



# SDG 7: Affordable and clean Energy

Ensure access to affordable, reliable sustainable and modern energy for all

The university seeks to improve the infrastructure and raise the level of technology to provide modern and sustainable energy services on campus, according to the support programs for beneficiaries.

The university seeks to use clean energy resources to meet the full energy demand, and moreover, the university has turned to lighting equipment that increases the efficiency of electricity use. In addition, it participates in facing the reduction of Global warming.



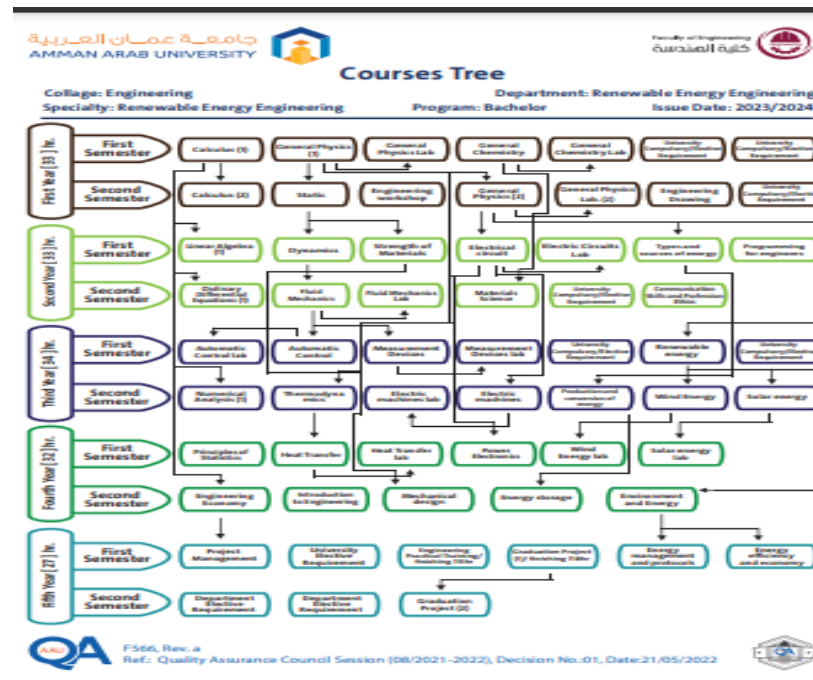
## Amman Arab University awards a bachelor's degree in renewable energy

In alignment with the vision and mission of the Amman Arab University, which encompasses the provision of outstanding higher education, and recognizing the limitations of conventional energy sources, the college of Engineering has taken steps to keep pace with scientific growth and contribute to find scientific and practical solutions. In this regard, the department of Renewable Energy Engineering was established in 2020.

The department awards a Bachelor's degree in Renewable Energy Engineering after successful completion of 162 credit hours. In general, the study plan focuses on renewable energy sources, energy conversion, transmission, storage, as well as energy economics and management. The program also includes the study of solar cell technology, wind energy systems, and various elective courses designed to enrich the student's knowledge in specialized topics related to sustainable energy technologies, including bioenergy and fuel cells, with a particular emphasis on renewable energy system design.

To enhance the theoretical knowledge acquired by students, the department is equipped with a range of specialized engineering laboratories furnished with high-specification devices and tools. This ensures that students will have the opportunities for hands-on practical application that align with the latest developments in the job market.

The college members in the Renewable Energy Engineering Department consists of a group of experienced academics with extensive expertise in various scientific fields. The aim is to provide a collaborative learning environment that fosters teamwork, enabling the graduation of specialized engineers in renewable energy engineering who are capable of meeting the demands of the job market in the renewable energy sector or pursuing further studies in this field at the graduate level.





**Faculty of Engineering**  
**Department of Renewable Energy Engineering**

**Study Plan of the Bachelor's Degree**  
**In Renewable Energy Engineering**  
**Academic Year: 2021 / 2022**

Plan Hours ( 162) credit hours  
Type of Program      Humanity      Scientific/ technical      Learning Style Blended/ Electronic      Medicine

Learning Style	Percentage of study plan hours/number	Actual rate
Electronics	10%-20% maximum	%17
Blended (Scientific programs)	30%-50% maximum	%48.5
Face to Face ( Scientific programs)	30% minimum	%34.5

Note: The learning styles of the courses are distributed at all academic levels in the program

## Renewable Energy Engineering Department Laboratories:

- Heat transfer laboratory
- Measurement Instruments laboratory
- Automation control laboratory
- Solar Energy Laboratory
- Wind energy laboratory
- Electrical circuits laboratory



## **Energy Innovation Platform (EIP) Workshop for Students of the Renewable Energy Engineering Department at Amman Arab University**

Coping with the guidance of Professor. Mohamad Al-Widyan, President of Amman Arab University, and in the presence of the Assistant President for Academic Affairs, Professor. Ismail Yamin, and as part of a series of extracurricular activities, College of Engineering at the University held a workshop on the Energy Innovation Platform (EIP) for faculty members and students of the Renewable Energy Engineering Department at the University, which was presented by Energy Innovation Platform Project Manager, Dr. Ayman Al-Batayneh.

Prof. Yamin welcomed the Energy Innovation Platform team to Amman Arab University, which opens its arms to cooperate with institutions that support and enhance the teaching process and keep pace with the latest developments in the industry and the labor market to develop the students' skills and open future horizons for them. He also urged the students to contribute effectively with the platform and enrich the applied aspect in their majors, identify the problems of the energy sector and strive tirelessly to find innovative and creative solutions to advance this important sector.

For his part, Dr. Anwar Al-Assaf, Dean of the College of Engineering at Amman Arab University, pointed out the importance of the project in solving energy problems and the College of Engineering's endeavor to enrich the practical and theoretical knowledge of college students, reflect its outcomes on the teaching process and transfer experience to College of Engineering students through workshops and lectures presented by specialized experts from the university or from local partners and specialized institutions.

In turn, Dr. Akram Musa, Head of the Renewable Energy Engineering Department at the University, provided an introductory overview of the project manager, Dr. Ayman Al-Batayneh, Associate Professor in the Department of Energy Engineering at the German Jordanian University, who was recently ranked by Stanford University as the best

2% of scientists in the world. Dr. Ayman Al-Batayneh then provided a detailed explanation about the most important services that the platform provides to the targeted sectors in terms of providing support, consultation, and advice to increase energy efficiency, providing educational resources, and online training. He added that the platform provides initial energy assessments, provides assistance in energy audits, and prepares special reports on Energy use and the feasibility of installing solar cells, in addition to providing an appropriate environment for holding meetings, communicating and exchanging knowledge.

During the workshop, the students' opinions were listened to and their inquiries about the issues raised were answered. In conclusion, Professor Ismail Yamin honored Dr. Ayman Al-Batayneh, Director of the Energy Innovation Platform Project at the University Shield, in appreciation of his efforts and response to the university's invitation to hold this workshop.





## **The College of Engineering at Amman Arab University participates in the Eighth Arab Forum for Renewable Energy and Energy Efficiency**

As part of its series of participation in extracurricular activities and under the directives of the University President, Professor Dr. Muhammad Al-Wadyan, Amman Arab University participated in the sessions of the Eighth Arab Forum for Renewable Energy and Energy Efficiency in Amman, under the patronage of Her Royal Highness Princess Sana Asem, may God protect and protect her. The university was represented in the forum's activities by Professor Dr. Hanan Mohamed Ahmed, Head of the Department of Architecture at Amman Arab University, which was organized by the Arab Renewable Energy Authority

In cooperation with the Jordanian Renewable Energy Association and the Smart Cities Association, in the presence of the Secretary-General of the Jordanian Ministry of Energy, along with a group of Arab diplomats and members of the Arab Renewable Energy Authority and the Council of Elders of the Arab Renewable Energy Authority in Jordan.

The forum included a group of lectures and dialogue sessions delivered by many experts and specialists in the field of renewable energy and investment, focusing on several topics, including renewable energy, smart cities, green hydrogen, innovative agricultural patterns to achieve food security, and electric cars in the West Asia, Europe and the Middle East region. This is for the sake of international cooperation in the issues of renewable energy and the environment to achieve the United Nations Sustainable Development Goals. During the forum's activities, the

requirements for achieving smart cities were discussed in three locations in the Hashemite Kingdom of Jordan, which are under study and research. A scientific symposium will be held in this context about that during The coming months.



## Meeting of the Advisory Board of the College of Engineering at Amman Arab University

The Advisory Board of the College of Engineering at Amman Arab University held its first meeting in the presence of the Dean of the College, Prof. Abdullah Al-Adinat, and a group of engineers with competencies and experience representing the institutions of the engineering professional community and heads of departments in the college. At the beginning of the meeting, Dr. Al-Adinat praised the role of the advisory council in the decision-making process in all matters related to the college, the educational goals of the college and its various programs and meeting the requirements of local and international accreditations.

During the meeting, the members of the Council were fully placed on the elements of the strategic plan of the College of Engineering at Amman Arab University, which emanates from the elements of the strategic plan of the university. Prof. Al-Adinat stressed the importance of including the views of the members of the Council for the vision, mission and objectives of the college in line with the vision, mission and objectives and tips to develop students' practical and scientific skills and raise their readiness to enter the labor market with an advantage and superiority.



### **Amman Arab University Organizes a Lecture on Modern Technology in Energy Saving**

The Department of Renewable Energy Engineering at the College of Engineering at Amman Arab University organized a scientific lecture on modern technology in energy saving. Engineer Raed Al-Fatiani, Director General of Baladakum Company, gave a presentation talking about the methods of regulating electrical energy and saving systems in order to exploit the entire electricity supply, which leads to saving energy and improving its efficiency. Prof. Abdullah Al-Adinat, Dean of the Faculty of Engineering at the University and Head of the Department of Renewable Energy Engineering, Dr. Mohammed Ismail, Engineer Eid Al-Assaf, Assistant General Manager of the National Electricity Company, and Engineer Mohammed Al-Zaro attended the event.

In this regard, Prof. Al-Adinat stressed that the college is keen to cooperate with many companies specialized in the field of energy aimed at providing students of the Faculty of Engineering with modern knowledge in this field. He added that these lectures allow students to raise their knowledge and skills in the fields of theoretical education and then reach the integration of the applied and theoretical aspects.

The students of the college showed great interest in the subject of the scientific lecture through the dialogue and discussion that took place in the lecture, where the students showed the extent to which they benefited from the implementation of such lectures because of their importance in practice and practice.



<https://aau.edu.jo/en/news/22537>

### **Department of Renewable Energy Engineering at “Amman Arab University” Participates in the Activities of the Engineering Industrial Trade Fair “ 2022”**

Department of Renewable Energy Engineering at Amman Arab University attended the activities of the engineering industrial trade fair “JIMEX 2022” and the Near East Exhibition for Solar Energy “SONEX”, where the exhibition included local, regional and international companies.

Also, the Near East Exhibition and Forum for Solar Technologies SONEX was held coinciding with the "JIMEX 2022" exhibition, where the latest solar energy applications in electricity, water, lighting, solar energy systems for buildings, factories, hospitals and farms, PV Module panels, Solar Inverters, and Energy conservation in addition to valuable lectures and workshops.

Organizing such visits comes with the aim of linking the academic side of the students to the labor market and introducing students to the latest applications and technologies used in the field of renewable energy, in addition to identifying the most important and prominent leading companies in this field. It is noteworthy that the Department of Renewable Energy Engineering at Amman Arab University is a member of the American Society of Energy Engineers and began receiving students at the beginning of the academic year 2020/2021, to meet Jordan's needs for skilled engineering cadres in the sectors of renewable energy engineering and to keep pace with the requirements of the current stage in light of the energy crisis, and serves the needs of the labor market that comes within the strategic plan of the University and its future vision in opening modern engineering disciplines that serve the needs of the local and Arab labor market.

*Pioneering and Excellence*