



Al-Balqa Applied University offers courses that teach specifically on climate science and/or environmental sustainability

14. إعداد مجموعة مؤشرات الأداء الاستراتيجية الخاصة بكل هدف استراتيجي، مع تحديد القيمة المستهدفة خلال الإطار الزمني للمؤشر، بالإضافة إلى تحديد مسؤولية تنفيذ ذلك المؤشر.

15. تخصيص المصادر المالية اللازمة لضمان تحقيق الأهداف الاستراتيجية ضمن الأطر الزمنية المحددة ووفق المؤشرات المحددة.

16. تحديد ووضع مجموعة البرامج والمشاريع والمبادرات اللازمة لتحقيق الاستراتيجية بكفاءة وفعالية.

17. بناء مجموعة الاستراتيجيات الخاصة بالكلية الأكاديمية والعمادات والوحدات الإدارية والمراكز العلمية التي سيعزز من القدرة التنافسية للجامعة.

18. بناء الخطط التنفيذية اللازمة لتنفيذ الاستراتيجية العامة للجامعة.

19. إعداد قاعدة بيانات لتابعة مؤشرات الأداء الاستراتيجية Dashboard.

20. تطوير الاستراتيجية العامة للجامعة ضمن مفهوم البقعة الاستراتيجية التي تعمل على استدامة عراقية وتحليل الاستعدادات والتفورات المحيطة بالجامعة وبتنفيذ الداخلية والخارجية على مختلف المستويات.

الرسالة:
"جامعة تطبيقية رائدة علمياً، ومناخسة عالمياً، ومتميزة في التدريس والبحث العلمي التطبيقي، والابتداء، والابتكار والريادة لبناء الاقتصاد، ومجتمع المعرفة".

الرسالة:
"تقديم تعليم تطبيقي ولفي عالي الجودة، وتوفر بيئة منافسة حاضنة ومحفزة للإبداع والابتكار والبحث والتطوير والريادة للمساهمة في تحقيق التنمية المستدامة والاقتصاد القائم على المعرفة".

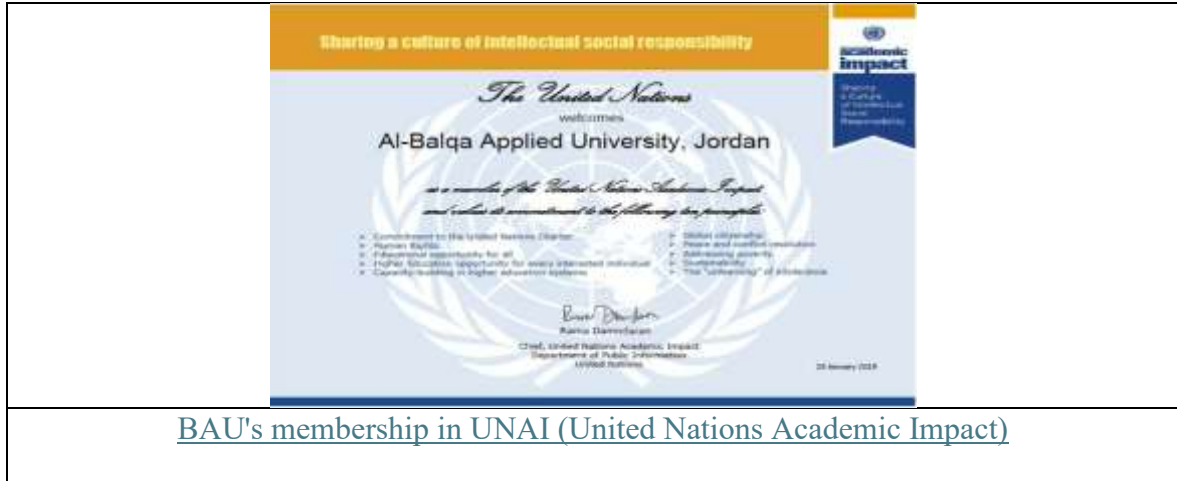
الغايات الرئيسية للجامعة:

1. تعزيز المعرفة وتطوير العملية التعليمية التعليمية.
2. الريادة بالبحث العلمي والأداء والابتكار.
3. تحقيق الأرياف للمجتمعات والتنمية المستدامة.

BAU is committed to achieving Sustainable development as shown in its strategic plan

The screenshot shows the United Nations Academic Impact (UNAI) website. At the top, it features the UN logo and the text "United Nations Academic Impact". Below this is a navigation menu with items like "About UNAI", "News & Events", "UNAI SDG Hub", "SDGs in Academia", "For Universities", "Get Involved", "Follow Us", and "Contact Us". The main content area is titled "UNAI SDG Hub 4" and features a large photograph of the Al-Balqa Applied University building. At the bottom of the page, there is a red banner with the United Nations logo, "United Nations Academic Impact", "SUSTAINABLE DEVELOPMENT GOALS", and "4 QUALITY EDUCATION" with an icon of an open book.

UNAI SDG Hub 4 Chair: Al Balqa Applied University



[BAU's membership in UNAI \(United Nations Academic Impact\)](#)

Al-Balqa Applied University is a one of the biggest providers of quality higher education in Jordan and it has a wide variety of associate diploma, bachelor, and master programs in all disciplines. In addition to its main campus in Salt city, it has 14 campuses across Jordan. This geographical distribution allows students from all socio-economic backgrounds to access quality education, a core university objective and SDG, where the university offers academic programs that are directly related to achieving sustainable development, such as a [master program in Water Resources and Environmental Management](#) and a [bachelor degree in Water Resources and Environmental Management](#).

BAU has a commitment to [meaningful education](#) around the SDGs across the university, relevant and applicable to all students, so it reviews and evaluates its programs and curricula to respond to student, community and sustainable developmental goals. This has seen in the introducing of new programs closely associated with the SDGs such as [renewable energy](#), smart organic agricultural



technology, hybrid and electric vehicle maintenance and smart buildings technologies to mention but a few. These new programs and the constant reviews by BAU emphasize the university’s commitment to meaningful education to all and the impact of SDG in its educational journey.

BAU is committed to combating poverty and unemployment which are both detrimental for sustainable development, so it works hard to align its programs with labour-market needs that enhance student employability and allow successful transition to work to have secure and sustainable jobs, also it offers seminars, workshops and exchange chances to students on issues related to the SDGs such as health and wellbeing, the climate and social protection.

Specific Courses on Environmental Sustainability

Table: Sample of SDGs Courses Description

Course name	Description
Climate Change and Sustainable Development	This course covers several aspects of defining climate change, its causes and effects on environmental and economic resources, and its connection to sustainable development and food security. This course covers the concepts of ecological sensitivity, climate models, and the prevailing pattern in Jordan. Methods of benefiting from cerebral information and how to obtain and process it are among the most important axes of this course. The role of geographic information systems and the mechanism of harnessing this technology to study this phenomenon and benefit from the environmental and climatic simulation will be addressed to solve problems related to drought, desertification, water scarcity, and pollution in Jordan



<p>Water Resources Management</p>	<p>This course provides a comprehensive overview of water resources, exploring their critical role in environmental sustainability, human development, and ecosystem health. Students will learn about the hydrological cycle, water distribution, and the physical, chemical, and biological characteristics of various water sources, including surface water, groundwater, and atmospheric water.</p> <p>The course covers key concepts in water resources management, focusing on the planning, development, and sustainable use of water. Topics include water quality, conservation techniques, supply and demand, and water policy frameworks. Special attention is given to the challenges of water scarcity, climate change impacts on water resources, and strategies for equitable water allocation. Students will also study integrated water resource management (IWRM) approaches, watershed management, and water treatment technologies</p>
<p>Renewable Energy Technologies</p>	<p>Introduction to renewable energy and the concept of energy generation and conversion, types of renewable energy, benefits of renewable energy, solar energy, wind energy, and smart electric grids.</p>
<p>Land, Water, and Environmental Management</p>	<p>This interdisciplinary course examines the complex relationships between land, water, and environmental systems, focusing on sustainable management practices that balance ecological health with human needs. Students will explore the fundamental principles of land and water resource management, including soil conservation, watershed protection, and the impacts of human activities on natural ecosystems.</p> <p>The course covers critical topics such as land use planning, soil erosion, water quality and availability, and pollution control. It also addresses the impacts of climate change on land and water resources, emphasizing the importance of integrated approaches to mitigate environmental degradation and promote ecosystem resilience. Students will gain insight into policies, tools, and practices that aim to protect land and water resources while ensuring their sustainable use for agriculture, urban development, and industry.</p>
<p>Health, Safety, and Professional Environment</p>	<p>The overall aim of this course is explaining the work environment and outlining the methods of protecting people and others at work. It provides examining the most commonly known dangers of</p>



	<p>distinguishing dangers of chemical and biological materials, falling from high floors, physical dangers, fire, electricity, other types of dangers, and how they influence health, work safety, controlling dangers and risks, in order to reduce the potential damage in case of any accident. The course also explains the hierarchy of dangers control processes, methods and techniques of personal safety, first aid methods in case of human causalities, and knowing the Jordanian legal requirements and national codes for protecting workers and employees.</p>
<p>Drinking water quality</p>	<p>This course is designed to introduce students to the main aspects of drinking water supply and quality as different water standards are explained theoretically in class. The laboratory analysis related to each parameter is then carried out. The course begins with an extensive review related to aqueous chemistry. Elements, radicals, and compounds present in or interacting with water and gas solubility in water. The course also discusses types and sources of pollution, changes in water quality, and water quality standards. Students also learn about water treatment such as mixing, flocculating, sedimentation, turbidity removal, filtration, softening, taste and odor control, and iron and manganese removal. All the common chemical indicators and analyzes of water such as conductivity, chloride, alkalinity and turbidity, sulfate, phosphorous, nitrate, iron and manganese removal and determination of dissolved material content and removal are presented in class and then students carry out experiments in the water laboratory under the supervision of the course instructor and safety procedures in the laboratory are well applied. Students are distributed into groups to carry out water experiments. After each lecture in the laboratory, the students must submit a report of the implemented experiment to the instructor for evaluation</p>
<p>Food Safety</p>	<p>Introduction to the concept of food hygiene and its importance. Food –borne infections and intoxication and the problem of residues in foods. Hygienic requirements in food production and harvesting areas and in food establishments with emphasis on hygienic food handling, processing, and storage. Personal hygiene and health requirements, cleaning and disinfecting and pest control as well as the application of hazard analysis critical control point (HACCP) system in food establishments, and workplace safety standards.</p>



<p>Ecology and Sustainable Production</p>	<p>This course deals with main principles of sustainable agriculture, as well as, with farming production systems that aim to enhance the health of the environment, natural resources and improve horticultural farm income. This course will also, provide a base of knowledge of the principles of alternative horticulture farming systems including soil biological processes (compost, humus, fertility and pest management.</p>
<p>Waste Management and Composting</p>	<p>Integrated sustainable waste management; Organic waste generation and characterization; Organic waste collection and transport; Organic waste treatment technologies; Science of composting; Composting technologies, compost quality, and its economic feasibility; Operating the composting technologies; Vermicomposting; Compost uses and global compost market; Case study composting; Governance of organic waste management; Impact of organic waste management on the environment.</p>
<p>Smart Lighting and Electrical Installations</p>	<p>Study and design of electrical wiring networks in the building by calculating the loads and the amount of lighting needed to illuminate the various facilities in it according to the standard specifications, components of household electrical wiring of one and three phase, electrical measurements, drawing and reading electrical diagrams, grounding, wireless electrical installations and smart home systems.</p>
<p>Heating, Air Conditioning and Cooling Technologies</p>	<p>Acquiring heating and cooling skills, calculating thermal loads and cooling loads for buildings, the principles of psychrometric and its use in air conditioning calculations in buildings, places of equipment placement and drawing plans, control systems for air conditioning and heating devices, and the use of renewable energy in heating and cooling.</p>
<p>Meteorology and Air Pollution</p>	<p>Structure of the atmosphere and its thermodynamics; water and its transformations; cloud formation; precipitation... etc. Current climate issues such as global warming. Fundamentals of air pollution, major pollutants, their sources and their effects (environmental, economic and health), air pollution from mobile/stationary sources and indoor air quality. Pollutant sampling and measurement devices, pollutant distributions and dispersal modes as well as available methods to control the pollutants. Relevant Jordanian air quality policies and standards and presents relevant case studies.</p>



<p>Hydrochemistry and Water Quality</p>	<p>Origin of water, properties, influence of soil and aquifer materials on groundwater quality. Classification and assessment of groundwater quality. Changes in drinking water quality and quality criteria, water pollution and physiochemical treatment.</p>
<p>Wastewater Treatment and Reuse:</p>	<p>Composition and characterization of wastewater and sludge, Wastewater microbiology, Municipal wastewater treatment systems including physical unit operations (physical treatment) and biological unit processes (biochemical treatment), treatment and disposal of sludge, and wastewater reuse.</p>
<p>Soil, Water, and Plant Relationships:</p>	<p>Basic relationships between soil, plant, and water that make it possible to better manage and conserve irrigation water. Review physical laws of solutions: vapor pressure, solution potential, and latent heat. Soil water terminology. Physical characteristics of soil, soil and water interactions, available soil water, and how plants use water to determine what crops to plant and when to irrigate. Review irrigation scheduling that determines when and how much water needs to be added to a crop's root zone to promote optimum yields.</p>
<p>Pests and Diseases of Honeybees</p>	<p>This course is designed to contribute to the enjoyment and profitability of honeybees by giving you the knowledge and skills to recognize and manage their pests and diseases.</p>
<p>Organic Farming</p>	<p>Method of preparation and fermentation of organic materials, factors affecting its fermentation, effect of microorganisms, effect of organic materials, on the soil and its content of nutrient elements, its effect on production and quality of fruits, methods and time of applications.</p>
<p>Biological Control</p>	<p>Biological pest control concepts, environmental aspects, ecology, and strategies. Conservation and augmentation of natural enemies. Importation and colonization of natural enemies from abroad. Examples of successful utilization of parasitoids, predators and microbial agents. Biological control ecology.</p>



<p>Organic Chemistry</p>	<p>Study the chemical properties of the compounds is cyclic, clarify the nature of inter-linkages in the molecules, the study of public reactions and the stereochemistry of these compounds. Includes the study of alcohol and aromatic compounds, chemical reactions, substitution reactions of various types, some of these mechanical interactions, methods of analysis of different kinds of class to determine the composition of the binary compounds.</p>
<p>Agriculture in Jordan</p>	<p>This course covers topics related to the development and development of agriculture and its global, Arab and local importance, agricultural climate, elements of plant production in rainy and irrigated areas, animal production, marketing of agricultural products, water sources and their uses. Agricultural operations used. Agricultural pests and methods of combating them, agricultural mechanization, food industries. Institutions and bodies working in the agricultural service in Jordan.</p>
<p>Environment and society</p>	<p>The proposed course provides a general and comprehensive description of the environment: its definition, evolution, and the benefits that can be achieved through preserving environmental resources. In addition to addressing the relationship between society and environmental resources. The course also discusses topics known as the environmental reality in Jordan in terms of the nature and types of ecosystems, the most important environmental problems facing Jordan and their implications for society in general, not only from an environmental aspect, but also from a health, social, economic and developmental aspect.</p>
<p>General entomology</p>	<p>Phylum Arthropoda and its main classes. External anatomy including head, thorax, abdomen, and their appendages. Internal anatomy including digestive, endocrine, respiratory, circulatory, nervous, and reproductive systems. Development, metamorphosis, and insect taxonomy are also covered.</p>



<p>Principles of Microeconomics</p>	<p>This course is an introductory course that covers fundamentals of Microeconomics with major emphasis on the theory of the market system. The course introduces economic concepts and analysis, demand and supply analysis, elasticity concepts, theories of the individual and the firm behavior mainly consumer and producer choice and how they interact to determine prices, output and resource allocations. The course also covers market structure in particular competition, monopoly, monopolistic competition and oligopoly.</p>
<p>Economic Feasibility Studies and Projects Evaluation</p>	<p>This course provides an introduction to the theory and practice of cost-benefit analysis and its link to basic economic and financial theory. Topics include: discounting and the valuation of benefits and costs, projects' appraisal phases including; economic, market and financial study, risk analysis, time value of money, and criteria for projects evaluation. Students will analyze and investigate contemporary cases from areas in economics and finance that are related to public policy issues and private projects.</p>
<p>Environmental Resources Management</p>	<p>Basic principles of environmental management; Environmental and sustainable development objectives; Nature's ecosystem services; Global environmental trends and issues Complexity; Managing biodiversity; pest and weed management; Soil, sediment, air and water – environmental degradation; Overview of environmental resources management assessment; Production, consumption, urbanization and extractive industries; The ecosystem approach and adaptive management; Strategic Management and SWOT Analysis.</p>



2- Sample of degrees on SDGs

Al-Balqa' Applied University



جامعة البلقاء التطبيقية

الخطة الدراسية
لتخصص "تكنولوجيا الزراعة العضوية الذكية"
برنامج البكالوريوس التقني

تم اعتماد هذه الخطة الدراسية بموجب قرار مجلس عمداء جامعة البلقاء التطبيقية رقم
2021/2020/1108 تاريخ 2022/8/24م (الجلسة 26) وتطبق اعتباراً من مطلع العام
الجامعي 2023/2022

تتكون الخطة الدراسية لنيل درجة البكالوريوس التقني في تخصص تكنولوجيا الزراعة العضوية الذكية
من (132) ساعة معتمدة، موزعة على النحو الآتي:

الرقم	المكون	ساعة معتمدة
1.	مهارات التشغيل	20
2.	العلوم الزراعية الأساسية	20
3.	أساسيات الزراعة العضوية	12
4.	المهارات الفنية المتخصصة	26
5.	التكنولوجيا المتقدمة المتخصصة	39
6.	التدريب الميداني وممارسة المهنة/ الخبرة العملية	9
7.	المشروع التطبيقي	6
	المجموع	132

Smart Organic Agricultural Technology



Al-Balqa Applied University
Faculty of Graduate Studies
Dept. Water Resources &
Environmental
Management



تأسست سنة 1997

جامعة البلقاء التطبيقية
كلية الدراسات العليا
قسم إدارة موارد المياه والبيئة

جامعة البلقاء التطبيقية

الخطة الدراسية لدرجة الماجستير في إدارة موارد المياه والبيئة / مسار الشامل

تتكون الخطة الدراسية لدرجة الماجستير في تخصص إدارة موارد المياه والبيئة من 33 ساعة معتمدة موزعة على النحو الآتي:

الساعات المعتمدة	المتطلبات	المسار
21	أ. مواد إجبارية	الشامل
12	ب. مواد إختيارية	
-	ج. الإمتحان الشامل	
33	المجموع	

Sample of dedicated SDGs specific courses (full degrees)

Master's degree in water resources and environmental management



جامعة البلقاء التطبيقية

الخطة الدراسية لدرجة البكالوريوس في تخصص إدارة موارد المياه والبيئة

تتكون الخطة الدراسية لدرجة البكالوريوس في تخصص (إدارة موارد المياه والبيئة) من (135) ساعة معتمدة موزعة على النحو الآتي:-

الرقم	المتطلبات	عدد الساعات المعتمدة
أولاً:	متطلبات الجامعة وتشمل : متطلبات الجامعة الإلزامية متطلبات الجامعة الاختيارية	27 21 6
ثانياً:	متطلبات الكلية	22
ثالثاً:	متطلبات التخصص وتشمل: متطلبات التخصص الإلزامية متطلبات التخصص الاختيارية	76 70 6
رابعاً:	متطلبات التخصص المساندة	10
	المجموع	135

Sample of dedicated SDGs specific courses (full degrees)
Bachelor's degree in water resources and environmental management



تكنولوجيا الطاقة المتجددة

مجالات العمل و مميزات التخصص

- تركيب وصيانة وحدات الطاقة الشمسية عمل خاص وعمل لدى شركات متخصصة
 - فني صيانة وتركيب الخلايا الشمسية وتوربينات الرياح لدى شركات الطاقة
 - فني صيانة لدى شركات الكهرباء
 - فني لدى محطات توليد الطاقة
- مميزات التخصص
عدم نفاد الطاقة المتجددة ، السرعة في امتلاك الخبرة والمعرفة ،
زيادة الحاجة لطاقة في المستقبل مما يؤدي الى زيادة الطلب عليها ،
الطاقة المتجددة صديقة للبيئة وليس لديها مخاطر

الخطة الدراسية



عدد ساعات التخصص



72 ساعة

Sample of dedicated SDGs specific courses (full degrees)
Associate Diploma degree in Renewable Energy



حوفي من عدن - إلى عمان البلقاء
جامعة البلقاء التطبيقية
الرئيسية - عن الجامعة - الكليات والمعاهد - المراكز العلمية - الوحدات الادارية - القبول والتسجيل

كلية السلط التقنية

دبلوم متوسط هندسة الابنية الذكية
خطة هندسة الابنية الذكية نظام سنين 2022/2021

المعلومات العامة:
عدد ساعات الخطة: 72 ساعة
سعر الساعة نظامي - نظام جديد: 35
سعر الساعة موازي - نظام جديد: 45
سعر الساعة موازي - شهادة عبر اردنية / جديد: 55
سعر الساعة موازي بالدولار - نظام جديد: 125

يجب اجتياز 9 ساعة بنجاح

رقم المادة	اسم المادة	س.م رقم المتطلب	المتطلبات	وصف المادة
20165171	الرسم الهندسي بالحاسوب	2		-
020000162	مختبر مفاهيم فيزيائية	1	متزامن مع 020000161	متزامن مع مفاهيم فيزيائية
020000151	مفاهيم رياضية	3		-

Sample of dedicated SDGs specific courses (full degrees)
Associate Diploma Degree in Smart Building Engineering



الخطة الدراسية

لتخصص "تكنولوجيا الزراعة العضوية الذكية"

برنامج البكالوريوس التقني

تم اعتماد هذه الخطة الدراسية بموجب قرار مجلس عمداء جامعة البلقاء التطبيقية رقم
2021/2020/1108 تاريخ 2022/8/24م (الجلسة 26) وتطبق اعتباراً من مطلع العام
الجامعي 2023/2022

تتكون الخطة الدراسية لنيل درجة البكالوريوس التقني في تخصص تكنولوجيا الزراعة العضوية الذكية
من (132) ساعة معتمدة، موزعة على النحو الآتي:

الرقم	المكون	ساعة معتمدة
1.	مهارات التشغيل	20
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7.	المشروع التطبيقي	6
	المجموع	132



Introducing a New Course (Sustainable Development) as a one of the Obligatory University Requirements for All BAU's Students



معلومات الطالب

رقم الطالب: 4 اسم الطالب: []
الحالة الأكاديمية: على مقاعد الدراسة كلية الكفاء الاصطناعي. التحقيقات الجدلية الرقمية
المبلغ المطلوب للمالية: null الاسم بالانجليزية: null
مكان الولادة بالانجليزية: IRBID مكان الولادة بالعربية: اربد
حالة التسجيل: 2026/2025 الفصل الاول - غير معتمد ... عدد مرات السحب و الإضافة : 2
الرقم الوطني: []

أقر بأن جميع المعلومات المذكورة و الموجودة في تقرير معلومات الطالب صحيحة
اعتماد

طلب جامعة اجباري عدد الساعات المطلوبة: 21 عدد الساعات المقطوعة: 0

رقم المادة	اسم المادة	عدد الساعات	النتيجة	ملاحظات
60000115	التربية الوطنية والمسؤولية المجتمعية	3		السنة - 0
L71602131	التفاضل والتكامل (1)	3	مسجل	السنة - 0
60000121	الريادة والإبتكار (باللغة الإنجليزية)	2	مسجل	السنة - 0
60000116	العلوم العسكرية	3		السنة - 0
60000122	اللغة الإنجليزية التطبيقية	3		امتحان مستوى اللغة الإنجليزية أو اللغة الإنجليزية - الإستراتيجي السنة - 0
60000113	اللغة العربية التطبيقية	3		امتحان مستوى اللغة العربية أو اللغة العربية - الإستراتيجي السنة - 0
60000123	المهارات الحياتية والعمل (باللغة الإنجليزية)	2	مسجل	السنة - 0
60000124	تطبيقات الكفاء الاصطناعي	2	مسجل	السنة - 0

طلب جامعة اختياري عدد الساعات المطلوبة: 6 عدد الساعات المقطوعة: 0

رقم المادة	اسم المادة	عدد الساعات	النتيجة	ملاحظات
60000114	الإسلام والحياة	3		السنة - 0
60600113	البيئة والمجتمع	3		السنة - 0
60000126	التنمية المستدامة	3		السنة - 0
61100111	الرياضة والصحة للجميع	3		السنة - 0
60600111	الزراعة في الأردن	3		السنة - 0
TS 105	السلامة المرورية	3		السنة - 0
62100111	القيم والأخلاق والمجتمع	3		السنة - 0
60000112	القدس (التضحية الفلسطينية)	3		السنة - 0
60000117	المجتمع الأردني	3		السنة - 0
61400123	المفاهيم والمهارات الإدارية المعاصرة	3		السنة - 0
60000119	تاريخ الحلفاء الراشدين	3		السنة - 0
62000121	مبادئ علم النفس	3		السنة - 0
61400121	مفاهيم إحصائية	3		السنة - 0
60000125	مهارات التواصل	3		السنة - 0

Sustainability Development as Mandatory requirement at all Programs