

University **University Of Anbar** 

**Country** Iraq

Web Address: https://www.uoanbar.edu.iq/English/index.php

https://www.uoanbar.edu.iq/index.php

Number of courses subjects related to sustainability offered = 1075



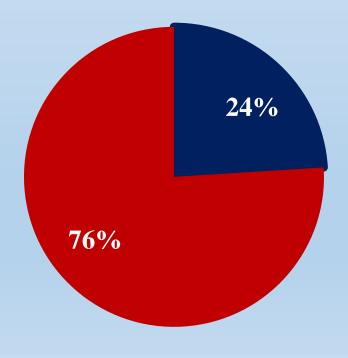


Number of courses subjects related to sustainability offered = 1075

Total number of courses/subjects offered = 4399

The ratio of sustainability courses to total courses/subjects:

**Total Courses/Subjects** 





Percent %	Summary Description of subject	The subject or topic which support SDG	Department	No.
16 %	The Subject includes addressing natural resources and their scarcity and preservation and is one of the objectives of sustainable development.	Economics of the environment	Agricultural economic	1
10 %	The Subject addresses the concept, objectives, theories and ways of achieving agricultural development.	Agriculture development	Agricultural economic	2
15 %	Production of plants resistant to living stress	Plant tissue cultivation	Gardening and garden engineering	3
30 %	Nutrition is one of the most important sciences that keeps the plant alive and gives it all the nutrients it needs that work towards achieving the sustainable development goals of all plant coverings.	Feed the plant	Gardening and garden engineering	4
70 %	The study of environmental data in both climatic and soil factors is summarized. Which is the main incubator of the plant and its surroundings? Agricultural crops are affected by climatic data This requires consideration of the climate world as part of the study factors in all .postgraduate research And never neglect it at all As a means of preserving local varieties that have been extinct due to climate change and their ineffective environment.	Advanced Plant Environment	Gardening and garden engineering	5
25 %	Ornamental plants include many different plants, including for aesthetic and healthy purposes.	Ornamental plants	Gardening and garden engineering	6



		·		
10 %	Complete article The principles of genetics and other science associated with this science and modern methods in developing the production of plants suited to increasing production and improving quality.	Inheritance of the plant	Gardening and garden engineering	7
10 %	Give lectures on sustainability and its relevance to parks, outdoor spaces and mechanisms or means of achieving the sustainability of parks and outdoor spaces in their three environmental, social and economic dimensions and how to achieve them in the proposed designs.	Garden Engineering/Fourth Stage	Gardening and garden engineering	8
30 %	Cultivation of fruit trees is concerned with cultivating species and varieties that have the potential to resist environmental conditions and volatility.	Cultivation of green fruit trees	Gardening and garden engineering	9
25 %	Multiplying the plant by using seeds containing embryos resulting from pollination and fertilization and the advantage of the resulting plants, multiplying the plant by other vegetative methods and its advantages and how to conduct it.	Theoretical and practical foundations of plant multiplication in the sexual and vegetative way	Gardening and garden engineering	10
15 %	Students can acquire knowledge and science in the field of plant anatomy, plant cells, components and functions.	Anatomy of the plant	Gardening and garden engineering	11
50 %	Plant breeding is the basis for vertical expansion of agricultural production and much horizontal expansion is hoped for in the future.	Plant breeding	Field crops	12



Percent %	Summary Description of subject	Subject	Stage	No.
30.6 %	-Recognize the ecosystem's concept, types, balance and movement of food within it and its importanceRecognize the most important environmental factors and their impact on the ecosystem and environmental laws and their importance to the ecosystemIdentification of the aquatic environment, the importance of water and its characteristics, sources and marine environment and accessRecognize the characteristics and importance of the soil, its composition and components, the risks to agricultural soil and how to increase the area of agricultural landFollow-up on vital cycles occurring in the ecosystem including the water cycle - carbon, nitrogen, phosphorus and sulfur and their importance in environmental balanceRecognize the most important industrial environmental changes and their causes and risks such as: global warming, ozone hole, black clouds, acid rain, drought and desertificationAccess to the concept of energy and knowledge of its traditional sources and identification of alternative sources of energy (solar energy and its use and the most important ways of converting it into electric energy - wind energy - tidal and island energy - geothermal energy - energy from waste and waste.	Environment Basics	First	1



·			
<ul> <li>1-Recognize the importance of microbes and plants to human well-being.</li> <li>2-Emphasize the life aspects and functions of plants as they relate to natural balance.</li> <li>3-Study botany and recognize the plant cell and its importance in disease resistance.</li> </ul>	Botany plant		2
Helping students learn about climate science and how important it is and therefore can be used in our daily lives as today's world is experiencing climate change and is experiencing a major .drought crisis	climate science		3
Environmental chemistry is the study of chemicals as they pass through our environment and the effects they cause on air, water, soil and so on. It's an important area of study because it helps us following and control pollutants.	Chemical Environment		4
The desert or desert environment is a difficult challenge for people who want to live in it, because its indicator of life depends on its natural possibilities such as the availability of water and pastures, as well as social imperatives that link societies such as: cohesion and mobility. These characteristics have made the nature of life in deserts the same, whether Arab desert or masked desert. The study of this material aims to explore how to live in these dry environments and how to make proper scientific use of them.	Desert Environment	Cocond	5
Plants are the most important living for soil development, as vegetation keeps the soil from erosion and reduces the amount of running water above the soil surface. Plants are the primary source of organic matter, so new plants should be sought to suit climate change.	Plant Environment	Second	6
Precision substances, gases and other contaminants have negative effects on various aspects of life in general, so this substance aims to search for contaminated substances and how to treat them in the right scientific ways.	Pollution basics		7
Biotechnology can bring great congestion to control and develop environmental quality by, inter alia, finding effective ways to process and dispose of waste. Biotechnology also plays an important role in improving the environment by treating eco- alien substances and addressing oil pollution, using certain plants and microscopic biology to dispose of radioactive waste.	Environmental Biotechnology		8



Percent %	Summary Description of subject	Subject	Stage	No.
	It is concerned with the safety and health of human beings with a set of procedures, rules and requirements that serve as protection, and is based on work to provide a safe environment around human beings as far as possible free from the sources of danger and the causes of injury or accidents.	Security and safety	First	1
	This course aims to learn about the history of NAO science and technology and the tools used to characterize Nano materials and discuss the effects arranged for future developments in different fields of science.	Chemistry Nao	Second	2
9 %	Scientific study of chemical and biochemical phenomena occurring in natural places that seek to reduce potential pollution at its source. It can be defined as the study of sources, interactions, transport and the effects and fate of chemical species in air, soil and water environments, the impact of human and biological activity on the environment.	Chemistry Environment	Third	3
	Definition and classification of natural products and their sources. The function of natural products in plants and their economic importance.	Natural outputs		
	It is a branch of chemistry that studies the transformation of oil and natural gas into useful products and raw materials.  Petrochemical science enters into a lot of human requirements of health, purification, food, etc.	Oil chemistry	Fourth	4



Percent %	Summary Description of subject	The Subject	No.
	Study of water sources - atmosphere, hydrological cycle, rain - evaporation - aquifers and watercourses - drainage - sediment transport - floods - ice, lakes and oceans.	Water Science	1
	Geological factors in the presence and movement of groundwater types of aquifers Darcy law groundwater wells groundwater chemistry groundwater prospecting intersection of seawater from groundwater in Iraqi country.	Hydrology	2
	Characteristics of petroleum, natural gas and accompanying water porous and permeable origin, collection and movement of petroleum – petroleum fisheries and cover rocks – exploration of petroleum about petroleum in the Iraqi country.	Petroleum geology	3
10, 5 %  From the whole approach	Recognize the geological concept of the environment and the risks associated with natural disasters such as earthquakes, floods and volcanoes, understand environmental risk reduction strategies, identify pollution types and risks to the environment and human beings, with the importance of waste disposal, focus on linking and applying environmental laws and their impact on political decision at the scientific, regional and local levels.	Environment geology	4
	Basic definitions of ores body forms, ores tissue, ores emergence theories, classification of ores deposits, magma deposits, water-free deposits, class deposits, industrial metals, overview of the presence of ores and industrial rocks in the country.	Economic geology	5



Percent %	Summary Description of subject	The subject or topic which support SDG	No.
8.3 %	-Classification of wastes, their types and methods of handling them by specialization -Recycle waste and get raw raw materials -Types of renewable energy and how to make use of them in the area of sustainable development -Bio-processing of environmental waste and ways of utilizing it and transforming it into useful materials -Methods of clearance of toxic and contaminated substances and elements of the environment	Advanced ecology (master's/postgraduate programme)	1
4 %	-How to deal with solid waste and the types and methods of processing it into organic fertilizer or burning it in special incinerators or biogas generationRecycling Waste -Renewable Energies (Types, Importance, Application Capabilities.	Environment and pollution (Stage IV/preliminary studies)	2



	-1	
الرابط	المرحلة	COURSE NAME
اتقر هتا	1ST	PRINCIPLES OF AGRICULTURE
		ECONOMY 1
اتقر هتا	الاؤلى	PRINCIPLES OF ANIMAL
		PRODUCTION
اتقر هتا	الاولى	PRINCIPLES OF HORTICULTURE
اتقر هتا	الاولى	GENERALS MATHEMATICS
اتقر هتا	الاولى	ENGLISH LANGUAGE
اتقر هنا	الاوئى	HUMAN RIGHTS
اتقر هنا	الاوئى	COMPUTER SKILLS
اتقر هنا	الاوئى	PRINCIPLES OF AGRICULTURE
		ECONOMY 2
اتقر هتا	الاولى	ECONOMICAL MATHEMATICS
اتقر هنا	الاوئى	PRINCIPLES OF PLANT
		PROTECTIONS
اتقر هتا	الاؤلى	PRINCIPLES OF FIELD CROPS
اتقر هنا	الاوئى	PRINCIPLES OF AGRICULTURAL

pdf	Stage	
انقر هنا	1 <sup>st</sup>	Organic chemistry
انقر هنا	1 <sup>st</sup>	General physics
انقر هنا	1 <sup>st</sup>	Human rights and freedoms
انقر هنا	1 <sup>st</sup>	Principle of animal production
انقر هنا	1 <sup>st</sup>	Principle of geology
انقر هنا	2 <sup>nd</sup>	Principle of statistic
انقر هنا	2 <sup>nd</sup>	Principle of plant protection
انقر هنا	2 <sup>nd</sup>	Agricultural machinery and equipment
1	and	
انقر هنا	2 <sup>nd</sup>	Agricultural guidance
انقر هنا	2 <sup>nd</sup>	Freedom and democracy
انقر هنا	3 <sup>rd</sup>	Natural resource economics
انقر هنا	3 <sup>rd</sup>	Plant Physiology



Lecture	Stage	Subject	Name of Teaher
Click Here	1st	Physics	Dr. Ghassan S. Jamil
Click Here	1st	<b>Engineering Geology</b>	Dr. Rafid S. Mushref
Click Here	1st	Calculus	Mr. Abdulrahman S.
Click Here	1st	Statics	Dr. Muhaned Haqi
Click Here	1st	Arabic Language	Mr. Majed H. Talal
Click Here	1st	Human Rights	Mr. Majed H. Talal
Click Here	2nd	Soil Physics	Mr. Ahmed A. Jubaur
Click Here	2nd	<b>Building Materials</b>	Dr. Aseel M. Mohammed
Click Here	2nd	Surveying	Dr. Khamis N. Sail
Click Here	2nd	Concrete Technology	Dr. Ayad S. Adi
Click Here	3rd	Reinforced Concrete Design	Mr. Mohammed T. Nawar
Click Here	3rd	Structure Theory	Dr. Zaid M. Kani
Click Here	3rd	Strength of Materials	Dr. Ghassan S. Jamil
Click Here	3rd	Engineering Hydrology	Mr. Mohammed F. Sahab
Click Here	4th	GIS	Dr. Ahmed S. Mohammed
Click Here	4th	Engineering Management	Dr. Jumaa A. Hamad
Click Here	4th	Estimates and Specifications	Aseel H. Abdulaah



(BA) Course Title	Notes
Engineering Geology	Course includes the sustainability in practice certificates embedded in the core curriculum.
<b>Building Construction</b>	Incorporates themes relating to social sustainability and focuses on practical skills development.
Fluid Mechanics	Course has had changes approved in the curriculum refresh programmed, which includes seven expectations focusing on sustainability and social responsibility.
Water Treatment	Incorporates themes relating to social sustainability and focuses on practical skills development.
Engineering Numerical Methods	Course includes the sustainability in practice certificates embedded in the core curriculum.
Fundamentals of Electrical Engineering	Course has had changes approved in the curriculum refresh programmed, which includes seven expectations focusing on sustainability and social responsibility.
Engineering Surveying I	Incorporates themes relating to social sustainability and focuses on practical skills development.
Engineering Surveying I	Course includes the sustainability in practice certificates embedded in the core curriculum.
Concrete Properties	Incorporates themes relating to social sustainability and focuses on practical skills development.
Dynamics	Course has had changes approved in the curriculum refresh programmed, which includes seven expectations focusing on sustainability and social responsibility.
Strength of Materials II	Incorporates themes relating to social sustainability and focuses on practical skills development.
Soil Mechanics	Course includes the sustainability in practice certificates embedded in the core curriculum.



Reinforced Concrete (2)	Incorporates themes relating to social sustainability and focuses on practical skills development.
Hydrology	Course has had changes approved in the curriculum refresh programmed, which includes seven expectations focusing on sustainability and social responsibility.
Ethics and Leadership skills	Incorporates themes relating to social sustainability and focuses on practical skills development.
Steel Structure	Course has had changes approved in the curriculum refresh programmed, which includes seven expectations focusing on sustainability and social responsibility.
Method of Construction & Estimation	Course includes the sustainability in practice certificates embedded in the core curriculum.
Highway Engineering	Incorporates themes relating to social sustainability and focuses on practical skills development.
Traffic Engineering	Course includes the sustainability in practice certificates embedded in the core curriculum.
Foundation Engineering (1)	Incorporates themes relating to social sustainability and focuses on practical skills development.
Sanitary & Environmental Engineering	Course has had changes approved in the curriculum refresh programmed, which includes seven expectations focusing on sustainability and social responsibility.
Engineering Mechanics (Static)	Course includes the sustainability in practice certificates embedded in the core curriculum.
Principles of manufacturing process	Incorporates themes relating to social sustainability and focuses on practical skills development.
Thermodynamics-II	Course has had changes approved in the curriculum refresh programmed, which includes seven expectations focusing on sustainability and social responsibility.
Engineering Metallurgy	Course includes the sustainability in practice certificates embedded in the core curriculum.
Electrical Machines	Course has had changes approved in the curriculum refresh programmed, which includes seven expectations focusing on sustainability and social responsibility.
Engineering Mechanics (Dynamics)	Course includes the sustainability in practice certificates embedded in the core curriculum.
Heat Transfer-I	Incorporates themes relating to social sustainability and focuses on practical skills development.  Course includes the sustainability in practice certificates embedded in the core curriculum.
Internal Combustion Engines	Course has had changes approved in the curriculum refresh programmed, which includes seven expectations focusing on sustainability and social responsibility.



Ethics & leadership skills	Course includes the sustainability in practice certificates embedded in the core curriculum.
Engineering Statistics	Incorporates themes relating to social sustainability and focuses on practical skills development.
Manufacturing Processes	Course includes the sustainability in practice certificates embedded in the core curriculum.
Industrial Engineering & Safety	Course has had changes approved in the curriculum refresh programmed, which includes seven expectations focusing on sustainability and social responsibility.
Gas Dynamics	Course includes the sustainability in practice certificates embedded in the core curriculum.
Manufacturing Processes	Incorporates themes relating to social sustainability and focuses on practical skills development.
Refrigeration	Course has had changes approved in the curriculum refresh programmed, which includes seven expectations focusing on sustainability and social responsibility.
Control Engineering & Measurements	Course includes the sustainability in practice certificates embedded in the core curriculum.
Mechanical Vibrations	Course includes the sustainability in practice certificates embedded in the core curriculum.
Air conditioning	Course includes the sustainability in practice certificates embedded in the core curriculum.
Design of Machine Elements-I	Course includes the sustainability in practice certificates embedded in the core curriculum.
Fundamental of Electrical Engineering	Incorporates themes relating to social sustainability and focuses on practical skills development.
Engineering Mechanics -Statics	Course has had changes approved in the curriculum refresh programmed, which includes seven expectations focusing on sustainability and social responsibility.
Engineering Geology	Course includes the sustainability in practice certificates embedded in the core curriculum.
Construction for Water Resources Projects	Course includes the sustainability in practice certificates embedded in the core curriculum.
Soil Physics	Incorporates themes relating to social sustainability and focuses on practical skills development.
Engineering surveying II	Course has had changes approved in the curriculum refresh programmed, which includes seven expectations focusing on sustainability and social responsibility.



<b>Building Materials Technology</b>	Course includes the sustainability in practice certificates
	embedded in the core curriculum.
Engineering Mechanics -Dynamics	Incorporates themes relating to social sustainability and focuses on practical skills development.
Strength of materials	Course includes the sustainability in practice certificates embedded in the core curriculum.
Engineering Hydrology	Incorporates themes relating to social sustainability and focuses on practical skills development.
Ethics and Leadership skills	Course has had changes approved in the curriculum refresh programmed, which includes seven expectations focusing on sustainability and social responsibility.
Water quality control	Incorporates themes relating to social sustainability and focuses on practical skills development.
Hydraulic Structures	Course includes the sustainability in practice certificates embedded in the core curriculum.
Engineering Management & Economy	Incorporates themes relating to social sustainability and focuses on practical skills development.
<b>Engineering Numerical Methods</b>	Course has had changes approved in the curriculum refresh programmed, which includes seven expectations focusing on sustainability and social responsibility.
Theory of Structures	Incorporates themes relating to social sustainability and focuses on practical skills development.
Remote Sensing DWE Elective Class	Course includes the sustainability in practice certificates embedded in the core curriculum.
Design of Reinforced Concrete Hydraulic Structures	Course includes the sustainability in practice certificates embedded in the core curriculum.
Foundations Engineering II	Course has had changes approved in the curriculum refresh programmed, which includes seven expectations focusing on sustainability and social responsibility.
Safety, and Operation of Dams	Course includes the sustainability in practice certificates embedded in the core curriculum.
Ground Water	Course includes the sustainability in practice certificates
DWE Elective Class	embedded in the core curriculum.
Economic of water resource II	Incorporates themes relating to social sustainability and focuses on practical skills development.
Steel Structures DWE Elective Class	Course has had changes approved in the curriculum refresh programmed, which includes seven expectations focusing on sustainability and social responsibility.



Method of Construction and Estimation	Course includes the sustainability in practice certificates embedded in the core curriculum.
Irrigation engineering	Incorporates themes relating to social sustainability and focuses on practical skills development.
Design of Dams	Course includes the sustainability in practice certificates embedded in the core curriculum.
Sanitary and Environmental Engineering	Course has had changes approved in the curriculum refresh programmed, which includes seven expectations focusing on sustainability and social responsibility.
Economic of water resources I	Course includes the sustainability in practice certificates embedded in the core curriculum.
Fundamentals of Electronics II	Course has had changes approved in the curriculum refresh programmed, which includes seven expectations focusing on sustainability and social responsibility.
Digital Techniques II	Incorporates themes relating to social sustainability and focuses on practical skills development.
DC Machines I Technology of Chemical Industries (I)	Course has had changes approved in the curriculum refresh programmed, which includes seven expectations focusing on sustainability and social responsibility.
Thermodynamics I	Course includes the sustainability in practice certificates embedded in the core curriculum.
Mass Transfer	Incorporates themes relating to social sustainability and focuses on practical skills development.
Technology of Natural Gas	Incorporates themes relating to social sustainability and focuses on practical skills development.
Properties of Petroleum and Natural Gas	Course has had changes approved in the curriculum refresh programmed, which includes seven expectations focusing on sustainability and social responsibility.
Courses Related to Sustainability (University of Anbar , Iraq)	



#### (University Of Anbar, Iraq)

#### **Description:**

University of Anbar updating the list of the courses and study programs according the university's polices which related to the sustainability. In the academic study year (2022 -2023) The university added 78 courses to the University's curriculum programs. Where the total study's programs reached up to 77 which divided as 22 programs for postgraduate, 2 diploma programs, and 57 undergraduate programs.

Total number of courses with sustainability embedded for courses running in 2022 - 2023: 1075 https://sdg.uoanbar.edu.iq/CMS.php?ID=42

#### For more Information please visit:

https://sdg.uoanbar.edu.iq/index.php

https://www.uoanbar.edu.iq/UEBDC/English/index.php

#### **AGRICULTURE COLLEGE:**

https://www.uoanbar.edu.iq/AgricultureCollege/CMS.php?ID=103

https://www.uoanbar.edu.iq/AgricultureCollege/English/CMS.php?ID=3

https://www.uoanbar.edu.iq/AgricultureCollege/English/CMS.php?ID=53

https://www.uoanbar.edu.iq/AgricultureCollege/English/CMS.php?ID=91

#### **ENGINEERING COLLEGE:**

https://www.uoanbar.edu.iq/EngineeringCollege/English/CMS.php?ID=137

#### **Euphrates Higher Basin Developing:**

https://www.uoanbar.edu.iq/UEBDC/English/CMS.php?ID=17

https://www.uoanbar.edu.iq/Bank-Section.php