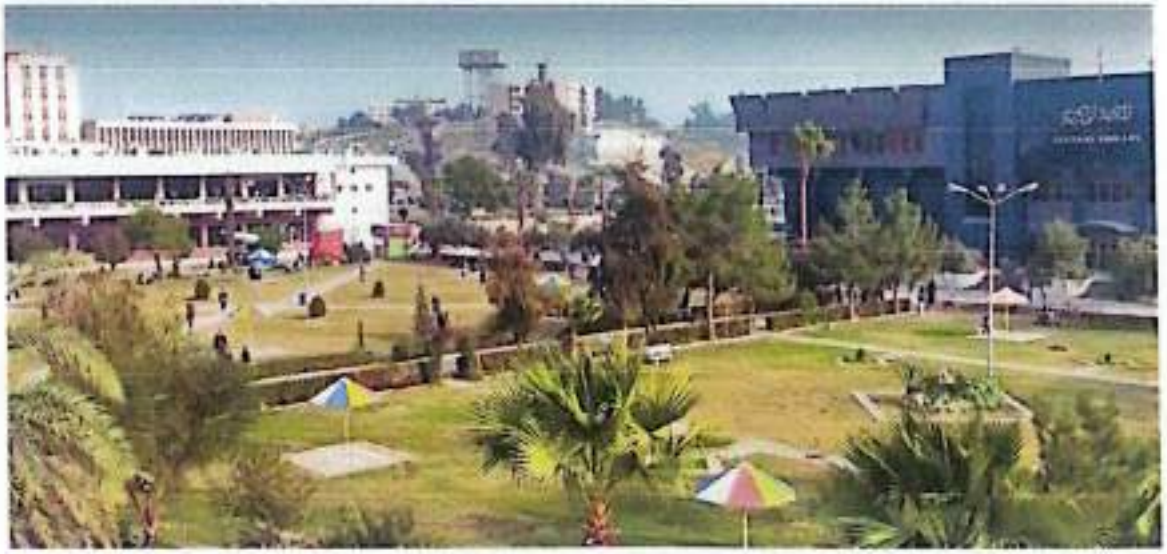
University of Mosul

جامعة الموصل

First Cycle – Bachelor's degree (B.Sc.) – Forest science

Agricultural Extension and Technology transfer

بكالوريوس علوم زراعة - الارشاد الزراعي ونقل التقنيات



جامعة الموصل
كلية الزراعة والغابات
قسم الإرشاد الزراعي ونقل التقنيات

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1. Overview

This catalogue is about the courses (modules) given by the program of Agricultural sciences to gain the Bachelor of Agricultural Extension degree. The program delivers (xx) Modules with (6000) total student workload hours and 240 total ECTS. The module delivery is based on the Bologna Process.

2. Undergraduate Courses 2023-2024

Module 1

Code	Course/Module Title	ECTS	Semester
UOM1031	COMPUTER 1	3	1
Class (hr/w)	**Lect/Lab./Prac./Tutor**	**SSWL (hr/sem)**	**USWL (hr/w)**
0	3	47	28
Description			
The "Computer Skills" module is designed to equip students with essential computing knowledge and practical skills needed for academic and professional success. It covers key areas such as basic computer operations, word processing, spreadsheet management, and presentation software. Students will also gain familiarity with internet navigation, email usage, and data management tools. The module introduces fundamental concepts in computer security, cloud computing, and the use of collaborative tools for teamwork. By the end of the course, students will be able to effectively use software applications to organize, analyze, and present information, while also understanding the ethical and secure use of technology in a modern digital environment			

Module 2

Code	Course/Module Title	ECTS	Semester
UOM1040	DEMOCRACY and HUMAN RIGHTS	2.00	1
Class (hr/w)	**Lect/Lab./Prac./Tutor**	**SSWL (hr/sem)**	**USWL (hr/w)**
2	0	32	18
Description			

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The "Democracy and Human Rights" module explores the fundamental principles and concepts underlying democratic governance and the protection of human rights. Students will study the evolution of democracy, different democratic systems, and the roles of institutions in promoting participation, transparency, and accountability. The course also addresses key human rights issues, including civil, political, social, and economic rights, as well as international frameworks that protect these rights. Through case studies and discussions, students will analyze the challenges facing democracy and human rights in different regions and contexts. By the end of the module, students will have a deeper understanding of the interconnection between democratic values and human rights, and the importance of safeguarding these principles in modern society

Module 3

Code	Course/Module Title	ECTS	Semester
UOM1021	ENGLISH LANGUAGE1	2.00	1
Class (hr/w)	**Lect/Lab./Prac./Tutor**	**SSWL (hr/sem)**	**USWL (hr/w)**
2	0	32	18
Description			
The "English Language" module is designed to enhance students' proficiency in English, focusing on the four essential language skills: listening, speaking, reading, and writing. It provides a comprehensive approach to language learning, covering grammar, vocabulary, pronunciation, and sentence structure. Through interactive activities, such as discussions, presentations, and written assignments, students will improve their ability to communicate effectively in academic, professional, and social contexts. The module also emphasizes comprehension and analysis of texts, both written and spoken, to develop critical thinking skills. By the end of the course, students will have gained confidence in using English in various settings and will be better prepared for further academic studies and global communication.			

Module 4

Code	Course/Module Title	ECTS	Semester
MAT1010	MATHEMATICS	7.00	1
Class (hr/w)	**Lect/Lab./Prac./Tutor**	**SSWL (hr/sem)**	**USWL (hr/w)**
2	2	63	112
Description			
The "Mathematics" module provides students with a strong foundation in essential mathematical concepts and problem-solving techniques. Covering topics such as algebra, geometry, calculus, and statistics, the course emphasizes both theoretical understanding and practical application. Students will develop critical thinking and analytical skills, enabling them to tackle complex mathematical problems in various fields. Through exercises and real-world examples, the module aims to enhance logical reasoning and quantitative skills, preparing students for further studies and professional applications in science, engineering, economics, and more.			

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Module 5

Code	Course/Module Title	ECTS	Semester
ACE1020	AGRICULTURE CAREER ETHICS	5.00	1
Class (hr/w)	**Lect/Lab./Prac./Tutor**	**SSWL (hr/sem)**	**USWL (hr/w)**
2	2	62	63
Description			
The " AGRICULTURE CAREER ETHICS " module introduces students to the ethical principles and responsibilities relevant to agricultural professionals. The course covers topics such as sustainability, environmental stewardship, tree welfare, and fair labor practices. Students will explore the ethical challenges faced in modern agriculture, including the impact of agricultural practices on ecosystems and society. Through case studies and discussions, the module encourages critical thinking about moral issues and promotes a commitment to ethical decision-making in agricultural practices. By the end of the course, students will understand the importance of ethics in fostering sustainable and responsible agricultural development.			

Module 6

Code	Course/Module Title	ECTS	Semester
END1030	ENGINEERING DRAWING	6	1
Class (hr/w)	**Lect/Lab./Prac./Tutor**	**SSWL (hr/sem)**	**USWL (hr/w)**
1	3	63	87
Description			
The "Engineering Drawing" module equips students with the fundamental skills of technical drawing, essential for all engineering disciplines. It covers basic principles of orthographic projection, isometric views, and sectional drawings. Students will learn how to interpret and create accurate engineering drawings, focusing on line work, dimensions, scaling, and geometric tolerances. The module also introduces the use of computer-aided design (CAD) software, enabling students to produce precise technical diagrams. By the end of the course, students will be proficient in visualizing and communicating design concepts, preparing them for advanced engineering tasks.			

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Module 7

Code	Course/Module Title	ECTS	Semester
AET1040	AGRICULTRAL ENGINEERING TECHNIQUES TRANSFER	5.00	1
Class (hr/w)	**Lect/Lab./Prac./Tutor**	**SSWL (hr/sem)**	**USWL (hr/w)**
2	2	63	62
Description			

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The "Agricultural Engineering Techniques Transfer" module focuses on the application and dissemination of modern engineering solutions in agriculture. It covers the principles of technology transfer, including the adoption of advanced machinery, irrigation systems, and precision farming tools. Students will learn how to assess and implement engineering techniques that enhance agricultural productivity and sustainability. The module emphasizes communication skills for effectively transferring knowledge to farmers and agricultural stakeholders. By the end of the course, students will be prepared to bridge the gap between agricultural research and practical field applications, promoting innovation in the agricultural sector.

Module 8

Code	Course/Module Title	ECTS	Semester
UOM1011	ARABIC LANGUAGE	2.00	2
Class (hr/w)	**Lect/Lab./Prac./Tutor**	**SSWL (hr/sem)**	**USWL (hr/w)**
2	0	32	18
Description			
The "Arabic Language" module is designed to develop students' proficiency in reading, writing, speaking, and listening in Arabic. It covers essential grammar, vocabulary, and sentence structure while emphasizing both classical and modern Arabic. Through various texts, writing exercises, and oral activities, students will enhance their communication skills and cultural understanding. The course also focuses on improving comprehension of complex texts and refining formal and informal writing styles. By the end of the module, students will have strengthened their ability to use Arabic effectively in academic, professional, and social contexts.			

Module 9

Code	Course/Module Title	ECTS	Semester
BSS1050	BIOSAFETY and SECURITY	3.00	2
Class (hr/w)	**Lect/Lab./Prac./Tutor**	**SSWL (hr/sem)**	**USWL (hr/w)**
1	2	47	28
Description			
The "Biosafety and Security" module provides students with an understanding of the principles and practices necessary to ensure safety in biological research and biotechnology. It covers topics such as risk assessment, containment strategies, and the safe handling of biological materials. Students will explore the ethical and legal frameworks governing biosafety, as well as the potential threats of biological hazards and biosecurity risks. The module emphasizes the importance of implementing proper protocols to protect both public health and the environment. By the end of the course, students will be equipped with the knowledge to manage biosafety in laboratory and field settings.			

Module 10

Code	Course/Module Title	ECTS	Semester

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AGS1060	AGRICULTURAL STATISTICS	5.00	2
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/w)
2	3	78	47
Description			
The "Agricultural Statistics" module introduces students to the statistical methods and tools used in agricultural research and data analysis. Topics covered include data collection, probability, hypothesis testing, regression analysis, and experimental design. Students will learn how to apply statistical techniques to solve real-world agricultural problems, such as crop yield analysis, soil quality assessment, and livestock management. The course emphasizes the interpretation of statistical results to inform decision-making in agricultural practices. By the end of the module, students will be able to analyze and interpret agricultural data, supporting evidence-based approaches in farming and research.			

Module 11

Code	Course/Module Title	ECTS	Semester
BIO1070	BIODIVERSITY	5.00	2
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/w)
2	2	63	62
Description			
The "Biodiversity" module explores the variety of life forms on Earth and their ecological significance. Students will study the different levels of biodiversity, including genetic, species, and ecosystem diversity, and their roles in maintaining ecosystem health and resilience. The course covers key concepts such as habitat conservation, the impacts of human activities on biodiversity, and strategies for sustainable management. Through case studies and fieldwork, students will learn about the importance of preserving biodiversity for food security, environmental stability, and human well-being. By the end of the module, students will appreciate the complex interrelationships among species and the need for conservation efforts.			

Module 12

Code	Course/Module Title	ECTS	Semester
AGI1080	AGRICULTURAL INFORMATICS	5.00	2
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/w)
2	1	63	62
Description			
The "Agricultural Informatics" module focuses on the integration of information technology and data			

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management in the agricultural sector. Students will learn about the tools and techniques used to collect, analyze, and interpret agricultural data, including Geographic Information Systems (GIS), remote sensing, and data analytics. The course emphasizes the role of informatics in improving decision-making, enhancing productivity, and promoting sustainable agricultural practices. Through practical exercises and case studies, students will develop skills in managing agricultural information systems and utilizing technology for precision farming and resource management. By the end of the module, students will be equipped to leverage informatics in addressing contemporary agricultural challenges.

Module 13

Code	Course/Module Title	ECTS	Semester
SUD1090	SUSTANIBLE DEVELOPMENT	5.00	2
Class (hr/w)	**Lect/Lab./Prac./Tutor**	**SSWL (hr/sem)**	**USWL (hr/w)**
2	0	62	63
Description			
The "Sustainable Development" module explores the principles and practices essential for achieving a balance between environmental, social, and economic sustainability. Students will study key concepts such as the United Nations Sustainable Development Goals (SDGs), resource management, and community engagement. The course examines the interconnections between human activities and environmental health, focusing on strategies to address challenges such as climate change, biodiversity loss, and poverty. Through case studies and project-based learning, students will develop critical thinking and problem-solving skills to promote sustainable practices in various sectors. By the end of the module, students will be prepared to contribute to sustainable development initiatives locally and globally.			

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Module 14

Code	Course/Module Title	ECTS	Semester
AMT1100	AGRICULTURAL MARKETING TECHNIQUES	5.00	2
Class (hr/w)	**Lect/Lab./Prac./Tutor**	**SSWL (hr/sem)**	**USWL (hr/w)**
2	0	32	93
Description			
The "Agricultural Marketing Techniques" module provides students with a comprehensive understanding of marketing principles specific to the agricultural sector. It covers key topics such as market analysis, consumer behavior, pricing strategies, and distribution channels for agricultural products. Students will learn effective techniques for promoting and selling crops, livestock, and other agricultural goods in domestic and international markets. The course emphasizes the importance of branding, quality assurance, and sustainable practices in marketing. Through case studies and practical exercises, students will develop skills to create effective marketing plans and strategies that enhance competitiveness and profitability in the agricultural industry.			

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Module 15

Code	Course/Module Title	ECTS	Semester
UOM1012	ARABIC LANGUAGE2	2.00	3
Class (hr/w)	**Lect/Lab./Prac./Tutor**	**SSWL (hr/sem)**	**USWL (hr/w)**
2	0	32	18
Description			
The "Arabic Language2" module is designed to develop students' proficiency in reading, writing, speaking, and listening in Arabic. It covers essential grammar, vocabulary, and sentence structure while emphasizing both classical and modern Arabic. Through various texts, writing exercises, and oral activities, students will enhance their communication skills and cultural understanding. The course also focuses on improving comprehension of complex texts and refining formal and informal writing styles. By the end of the module, students will have strengthened their ability to use Arabic effectively in academic, professional, and social contexts.			

Module 16

Code	Course/Module Title	ECTS	Semester
UOM2050	The CRIMES of the BATH REGIME in IRAQ	2.00	3
Class (hr/w)	**Lect/Lab./Prac./Tutor**	**SSWL (hr/sem)**	**USWL (hr/w)**
2	0	32	18
Description			
The "Crimes of the Ba'ath Regime in Iraq" module examines the human rights abuses and atrocities committed during the rule of the Ba'ath Party. Students will explore key events such as the Anfal Campaign, chemical attacks, mass executions, and the suppression of political dissent. The module also delves into the legal, social, and historical context of the regime's actions, analyzing the impact on various ethnic and religious groups. By studying testimonies, legal documents, and historical accounts, students will gain a deeper understanding of the regime's legacy and its consequences for Iraq and the wider region.			

Module 17

Code	Course/Module Title	ECTS	Semester
IPM2110	INTEGRATED PEST MANAGEMENT	5.00	3
Class (hr/w)	**Lect/Lab./Prac./Tutor**	**SSWL (hr/sem)**	**USWL (hr/w)**
2	2	63	62

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Description
The "Integrated Pest Management" (IPM) module focuses on sustainable and environmentally friendly approaches to managing agricultural pests. Students will learn about the principles of IPM, which combines biological, cultural, mechanical, and chemical methods to control pests while minimizing harm to ecosystems. The course covers pest identification, monitoring techniques, and decision-making processes to implement effective pest control strategies. Emphasis is placed on reducing pesticide use and promoting natural predators. By the end of the module, students will be equipped with the knowledge and skills to design and apply integrated pest management plans that enhance crop production and protect the environment.

Module 18

Code	Course/Module Title	ECTS	Semester
AEM2120	AGRICULTRAL ENGINEERING PROJECT MANAGEMENT	2	3
Class (hr/w)	**Lect/Lab./Prac./Tutor**	**SSWL (hr/sem)**	**USWL (hr/w)**
2	2	78	72
Description			
The "Agricultural Engineering Project Management" module provides students with the skills and knowledge necessary to plan, execute, and manage engineering projects in the agricultural sector. Topics covered include project planning, resource allocation, budgeting, risk management, and the use of modern project management tools. The course emphasizes effective communication, leadership, and decision-making skills to ensure successful project outcomes. Students will learn how to manage various agricultural projects, such as irrigation systems, farm infrastructure, and machinery installation. By the end of the module, students will be capable of overseeing complex agricultural engineering projects from conception to completion.			

Module 19

Code	Course/Module Title	ECTS	Semester
DAE2160	DESIGN AND ANALYSIS of EXPERIMENTS	5.00	3
Class (hr/w)	**Lect/Lab./Prac./Tutor**	**SSWL (hr/sem)**	**USWL (hr/w)**
2	2	63	62
Description			
The "Design and Analysis of Experiments" module introduces students to the principles and methodologies used in planning, conducting, and analyzing scientific experiments. The course covers key topics such as experimental design, randomization, replication, and the analysis of variance (ANOVA). Students will learn how to create experiments that yield valid, reliable results and how to analyze data using statistical methods to draw meaningful conclusions. Emphasis is placed on practical applications in agricultural and biological research. By the end of the module, students will be able to			

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design robust experiments and interpret experimental data for research and decision-making.

Module 20

Code	Course/Module Title	ECTS	Semester
APT2140	AGRICULTURAL PRODUCTION TECHNOLOGIES	5.00	3
Class (hr/w)	**Lect/Lab./Prac./Tutor**	**SSWL (hr/sem)**	**USWL (hr/w)**
2	2	63	62
Description			
The "Agricultural Production Technologies" module introduces students to the latest innovations and technologies used to enhance agricultural productivity and sustainability. Topics include precision farming, advanced irrigation systems, greenhouse technologies, and the use of biotechnology in crop and livestock production. Students will explore how these technologies optimize resource use, improve yields, and reduce environmental impacts. The course also covers the integration of digital tools like drones, sensors, and data analytics to monitor and manage agricultural processes. By the end of the module, students will be equipped with practical knowledge of cutting-edge technologies to improve efficiency in agricultural production.			

Module 21

Code	Course/Module Title	ECTS	Semester
FTP2150	FOOD TECHNOLOGIES and HEALTH AGRICULTRAL PRODUCTS	5.00	3
Class (hr/w)	**Lect/Lab./Prac./Tutor**	**SSWL (hr/sem)**	**USWL (hr/w)**
2	2	63	62
Description			
The "Food Technologies and Health Agricultural Products" module focuses on the processing, preservation, and safety of agricultural products to ensure high nutritional value and quality. Students will learn about modern food technologies used in the production of healthy and safe food, including techniques like pasteurization, canning, drying, and packaging. The course also covers the impact of these technologies on the nutritional content of food, as well as regulations and standards for food safety. By the end of the module, students will understand how to apply advanced food technologies to produce health-focused agricultural products that meet consumer demands.			

Module 22

Code	Course/Module Title	ECTS	Semester
UOM2022	ENGLISH LANGUAGE2	2.00	4

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Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/w)
2	0	32	18

Description
The "English Language2" module is designed to enhance students' proficiency in English, focusing on the four essential language skills: listening, speaking, reading, and writing. It provides a comprehensive approach to language learning, covering grammar, vocabulary, pronunciation, and sentence structure. Through interactive activities, such as discussions, presentations, and written assignments, students will improve their ability to communicate effectively in academic, professional, and social contexts. The module also emphasizes comprehension and analysis of texts, both written and spoken, to develop critical thinking skills. By the end of the course, students will have gained confidence in using English in various settings and will be better prepared for further academic studies and global communication.

Module 23

Code	Course/Module Title	ECTS	Semester
UOM2032	COMPUTER SKILLS2	3.00	4
Class (hr/w)	**Lect/Lab./Prac./Tutor**	**SSWL (hr/sem)**	**USWL (hr/w)**
2	3	47	28

Description
The "Computer Skills2" module is designed to equip students with essential computing knowledge and practical skills needed for academic and professional success. It covers key areas such as basic computer operations, word processing, spreadsheet management, and presentation software. Students will also gain familiarity with internet navigation, email usage, and data management tools. The module introduces fundamental concepts in computer security, cloud computing, and the use of collaborative tools for teamwork. By the end of the course, students will be able to effectively use software applications to organize, analyze, and present information, while also understanding the ethical and secure use of technology in a modern digital environment

Module 24

Code	Course/Module Title	ECTS	Semester
APT2130	AGRICULTURAL PRODUCTION MECHANIZATION TECHNIQUES	5.00	4
Class (hr/w)	**Lect/Lab./Prac./Tutor**	**SSWL (hr/sem)**	**USWL (hr/w)**
2	2	63	62

Description
The "Agricultural Production Mechanization Techniques" module focuses on the use of machinery and

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technology to enhance the efficiency and productivity of agricultural operations. Students will study various mechanization techniques, including the use of tractors, harvesters, irrigation systems, and planting equipment. The course covers the principles of machine operation, maintenance, and safety, along with the economic and environmental impacts of mechanization. Emphasis is placed on selecting appropriate machinery for different farming tasks to optimize production. By the end of the module, students will be able to apply modern mechanization techniques to improve agricultural processes and sustainability.

Module 25

Code	Course/Module Title	ECTS	Semester
DPF2170	DESIGN and PLANNING of AGRICULTURAL FACILITIES	5.00	4
Class (hr/w)	**Lect/Lab./Prac./Tutor**	**SSWL (hr/sem)**	**USWL (hr/w)**
2	2	63	62
Description			
The "Design and Planning of Agricultural Facilities" module focuses on the principles of designing and developing efficient and sustainable infrastructure for agricultural operations. Students will learn how to plan and design key facilities such as storage buildings, greenhouses, irrigation systems, livestock housing, and processing units. The course emphasizes factors like cost-efficiency, environmental impact, and functionality in agricultural production. Topics also include site selection, layout optimization, and the use of modern materials and technologies. By the end of the module, students will be equipped to plan and design agricultural facilities that enhance productivity and sustainability.			

Module 26

Code	Course/Module Title	ECTS	Semester
BEI180	Beneficial insects	5.00	4
Class (hr/w)	**Lect/Lab./Prac./Tutor**	**SSWL (hr/sem)**	**USWL (hr/w)**
2	2	63	62
Description			
The course includes theoretical lectures and practical experiments, which helps students understand the importance of these organisms in daily life and the environment and focuses on studying insects that play a positive role in the environment. The course covers a range of topics, such as. Insect classification: defining different species and how to classify them. The role of insects in ecological balance: studying how insects affect the environment, such as pollinating plants and decomposing organic matter. Insects as pest control agents: reviewing how insects are used to naturally control agricultural pests. Insect farming: techniques for raising beneficial insects in agriculture and environmental projects. Economic impacts: how the economy benefits from beneficial insects in agriculture and industry.			

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Module 27

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BIA2200	BIOCHEMICAL ANALYSIS	5.00	4
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/w)
2	2	63	62
Description			
The " Biochemical Analysis" module introduces students to the principles and techniques used in the biochemical analysis of agricultural products and processes. The course covers experimental design, sample preparation, and the application of various analytical methods, including chromatography, spectroscopy, and enzymatic assays. Students will learn to assess the composition and quality of food, soil, and plant materials through biochemical analysis. Emphasis is placed on interpreting results and understanding their implications for agricultural practices and food safety. By the end of the module, students will be equipped to design and conduct experiments that enhance biochemical understanding in agricultural contexts.			

Module 28

Code	Course/Module Title	ECTS	Semester
AWE2210	AGRICULTURAL WASTE TREATMENT ENGINEERING	5.00	4
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/w)
2	2	63	62
Description			
Definition of waste management and basic principles. Introduction with agricultural wastes and their utilization. Introduction with best management practices in agriculture. Definition of different waste management methods like MBO, landfilling, composting and incineration. Investigate the benefits of waste management in farms. Investigate environmental impacts of traditional farming and agriculture. Analyze and discuss Sustainable development and agriculture			

Module 29

Code	Course/Module Title	ECTS	Semester
MAP3500	MEDIA and AGRECULTURAL PRESS	2.00	5
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/w)
3	2	48	2
Description			
The " MEDIA and AGRECULTURAL PRESS " Learn about radio training, How to conduct a radio and television dialogue, How to do a radio investigation. For the student to become familiar with agricultural media and print agricultural journalism For rural women Practical, understand the duties of agricultural journalism, the services it provides, and its arts Practical. The student should know how			

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agricultural news is processed and how a fact-based investigation is conducted. The student should conduct an agricultural press interview and newspaper headlines Practical. The student should know what a press photo is and what are the characteristics of a good press photo, For the student to become familiar with the rules of reviewing journalistic materials. Characteristics and abilities of a journalist writer and how to write a good journalistic text, The student should become familiar with agricultural extension publications and design an agricultural extension leaflet Practical

Module 30

Code	Course/Module Title	ECTS	Semester
CCM3510	Communication	3.00	5
Class (hr/w)	**Lect/Lab./Prac./Tutor**	**SSWL (hr/sem)**	**USWL (hr/w)**
3	2	63	12
Description			
The student gets to know the concept of communication, its forms and types , The student get know the means of communication .The student should be able to plan the elements of communication process. The student should recognize the rates by which a person recei information according to the senses . The student understands the components of communication process . The student should be able to distinguish between for communication and informal communication, and be able to employ forms of communicat and explain the extent of their impact on farmers.			

Module 31

Code	Course/Module Title	ECTS	Semester
EDP3520	EDUCATIONAL PSYCHOLOGY	5.00	5
Class (hr/w)	**Lect/Lab./Prac./Tutor**	**SSWL (hr/sem)**	**USWL (hr/w)**
3	2	63	62
Description			
the student gets acquainted with what educational psychology is . the student is familiar with fields of educational psychology . the student defines the goals of educational psychology , the stud gets acquainted with what educational psychology is , the student is familiar with the field educational psychology the student defines the goals of educational psychology			

Module 32

Code	Course/Module Title	ECTS	Semester
RUL3530	RURAL LEADERSHIP	5.00	5

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Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/w)
3	2	63	62

Description
To show the contents of Rural Leadership . To recognize the leadership and presidency and the difference between them . To explain the importance of leadership in guidance work . To define rural leadership roles . To be familiar with rural leadership roles . To be familiar with the most important procedures for determining rural driving patterns

Module 33

Code	Course/Module Title	ECTS	Semester
GRD3540	GROUPS DYNAMIC	5.00	5
Class (hr/w)	**Lect/Lab./Prac./Tutor**	**SSWL (hr/sem)**	**USWL (hr/w)**
3	2	63	62

Description
the student gets acquainted with the concept of Group dynamics . the student describes a relations Group dynamics in psychology The meeting , the student knows the details Field study the student compares the group dynamics Internal& external . the student mentions the benefits Group dynam describes the student By natural experimentation ,the student knows what a group is .the student draws up a list of characteristics of the group , the student explains the importance of the group

Module 34

Code	Course/Module Title	ECTS	Semester
SRM3550	SOCIAL RESEARCH METHODS	5.00	5
Class (hr/w)	**Lect/Lab./Prac./Tutor**	**SSWL (hr/sem)**	**USWL (hr/w)**
3	2	63	62

Description
For the student to become familiar with science and knowledge . : The student learns about sc research methods. The student said Distinguish between research Natural and social . That student understands the mechanism of scientific research and its rationale , The student understa the steps for carrying out scientific research. For the student to become familiar with the b scientific steps of practical research

Module 35

Code	Course/Module Title	ECTS	Semester

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SFT3240	STATISTICAL FARM TECHNOLOGY	5.00	5
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/w)
3	2	63	62
Description			
it provides a unique learning experience that is both engaging and relevant. It helps them understand the connection between their actions and the environment, fostering a sense of responsibility and stewardship. It also equips them with practical skills that can be applied in various fields, not just agriculture. Understand the principles of sustainable agriculture. Learn advanced crop cultivation and management techniques. Develop skills in natural resource management and conservation. Emphasize integrated pest and disease control. Prepare students to implement sustainable practices on their agricultural operations.			

Module 36

Code	Course/Module Title	ECTS	Semester
TRC3560	THURIES RURAL CHANGE	4.00	6
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/w)
3	2	48	52
Description			
shows the contents and forms of social change, to identify the basic requirements at the preliminary stage and the basic steps of social change . to explain the types of change and social mechanisms the student should plan the planning stage of the change process , to be aware of the manifestations of social change , to evaluate the entrances to the implementation of processes and procedures of social change to explain the process of social change and the difficulties facing the process of change the student should identify the basic needs in the implementation of the program intended to bring about change			

Module 37

Code	Course/Module Title	ECTS	Semester
EFY3570	EXTENSION for RURAL WOMAN and RURAL YOUTH	5.00	6
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/w)
3	1	63	62
Description			
The student learns about the concept of counseling for rural women , The student should be abl understand the reality of rural women and ways to develop them For the student to understand obstacles to women's participation in development activities . The student should be able to evalu the , role of civil society organizations in the development of rural women The student identifies			

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problems of rural women The student should be able to identify the role that rural women pla agricultural development

Module 38

Code	Course/Module Title	ECTS	Semester
MEA3580	METHODS and EXTINSION AIDS	5.00	6
Class (hr/w)	**Lect/Lab./Prac./Tutor**	**SSWL (hr/sem)**	**USWL (hr/w)**
3	1	63	62
Description			
To familiarize the student with the methods and means of Agricultural extension, and to get acquainted with the concept of methods and means of extension .To get acquainted with the conditions for using the means and guidance AIDS , Selection of methods and guidance AIDS, methods of individual communication, field and home visits , The concept of AIDS , the importance of means in the instructional process . Terms of use of means and guidance AIDS, social networking sites as one of the modern guidance technologies			

Module 39

Code	Course/Module Title	ECTS	Semester
EXM3590	EXTENSION MANAGEMENT	5.00	6
Class (hr/w)	**Lect/Lab./Prac./Tutor**	**SSWL (hr/sem)**	**USWL (hr/w)**
3	1	63	62
Description			
To get acquainted with the vocabulary of management the importance of management the task of management the definition of management the functions of management ,To get acquainted with the methods of scientific management Understands the management process and the achievement of management objectives and organizational resources. Understand how to achieve the goals of the administrative process and organizational resources , To get acquainted with the classical theories of management and organization and bureaucratic theory, To distinguish the steps of the implementation of classical theories and bureaucratic theory			

Module 40

Code	Course/Module Title	ECTS	Semester
MEM3600	MESURMENT METHODS	5.00	6
Class (hr/w)	**Lect/Lab./Prac./Tutor**	**SSWL (hr/sem)**	**USWL (hr/w)**
3	1	63	62

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Description
The student gets to know the concept measurement , For the student to compare two concepts Measurement in behavioral sciences and natural . The student should know the nature of measurement i behavioral sciences To enumerate the student Measurement properties in behavioral sciences , My theor The student knows the levels measurement practical: To give the student examples of types Measurem and their levels , For the student to get to know Variables and their types The student should distinguish between Variables And its types

Module 41

Code	Course/Module Title	ECTS	Semester
SAE3610	SPECIALIST AGRICULTURAL EXTINSION	5.00	6
Class (hr/w)	**Lect/Lab./Prac./Tutor**	**SSWL (hr/sem)**	**USWL (hr/w)**
3	1	63	62
Description			
This unique learning opportunity will feature a flipped model where materials that are read or watched before each live session will provide the background for interactive sessions and panel discussions, allowing participants to learn from each other, from Extension experts and practitioners. Assessing community needs and setting program priorities, Use of information and communication tools (ICT) and educational technology in agricultural extension. Models of Extension worldwide .Extension programming for agricultural crops and integrated pest management. Linking farmers to market			

Module 42

Code	Course/Module Title	ECTS	Semester
SEM3260	SEMINARS	1.00	7
Class (hr/w)	**Lect/Lab./Prac./Tutor**	**SSWL (hr/sem)**	**USWL (hr/w)**
3	1	17	8
Description			
The "Seminars" module is designed to enhance students' critical thinking, research, and presentation skills through a series of interactive discussions and presentations on contemporary topics in forestry and environmental science. Students will engage with faculty, industry experts, and peers to explore current research trends, challenges, and innovations within the field. The module emphasizes the importance of effective communication and the ability to articulate ideas clearly and confidently. Participants will present their findings from individual research projects and receive constructive feedback, fostering a collaborative learning environment. By the end of the module, students will be well-prepared for professional discussions and academic discourse in their careers.			

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Module 43

Code	Course/Module Title	ECTS	Semester
EXT4620	EXTENSION TRAINING	3.00	7
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/w)
4	1	63	12
Description			
To define the concept of training, to define the objectives of Agricultural Extension Training , To be familiar with the implementation of extension training programs, and to identify the important things that should be taken into account when implementing the training program .To define the concepts of education and training, to compare education and training To clarify the most important procedures when determining the schedule of education and training			

Module 44

Code	Course/Module Title	ECTS	Semester
EPP4630	EXTENSION PROGRAMS PLANNING	5.00	7
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/w)
4	1	63	62
Description			
By the end of the course the student should be able to recognize, understand and apply procedures related to Planning of extension programs ,			

Module 45

Code	Course/Module Title	ECTS	Semester
WCT4320	WEED CONTROL TECHNOLOGY	5.00	7
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/w)
4	1	63	62
Description			
Defines, enumerates and explains the jungles, their benefits and their harms . The division and classification of jungle plants is counted . Defines the regionalization and enumerates the qualities related to the regionalization and the means of the spread of the weed , Explains the characteristics of the weed plants related to adaptation , Defines the life antibodies (known the life antibodies, the number of places where the anti-life materials are present) , B8: Enumerates the different			

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breeding methods of weed plants , Describes the ways of entry of antibiotic substances (explain the ways of entering the antibiotic substances into the environment, explain the methods of washing and volatilization) , Explains the effect of stillness on weed plants

Module 46

Code	Course/Module Title	ECTS	Semester
AEA4640	AGRICULTURAL EXTENSION APPROACHES	5.00	7
Class (hr/w)	**Lect/Lab./Prac./Tutor**	**SSWL (hr/sem)**	**USWL (hr/w)**
4	2	63	62
Description			
By the end of the course the student should be able to recognize, understand and apply procedures related to Agriculture extension approaches , By the end of the course the student should be able to recognize, understand and apply procedures related to Agriculture extension approaches , By the end of the course the student should be able to recognize, understand and apply procedures related to Agriculture extension approaches , By the end of the course the student should be able to recognize, understand and apply procedures related to Agriculture extension approaches , By the end of the course the student should be able to recognize, understand and apply procedures related to Agriculture extension approaches			

Module 47

Code	Course/Module Title	ECTS	Semester
EXE4650	EXTENSION ECOLOGY	5.00	7
Class (hr/w)	**Lect/Lab./Prac./Tutor**	**SSWL (hr/sem)**	**USWL (hr/w)**
4	1	63	62
Description			
To know and understand the vocabulary of the environment and the agricultural extension system . To explain the concepts of the environment and the types of agricultural extension systems , To know the importance of the environment and the factors of the extension environment . To know and enumerate the functions and types of environment . To identify, enumerate, distinguish and compare types of environments Various Guidelines , to know and understand how to coexist with different environments.			

Module 48

Code	Course/Module Title	ECTS	Semester
ADE4660	ADULT EDUCATION	5.00	7
Class (hr/w)	**Lect/Lab./Prac./Tutor**	**SSWL (hr/sem)**	**USWL (hr/w)**

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4	1	63	62
Description			
By the end of the course the student should be able to recognize, understand and apply procedures related to adult education .			

Module 49

Code	Course/Module Title	ECTS	Semester
AEP4290	AGRICULTRUAL ENGINEERING PROJECT1	2.00	8
Class (hr/w)	**Lect/Lab./Prac./Tutor**	**SSWL (hr/sem)**	**USWL (hr/w)**
4	3	47	3
Description			
The "Agricultural Engineering Project" module provides students with hands-on experience in applying engineering principles to solve real-world agricultural problems. Throughout the course, students will work on individual or group projects that focus on designing, developing, and implementing innovative solutions in areas such as irrigation systems, machinery design, and sustainable farming practices. Emphasis will be placed on project planning, resource management, and technical communication. Students will also engage in critical analysis and evaluation of their designs through feedback and peer review. By the end of the module, participants will gain valuable skills in project management and practical engineering applications within the agricultural sector.			

Module 50

Code	Course/Module Title	ECTS	Semester
EPE4670	EXTENSION PROGRAMS EVALUATION	3.00	8
Class (hr/w)	**Lect/Lab./Prac./Tutor**	**SSWL (hr/sem)**	**USWL (hr/w)**
4	1	63	12
Description			
By the end of the course the student should be able to recognize, understand and apply procedures related to Evaluation of extension programs , By the end of the course the student should be able to recognize, understand and apply procedures related to Evaluation of extension programs , By the end of the course the student should be able to recognize, understand and apply procedures related to Evaluation of extension programs . By the end of the course the student should be able to recognize , understand and apply procedures related to Evaluation of extension programs			

Module 51

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Code	Course/Module Title	ECTS	Semester
TTM4680	TECHNOLOGY TRANSFER METHODS	5.00	8
Class (hr/w)	**Lect/Lab./Prac./Tutor**	**SSWL (hr/sem)**	**USWL (hr/w)**
2	1	63	62
Description			
Mentions the history of the dissemination of agricultural techniques . He was destined to know publishing . Explains the concept of diffu of agricultural innovations . documents the beginnings of the traditional counseling method , Explain the mechanisms for applying the traditional counseling method , Distinguish between the determinants of the traditional counseling style . Defines the technological pro Explains the importance of the technological process , Explains the steps of the technological process , documents the beginnings of the training and visiting method , Explain the mechanisms for applying the training and visit method , Distinguish between the determinant the traditional counseling style . Known as agricultural technology transfer cycle , Distinguish between the stages of transfer of agricultu technologies . Evaluates the role of agricultural extension in transferring technologies .			

Module 52

Code	Course/Module Title	ECTS	Semester
LSD4690	LOCAL SOCIETY DEVELOPMENT	5.00	8
Class (hr/w)	**Lect/Lab./Prac./Tutor**	**SSWL (hr/sem)**	**USWL (hr/w)**
4	2	63	62
Description			
Students learn about the concept, objectives and history of rural development ,Identify basic requirements in the preliminary phase of development programme planning , Students understand developmental curricula and development programs . Students should learn about development trends of all kinds. The student identifies the basic needs in the implementation of the intentional program . Recognize the dimensions of Yerevan development and the difference between them , The student identifies the basic needs in the implementation of the intentional program . The student understands the basic stages in rural development .			

Module 53

Code	Course/Module Title	ECTS	Semester
EGR4710	EXTENSION GENERAL RELATIONSHIPS	5.00	8
Class (hr/w)	**Lect/Lab./Prac./Tutor**	**SSWL (hr/sem)**	**USWL (hr/w)**
4	2	63	62
Description			
The student seeks to familiarize himself with ,understand, and apply procedures related to concept of public relations and distinction between media, advertising and public relations , The stu			

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determines the type of public relations and a historical overview of the emergence of public relations and stages of its development. The student is familiar with the elements and nature of public relations , student is introduced of many definitions of public relations according to opinions of researchers thinkers in public relations

Module 54

Code	Course/Module Title	ECTS	Semester
RSS4720	RURAL SOCIETY SCIENCE	5.00	8
Class (hr/w)	**Lect/Lab./Prac./Tutor**	**SSWL (hr/sem)**	**USWL (hr/w)**
4	2	63	62
Description			
The student learns about the origins of science Rural society and its development , The student presents h knowledge about social change, its types and factors Social change . The student demonstrates knowledg rural community development and attributes general rural community. The student gets to know al theories social change. The student is familiar with rural housing patterns and rural commu development. The student introduces the concept of rural community development, its importance and g . The student develops his knowledge of the branches of sociology and the importance of rural developn , Conducting a scientific visit to extension center in Al-Rashedia to acquaint students with knowledge concepts about the basics of rural development.			

Module 55

Code	Course/Module Title	ECTS	Semester
SAT4310	SMART AGRICULTURAL TECHNIQUES	5.00	8
Class (hr/w)	**Lect/Lab./Prac./Tutor**	**SSWL (hr/sem)**	**USWL (hr/w)**
2	2	63	62
Description			
Smart agricultural technologies are a set of modern tools and techniques used to improve agricultural operations and make them more efficient and sustainable through the use of data and advanced technology. These technologies aim to increase agricultural production while reducing costs and conserving natural resources. Below is a summary of the most important aspects of smart agricultural technologies: Precision agriculture, remote sensing and the Internet of Things (IoT), ,Artificial intelligence and data analysis. Vertical farming, smart irrigation systems, drones. Hydroponics, Smart agricultural technologies rely on advanced technology to make agricultural operations more precise and sustainable. Using technologies such as artificial intelligence, the Internet of Things, and robotics, productivity can be improved, costs reduced, and natural resources protected, contributing to sustainable and efficient agriculture			

Module 56

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Code	Course/Module Title	ECTS	Semester
AEP4292	AGRICULTRUAL ENGINEERING PROJECT2	2.00	8
Class (hr/w)	**Lect/Lab./Prac./Tutor**	**SSWL (hr/sem)**	**USWL (hr/w)**
4	3	47	3
Description			
The "Agricultural Engineering Project" module provides students with hands-on experience in applying engineering principles to solve real-world agricultural problems. Throughout the course, students will work on individual or group projects that focus on designing, developing, and implementing innovative solutions in areas such as irrigation systems, machinery design, and sustainable farming practices. Emphasis will be placed on project planning, resource management, and technical communication. Students will also engage in critical analysis and evaluation of their designs through feedback and peer review. By the end of the module, participants will gain valuable skills in project management and practical engineering applications within the agricultural sector.			

Contact

Program Manager:

| Talal Saeed Hameed Ph.D. in Agriculture Extension | Assistant Professor

Email: Stalal1982@uomosul.edu.iq

Mobile no.: 07740923857

Program Coordinator:

| zahraa meiser sultan Ms. in Agriculture Extension | Assistant Professor

Email: Zahraa.albasso@uomosul.edu.iq

Mobile no: 07703345503

Chairperson of the Scientific Committee
Dr. Ahmad Awad Talb

Head Of Department
Dr. Talal Saeed Hamee

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