



Academic Program Description

University Name: Tikrit University

Faculty/Institute: College of Agriculture

Scientific Department: Horticulture and Landscape

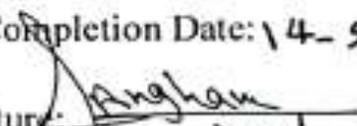
Academic or Professional Program Name: BSC.

Final Certificate Name: Bachelor in Agricultural Sciences\ Horticulture and Landscape

Academic System: Semesters

Description Preparation Date: 14-9-2025

File Completion Date: 14-9-2025

Signature: 
Dr. Angham Ayed
Head of Department Name:

Date: 14-9-2025

Signature: 
Pro. Dr. Mohammed Saleh Mohammed
Associate Dean for Scientific Affairs:

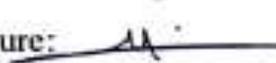
Date: 14/9/2025

The file is checked by:

Department of Quality Assurance and University Performance

Director of the Quality Assurance and University Performance Department: Dr. May Salom

Date: 14.9.2025

Signature: 




Dr. Sami

Approval of the Dean

sami khudhur saeed
Dean

1. Program Vision

Leadership in education, scientific research, and practical application in the field of horticulture and landscape engineering, contributing to smart and sustainable agriculture that supports the green economy and addresses climate change challenges.

2. Program Mission

To prepare qualified and specialized scientific cadres in horticulture and landscape engineering capable of employing smart agriculture technologies and environmental innovation, contributing to the development of the green economy through applied scientific research, community service, and the promotion of sustainable natural resource management.

3. Program Objectives

1. Develop academic curricula in line with global advancements in smart agriculture and modern technologies in horticultural production.
2. Support scientific research in sustainable agriculture and environmentally and economically efficient horticultural crop production.
3. Strengthen partnerships with governmental and private sectors and civil society to apply green economy concepts in horticultural projects.
4. Enhance students' and researchers' abilities to use modern technologies (such as precision agriculture, agricultural IoT, and artificial intelligence) to improve productivity and resource efficiency.
5. Promote biodiversity conservation and the preservation of local and traditional plant varieties within a sustainable environmental perspective.
6. Encourage green entrepreneurship in horticulture by supporting graduation projects and environmentally friendly agricultural innovation.

7. Contribute to urban beautification and the expansion of green spaces through the development of urban landscape engineering using innovative ecological solutions.
8. Provide training and service programs that meet community needs and support smart agriculture practices among farmers and agricultural engineers.

4. Program Accreditation

The Department of Horticulture and Landscape Engineering seeks to obtain national programmatic accreditation in accordance with the standards of the Ministry of Higher Education and Scientific Research through curriculum development, strengthening applied research, and improving the educational environment, thereby ensuring the quality of learning outcomes and meeting labor market requirements.

5. Other external influences

The department recognizes the nature of external factors and their impact on its performance and adopts flexible policies for strategic planning and continuous development to ensure the sustainability of program quality and the achievement of its educational and research objectives despite environmental, economic, and regulatory challenges.

6. Program Structure

Program Structure	Number of Courses	Credit hours	Percentage	Reviews•
Institution Requirements	8	8	13	
College Requirements	7	19	12	
Department Requirements	45	122	75	
Summer Training	-	-	-	There is summer training
Other	-	-	-	

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

Program Description				
Year/Level	Course Code	Course Name	Credit Hours	
			theoretical	Practica
First	HOR101	Agricultural Machinery and Equipment	2	3
First	HOR102	Plane Surveying	1	3
First	HOR103	Principles of Soil Science	2	3
First	HOR104	Mathematics	2	–
First	HOR105	General Botany	2	3
First	HOR106	Organic Chemistry	2	3
First	HOR107	Computer I	1	–
First	HOR108	Human Rights and Public Freedoms	1	–
First	HOR109	Principles of Field Crops	2	3
First	HOR110	Principles of Animal Production	2	3
First	HOR111	Principles of Food Industries	2	3
First	HOR112	Statistics	1	3
First	HOR113	Computer Applications II	–	3
First	HOR114	Principles of Agricultural Economics	2	–
First	HOR115	Crimes of the Baath Party	1	–
First	HOR116	Engineering Drawing	–	3
Second	HOR201	Principles of Microbiology	2	3
Second	HOR202	Plant Anatomy	2	3
Second	HOR203	Plant Physiology	2	3
Second	HOR204	Principles of Landscape Design	2	3
Second	HOR205	Genetics	2	3
Second	HOR206	Horticultural Entomology	1	3
Second	HOR207	Computer Applications II	–	3
Second	HOR208	Plant Nutrition	2	3
Second	HOR209	Biochemistry	2	3
Second	HOR210	Plant Ecology	2	3
Second	HOR211	Organic Agriculture	2	3
Second	HOR212	Nurseries and Propagation	2	3
Second	HOR213	Principles of Agricultural Extension	2	–
Second	HOR214	Weeds and Control Methods	2	3
Second	HOR215	Freedom and Democracy	1	–

Third	HOR301	Deciduous Fruits I	2	3
Third	HOR302	Vegetable Production I	2	3
Third	HOR303	Ornamental Plants I	1	3
Third	HOR304	Experimental Design and Analysis	2	3
Third	HOR305	Plant Growth Regulators	2	3
Third	HOR306	Medicinal and Aromatic Plants	2	3
Third	HOR307	Irrigation and Drainage	2	3
Third	HOR308	Deciduous Fruits II	2	3
Third	HOR309	Vegetable Production II	2	3
Third	HOR310	Ornamental Plants II	1	3
Third	HOR311	Beekeeping	2	3
Third	HOR312	Horticultural Plant Diseases	1	3
Third	HOR313	Plant Breeding	2	3
Third	HOR314	Computer Applications III	–	3
Fourth	HOR401	Evergreen Fruits	2	3
Fourth	HOR402	Vegetable Seed Production	2	3
Fourth	HOR403	Protected Agriculture	2	3
Fourth	HOR404	Farm Management	1	3
Fourth	HOR405	Graduation Research Project	–	3
Fourth	HOR406	Seminar	1	–
Fourth	HOR407	Grapes and Small Fruit Production	2	3
Fourth	HOR408	Date Palm Production	2	3
Fourth	HOR409	Landscape Engineering	2	3
Fourth	HOR410	Harvesting and Postharvest of Horticultural Crops	2	3
Fourth	HOR411	Tissue Culture	2	3
Fourth	HOR412	Graduation Research Project	–	3

8. Expected learning outcomes of the program

Knowledge

Graduates of the program are expected to be able to:

1. Explain the scientific foundations of horticultural sciences and horticultural crop production.
2. Interpret physiological, chemical, and biological processes in plants.
3. Distinguish soil and environmental characteristics and their effects on plant production.
4. Identify plant pests and diseases and apply scientific management methods.
5. Understand the principles of landscape design and green space planning.

Skills

Graduates of the program are expected to be able to:

1. Perform applied agricultural practices in fields, nurseries, and greenhouses.
2. Efficiently use agricultural equipment, instruments, and modern technologies.
3. Design gardens and green spaces based on scientific and engineering principles.
4. Analyze agricultural data, conduct research experiments, and interpret results.
5. Diagnose plant production problems and propose appropriate solutions.

Values

Graduates of the program are expected to demonstrate:

1. Commitment to professional agricultural ethics and scientific integrity.
2. Respect for environmental sustainability principles and conservation of natural resources.
3. Professional responsibility and teamwork spirit.
4. Community service and contribution to the development of the agricultural sector.
5. Commitment to lifelong learning and keeping pace with scientific and technological advancements.

9. Teaching and Learning Strategies

The program adopts diverse student-centered teaching and learning strategies that integrate theoretical, practical, research-based, and technological approaches, ensuring the achievement of the intended learning outcomes and the development of students' scientific and applied thinking skills.

10. Evaluation methods

The program adopts a comprehensive assessment system that includes formative, summative, practical, and research-based evaluation methods. It is grounded in clear and objective criteria to ensure accurate measurement of learning outcomes and to achieve fairness and transparency in assessing students' performance.

11. Faculty

Faculty Members

Academic Rank	Specialization		Special Requirements/Skills (if applicable)	Number of the teaching staff	Lecturer
	General	Special			
Professor	Agriculture	Horticulture		14	
Assistant Professor	Agriculture	Horticulture		4	
Lecturer	Agriculture	Horticulture		10	
Assistant Lecturer	Agriculture	Horticulture		7	

Professional Development

Mentoring new faculty members

Orientation of New Faculty Members

The program is committed to providing a supportive academic environment for newly appointed faculty members to ensure their effective integration into the educational and research system. This is achieved through:

An academic orientation program introducing the program's mission, objectives, and learning outcomes. A faculty handbook outlining academic policies, assessment systems, and teaching regulations.

Professional development of faculty members

The program adopts a sustainable professional development plan aimed at enhancing faculty members' scientific, teaching, research, and technical competencies through training, conferences, research collaboration, and the use of modern technologies.

12. Acceptance Criterion

The program adopts clear and objective admission criteria that align with national admission regulations and ensure the selection of academically qualified students capable of fulfilling the program requirements and achieving its learning outcomes.

13. The most important sources of information about the program

The program provides diverse and up-to-date educational and research resources—print, electronic, and practical—to support learning and ensure the achievement of learning outcomes in line with academic quality standards.

14. Program Development Plan

The program follows a continuous development plan based on periodic performance analysis and indicators, aligned with academic quality standards and labor market needs, to enhance learning outcomes and achieve institutional excellence.

Fourth	HOR410	Harvesting and Postharvest of Horticultural Crops	Basic	*	*	*	*	*	*	*	*	*	*	*	*
Fourth	HOR411	Tissue Culture	Basic	*	*	*	*	*	*	*	*	*	*	*	*
Fourth	HOR412	Graduation Research Project	Basic	*	*	*	*	*	*	*	*	*	*	*	*

*Please tick the boxes corresponding to the individual program learning outcomes under evaluation.

