5
Second Year/First Semester	META242	Metallurgy	2	3	3.5
Second Year/First Semester	PRPP117	Principles of Plant Protection	2	3	3.5
Second Year/First Semester	AGMA243	Agricultural Machinery	2	3	3.5
Second Year/First Semester	PAEC115	Principles of Agricultural Economy	2	-	2
Second Year/First Semester	ALLA236	Alteration and leveling of land	2	3	3.5
Second Year/First Semester	INDR245	Industrial Drawing	-	3	1.5
Second Year/First Semester	WORS246	Workshop 2	-	3	1.5
Second Year/First Semester	ENGL201	English Language 2	2	-	2
Second Year/First Semester	CBAP200	Crimes of the defunct Baath Party	2	-	2
Second Year/ Second Semester	ARAL102	Arabic Language 2	2	-	2
Second Year/ Second Semester	DYME247	Dynamic Mechanics	2	3	3.5
Second Year/ Second Semester	SOPH346	Soil Physics	2	3	3.5
Second Year/ Second Semester	PEST417	Pesticide	2	3	3.5
Second Year/ Second Semester	PRFI111	Principles of Food Industry	2	3	3.5
Second Year/ Second Semester	PRAP114	Principles of Animal Production	2	3	3.5

Second Year/ Second Semester	STAT109	Statistical	2	3	3.5
Second Year/ Second Semester	COMA203	Computer Application 2	2	-	2
Third Year/ First Semester	THER375	Thermodynamics	2	3	3.5
Third Year/ First Semester	SOPE376	Soil Preparation Equipment	2	3	3.5
Third Year/ First Semester	ANPM224	Animal Production Mechanization	2	3	3.5
Third Year/ First Semester	SOFE377	sowing and fertilizing equipment	2	3	3.5
Third Year/ First Semester	FLME78	Fluid Mechanics	2	3	3.5
Third Year/ First Semester	IRDR308	Irrigation and Drainage	2	3	3.5
Third Year/ Second Semester	METP379	Mechanics Of Tractor Performance	2	3	3.5
Third Year/ Second Semester	OMCS380	Orchard machinery and crop servicing	2	3	3.5
Third Year/ Second Semester	IRDE381	Irrigation and Drainage Equipment	2	3	3.5
Third Year/ Second Semester	DAMA382	Design Of Agricultural Machinery	2	3	3.5
Third Year/ Second Semester	INCE383	Internal Combustion Engine	2	3	3.5
Third Year/ Second Semester	DAAE302	Design and analysis of agricultural experiments	2	3	3.5
Fourth Year/ First Semester	MART475	Maintenance and Repair of Tractors	2	3	3.5
Fourth Year/ First Semester	HEME476	Heavy machines and equipment	2	3	3.5
Fourth Year/ First Semester	HYSE477	Hydraulic system and Equipment	2	3	3.5

Fourth Year/ First Semester	FPEM478	Food processing Equipment manufactures	2	3	3.5
Fourth Year/ First Semester	ELST479	Electrical systems of Tractor	2	3	3.5
Fourth Year/ First Semester	AGBU480	Agricultural Buildings	2	3	3.5
Fourth Year/ First Semester	REPR402	Research Project 1	-	3	1.5
Fourth Year/ Second Semester	HAEQ481	Harvesting Equipment	2	3	3.5
Fourth Year/ Second Semester	POHE482	Post Harvest Equipment	2	3	3.5
Fourth Year/ Second Semester	MAAM483	Management of Agricultural Machineries	2	3	3.5
Fourth Year/ Second Semester	PLPE484	Plant Protection Equipment	2	3	3.5
Fourth Year/ Second Semester	FOEQ485	Forage Equipment	1	3	2.5
Fourth Year/ Second Semester	SEM404	Seminar	1	-	1
Fourth Year/ Second Semester	REPR403	Research Project 2	-	3	1.5

8. Expected learning outcomes of the program

Knowledge	
The code	knowledge and understanding
A1	The student should be able to demonstrate sound knowledge and understanding of the Arabic language, its teaching, development, and dissemination as a scientific and educational language in various scientific and cognitive fields.
A2	The student should be able to explain the foundations of university culture and its core values, including accountability, transparency, justice, equality, cooperation, belonging, and citizenship.

A3	The student should be able to explain the principles of human rights and democracy and their role in achieving effective partnership with all segments of society.
A4	The student should be able to demonstrate sound knowledge and understanding of the English language, its teaching, dissemination, development, and use for scientific and educational purposes in various scientific and cognitive fields.
A5	The student should be able to interpret biodiversity, its importance, and how to preserve natural resources in the environment.
A6	The student should be able to grasp the basics of basic and applied sciences and modern technologies related to agriculture, food, and the principles of planning and implementing agricultural operations.
A8	The student should be able to explain the foundations and principles of basic sciences and their applications in agriculture sciences and food technology, illustrating the chemical composition of food contents, their reactions, food spoilage factors, and appropriate preservation and manufacturing methods.
A9	The student should be able to explain the basics of agricultural engineering and the principles of planning and implementing agricultural operations.
A11	The student should be able to explain the fundamentals of integrated management of various pests and disease agents, and the most important modern methods used for control.
A13	The student should be able to familiarize themselves with various scientific methods for the development and improvement of agricultural resources, facilities, and sectors.
A15	The student should be able to explain the principles of planning and implementing agricultural operations and understand market needs through analysis of supply and demand prices.
A16	The student should be able to explain the stages and essential elements of planning and implementing agricultural and cultural operations and activities in agricultural communities.
A17	The student should be able to explain the principles and theories of basic sciences related to agriculture and rural development.
A18	The student should be able to compare market needs through analysis of supply and demand prices.
A20	The student should be able to explain the principles of basic and applied sciences and modern technologies related to agricultural sciences, land, water, and the environment
A21	The student should be able to describe practical developments in the field of land sciences and related sciences.
A22	The student should be able to explain environmental issues and problems related to the land, water, and environmental sectors.

A23	The student should be able to classify types of agricultural equipment and devices, their uses, mechanical systems, and water pumps used in agricultural production.
A24	The student should be able to explain the principles of planning and implementing agricultural operations and appropriate scientific methods for soil and water treatment according to quality standards and food safety.
A35	The student should be able to explain the basics of designing irrigation systems and post-harvest processes according to concepts and elements of quality management and safety in agriculture and food, such as drying, pasteurization, storage, and processing.
A37	The student should be able to understand food processing methods, food preservation, and the basics of food transportation and trading.
A43	The student should be able to explain soil and water management methods and appropriate agricultural practices for field crops and pastures to maintain and prevent deterioration.
A46	The student should be able to explain the structure of living organisms in terms of plant cells, tissues, organs, and their functions, and explain the divisional and structural characteristics of field crops.
A49	The student should be able to explain the principles of planning and implementing agricultural operations to serve animal wealth in productive and economic aspects in various agricultural communities and its relationship with sustainable development.
A52	The student should be able to explain the basic concepts, knowledge, and modern techniques related to agriculture, food, and their relationship with animal, poultry, and fish nutrition.
A55	The student should be able to classify horticultural crops according to their plant and horticultural characteristics and uses.
A57	The student should be able to identify the fundamentals of renewable energy and utilize them in agricultural production operations.
A67	A67: The student should be able to understand social and economic structures, processes, and institutions across a wide range of human experiences and cultures.
Skills	
The code	The mental (intellectual) skills:
B1	The student should be able to systematically and positively exercise various thinking skills in diagnosing problems and issues encountered during work, and propose appropriate solutions.
B2	The student should be able to express their ideas clearly and objectively, and engage in positive dialogue with colleagues, superiors, and subordinates at work.

B3	The student should be able to systematically and objectively discuss and evaluate studies and research related to societal issues.
B4	The student should be able to propose commercial production plans for plant, animal, and food crops according to market systems by assessing the economic situation of the market and understanding its needs.
B5	The student should be able to propose solutions to problems related to systems, processes, machines that interact with humans, plants, animals, microorganisms, and biological materials.
B8	The student should be able to evaluate the economic situation of the market by solving agricultural problems and understanding its needs.
B9	The student should be able to propose methods for analyzing data and information and interpreting agricultural phenomena using applied software to solve agricultural problems.
B13	The student should be able to systematically analyze scientific data and information related to agricultural problems to find the most suitable solutions.
B14	The student should be able to plan for the management of agricultural projects free from diseases and pests according to quality and safety standards.
B15	The student should be able to evaluate the management of agricultural projects according to quality and safety standards, free from diseases and pests.
B16	The student should be able to choose logical solutions to problems in engineering systems, set concise and clear objectives, propose practical and reasonable solutions, analyze alternative solutions.
B18	The student should be able to analyze data and information related to agricultural problems in the land, water, and environmental sectors to find the most suitable solutions.
B19	The student should be able to design production plans and irrigation projects that achieve food and water security and serve the goals of sustainable development.
B22	The student should be able to propose appropriate solutions to specialized problems in the fields of soil, water, and environmental sciences.
B24	The student should be able to analyze assessment data and information for decision-making to maintain quality improvement and appropriate intervention.
B30	The student should be able to classify the social and economic factors that achieve technical and economic efficiency for the agricultural establishment.
B31	The student should be able to propose plans for planting field crops and developing pastures according to environmental conditions, soil quality, and water.
B32	The student should be able to innovate experimental designs and collect and analyze data under field, field, and laboratory conditions.

B39	The student should be able to choose the best proposed alternatives to solve a agricultural problem to achieve maximum efficiency for the agricultural establishment and utilize available natural resources to achieve sustainable agricultural development.
B41	The student should be able to develop production technologies for horticultural crops and methods for their trading and marketing.
B46	The student should be able to diagnose agricultural production problems and mechanize small holdings and propose appropriate solutions.
B47	The student should be able to solve problems using arithmetic, algebraic, geometric, statistical, or computational methods.
B48	The student should be able to identify and measure land areas and conduct spatial analysis.
B49	The student should be able to develop and evaluate management plans with multiple objectives and constraints.
Professional (practical) skills:	
The code	Professional (practical) skills:
C1	The student should be able to design scientific experiments to solve agricultural problems by applying modern techniques related to agricultural operations and food production.
C2	The student should be able to produce safe food for humans and animals while preserving the environment.
C3	The student should be able to prepare scientific research and studies in their field of specialization in both Arabic and English.
C4	The student should be able to conduct feasibility studies for agricultural projects using various programs.
C5	The student should be able to fulfill their national and societal role through a culture of peaceful coexistence.
C6	The student should be able to use laboratory equipment and computers to predict the spread of plant pests and diseases, operate agricultural machinery used in pest and disease control, and maintain them.
C7	The student should be able to efficiently employ modern techniques related to agricultural operations and food production to develop and improve food products, apply correct specifications and standards in the field of food science and nutrition, and analyze food composition and changes that occur in it.
C9	The student should be able to conduct applied research and use statistical programs in experimental design and data analysis in the field of food and nutrition research.
C10	The student should be able to design advisory programs to address agricultural phenomena and problems.

C13	The student should be able to plan economically viable production activities to increase agricultural productivity.
C15	The student should be able to apply standard economic principles in agricultural projects within the framework of international trade.
C16	The student should be able to collect relevant data on agricultural phenomena and problems.
C18	The student should be able to practice good agricultural practices that ensure environmental safety, maximize agricultural productivity, produce safe food, and preserve the environment.
C19	The student should be able to use agricultural resources optimally by implementing economically viable production activities to increase productivity and achieve sustainable agricultural development.
C21	The student should be able to apply modern techniques related to the management and implementation of agricultural land, water, environmental, and food production projects, adhering to professional and ethical standards.
C22	The student should be able to employ practical methods to address issues and problems in the fields of soil, water, and environmental sciences.
C23	The student should be able to apply theories of engine and tractor operation and usage.
C24	The student should be proficient in using modern techniques, managing agricultural machinery and equipment, irrigation and drainage systems, agricultural structures, greenhouses, automated service strategies, and agricultural mechanization.
C25	The student should be able to implement agricultural facility projects, land surveying and reclamation, irrigation systems, water harvesting, and good agricultural practices to maximize productivity for food security.
C26	The student should be able to select appropriate devices and equipment used in food and dairy manufacturing and analysis.
C29	The student should be able to use agricultural resources optimally to achieve sustainable agricultural development.
C34	The student should be able to monitor changes in natural phenomena such as soil deterioration, desertification, and water pollution leading to the death of beneficial organisms.
C36	The student should be able to use fertilizers and pesticides in appropriate quantities and high quality, applying suitable usage systems.
C37	The student should be able to prepare initial budgets for agricultural projects and activities.

C38	The student should be able to conduct statistical and economic analysis of the local market for planning and developing the agricultural sector.
C41	The student should be able to diagnose diseases and pests of field crops and apply an integrated management system to control them.
C45	The student should be able to manage field crop production operations under conditions of drought, rain-fed agriculture, and irrigation systems using modern techniques
Communication and Information Technology Skills:	
The code	Communication and Information Technology Skills:
D1	The student should be able to use computer software for analyzing and presenting data and information in the agricultural field.
D2	The student should be able to effectively engage in reinforcing concepts of coexistence, tolerance, and diversity, both in practice and application.
D3	The student should be able to communicate fluently and effectively in both Arabic and English within their field of specialization.
D4	The student should be able to develop their cognitive, professional, and research capabilities in their field of specialization independently.
D6	The student should be able to manage human resources and create a collaborative work environment.
D10	The student should be able to demonstrate self-directed and continuous learning abilities to develop their professional knowledge and skills.
D11	The student should be able to master problem-solving methods and time management in the agricultural mechanization field.
D12	The student should be able to use information technology to easily access and present data and information, serving their professional practice and enabling them to present information scientifically and accurately.
D14	The student should be able to keep up with the requirements of the job market by familiarizing themselves with modern developments in the field of agricultural machinery and equipment.
D16	The student should be able to efficiently handle appropriate audiovisual means for presenting specialized environmental data and information.
D17	The student should possess effective communication skills and the ability to work within specialized teams with relevant stakeholders.
D21	The student should be able to raise awareness in the community about the importance of increasing green cover as a contribution to reducing environmental pollution and improving its impact on the health, psychological, and social aspects of society.

D22	The student should possess the ability to manage human resources and create a collaborative work environment.
D23	The student should have knowledge of general agricultural issues at both the national and global levels.
D24	The student should be able to interpret quantitative information from formulas, graphs, tables, plans, simulations, and visualizations, draw conclusions from that information, and represent it symbolically, visually, and numerically.
Ethics	
The code	Positions/Beliefs (Values, Independence, Responsibility):
E1	The student should be able to propose methods for preserving the environment and natural resources within the local community.
E2	The student should be able to contribute to enhancing understanding and awareness of professionalism in work and to assume legal, ethical, and social responsibilities.
E3	The student should be able to efficiently and effectively engage in the workplace to transfer knowledge and skills to farmers and the general public.
E4	The student should be able to contribute to raising awareness among farmers and community members to reduce the use of agricultural pollutants.
E5	The student should be able to take responsibility for completing work efficiently and ensure professional ethics.
E6	The student should be able to prioritize critical analysis and critical thinking within Eastern and Arab cultural traditions.
E7	The student should be able to evaluate ethical issues using critical thinking skills.

9. Teaching and Learning Strategies

- ✓ Theoretical lectures
- ✓ Watching scientific films online (Data Show)
- ✓ Field applications
- ✓ Assigning students homework assignments.
- ✓ Implementing some lessons in laboratories that contain miniature models of agricultural machinery parts.
- ✓ Conducting summer training by sending students to relevant departments and directorates.
- ✓ Assigning students to conduct experiments and turn them into mini-research and reports.

- ✓ E-learning by assigning students to search the web engines to find solutions to field and technical problems directed to them.
- ✓ Departmental seminars held for discussion

10. Evaluation methods

- ✓ Homework assignments and solving mathematical problems.
- ✓ Giving grades based on the level of participation and interaction within the lecture.
- ✓ Writing reports after completing the application period to assess students' ability to diagnose problems and find solutions.
- ✓ Classroom seminars and reports presented and discussed by students.
- ✓ Adhering to specified deadlines for submitting assignments and required research by students.
- ✓ Daily, periodic, and final exams reflecting the student's level of interest in cognitive and skill acquisition.
- ✓ Extracurricular activities (creativity, specialization skills).

11. Faculty

Faculty Members

Academic Rank	Specialization		Special Requirements/Skills (if applicable)		Number of the teaching staff	
	General	Special			Staff	Lecturer
professor	-	Agricultural machines and machinery	-	-	3	-
Assistant Professor	-	Agricultural machines and machinery	-	-	4	-
Lecturer	-	Agricultural machines	-	-	14	-

		and machinery				
Assistant Lecturer	-	Agricultural machines and machinery	-	-	3	-

Professional Development

Mentoring new faculty members

- ✓ Developing skills to enhance self-confidence, a positive orientation towards a culture of quality, the requirements of enhancing a sense of responsibility, belief in the spirit of teamwork and its role in achievement, and developing a sense of function and ethical conscience.
- ✓ Evaluating academic courses and plans in coordination with academic departments to ensure that they meet labor market requirements.
- ✓ Possessing the skills of guiding and guiding students.
- ✓ The ability to produce educational materials according to quality specifications, including academic curricula, media, lectures and educational supplies.

Professional development of faculty members

- ✓ Developing educational skills through diversifying teaching methods, dealing positively with and practicing feedback, using educational techniques, and focusing on developing intellectual and competitive skills among students.
- ✓ Developing skills to address problems and phenomena affecting the course of the educational process in the college
- ✓ Developing the ability to evaluate academic courses and plans in coordination with academic departments to ensure that they meet labor market requirements.
- ✓ Developing the ability to measure the satisfaction of beneficiaries (faculty members, students, the community) with the educational and research process at the college.
- ✓ Evaluating tests and means of evaluating students, and preparing reports to follow up on their results.

12. Acceptance Criterion

- ✓ Students are accepted into college programs centrally through the Central Admissions Department at the Ministry of Higher Education and Scientific Research and according to the application channels approved by the Ministry.
- ✓ Students are distributed among the department's program according to the grade point average and the students' desire.
- ✓ To be physically fit and healthy based on the medical examination report
- ✓ The average of the advanced student, according to the minimum averages approved by the Ministry.

13. The most important sources of information about the program

- ✓ The main source of program information is the minutes of the Ministerial Committee of Experts for the departments corresponding to the Department of Agricultural Machinery and Machinery, which are accredited as a scientific body by the Committee of Deans of Colleges of Agriculture.
- ✓ The study prepared by the Scientific Committee and the Department Council and approved by the College Council, which includes proposals for modernizing agricultural specializations and simulating the three most important corresponding scientific departments accredited internationally.
- ✓ Local and regional market needs.

14. Program Development Plan

A plan was developed to develop the program after studying the internal review notes by the faculty members, the quality assurance committees, the department's scientific committee, the department council, the external review of the program, and the students' notes through analyzing the results of student questionnaires for the courses. Notes from the academic advisors and analysis of data from the college's questionnaire committee questionnaires and examination question evaluation reports for all courses. The program is as follows:

- ✓ Inadequate practical training

- ✓ The lack of a clear mechanism to help struggling students and motivate outstanding students
- ✓ Students' lack of familiarity with university regulations governing the educational process.

