



جامعة الإمام عبد الرحمن بن فيصل  
IMAM ABDULRAHMAN BIN FAISAL UNIVERSITY



SDG 9

Industry, Innovation  
& Infrastructure

Sustainable  
Development Report

2024-2025



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## 1. Awareness lecture titled "The Impact of Smart City Applications in Combating Desertification" by IAU



In tandem with the launch of the #Watan\_Akhdar\_Ghadan\_Mustaqil #Baytuna\_Kanz event, I was delighted today to represent @IAU\_Arch through a gracious invitation from @IAU\_DCP and in collaboration with @ncvcksa, where I delivered an awareness lecture titled:

**The Impact of Smart City Applications in Mitigating Desertification.**

<https://x.com/Aboodkoa/status/1920386053124296992>

## 2. King Fahad University Hospital of IAU launched a set of Innovative Pharmacy Services for Public

The Dean of the College of Medicine at #Imam\_Abdulrahman\_Bin\_Faisal\_University, who is also the General Supervisor of King Fahd University Hospital in Khobar affiliated with the university, Dr. Bassam Awary, **launched a set of new medical services for the Pharmacy Services Department at the hospital.** This was in the presence of the hospital's Medical Director, Dr. Majed Al-Abdali, and Dr. Abdul Salam Al-Assiri, the General Director of Pharmacy Services at the Medical City.

The pharmacy services launched are:

- Smart dispensing cabinets for medications.
- A device for preparing intravenous nutrition.
- Standardization of entering medication lists and medical prescriptions into the medical information system.
- Development of the system for reporting medication side effects.



[https://x.com/IAU\\_KSA/status/1921955966892855602](https://x.com/IAU_KSA/status/1921955966892855602)

### 3. IAU Encouraging Innovation, Research, and Investment



The Cybersecurity Research and Innovation Pioneers Grants Initiative A key initiative that enables cybersecurity researcher and innovators to explore the landscape of promising cybersecurity innovations for current and future cybersecurity challenges.

<https://www.iau.edu.sa/en/news/join-now-encouraging-innovation-research-and-investment>

#### 4. Deanship of Graduate Studies of IAU announces the Scientific Publishing Initiative for graduate students



The Deanship of Graduate Studies is pleased to announce the launch of the Scientific Publishing Initiative for Graduate Students as follows:

1. Scientific publication reward according to the classification of the scientific publishing journal
2. In addition to the possibility of obtaining a discount of (10%) of the total tuition fees for the program in which the student is enrolled for each published scientific paper, the published scientific paper is counted for one person, who is the principal researcher.

<https://www.iau.edu.sa/en/news/the-scientific-publishing-initiative-for-graduate-students>

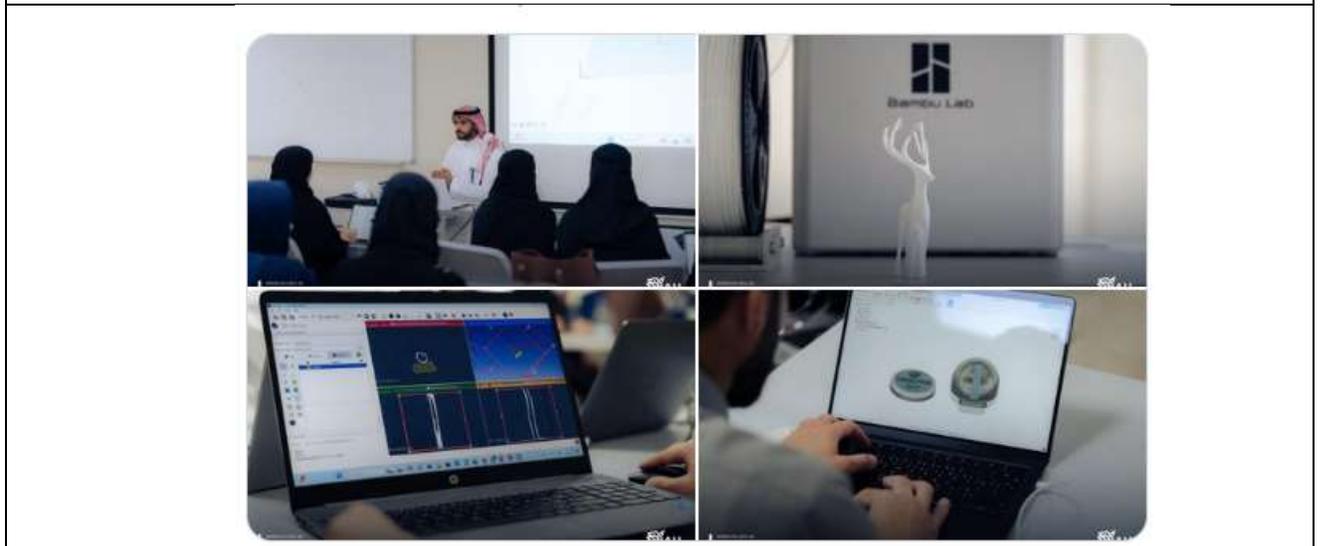


## 5. College of Engineering of IAU utilized 3D Printing Technology in the field of Medicine



College of Engineering of IAU utilized 3D printing technology to precisely determine the size of the missing part in in bone and elbow joint transplantation for a patient

[https://x.com/CE\\_IAU\\_SA/status/1971660317508993049](https://x.com/CE_IAU_SA/status/1971660317508993049)



IAU conducted a three-day practical workshop on 3D printing technologies in the medical field applications

[https://x.com/CE\\_IAU\\_SA/status/1893309482815377606](https://x.com/CE_IAU_SA/status/1893309482815377606)

## 6. IAU conducted Seventh Student Research Day



Under the patronage and presence of His Excellency the President of #جامعة\_الإمام\_عبدالرحمن\_بن\_فيصل, Acting Dr. Fahd Al-Harbi, the College of Medicine held the Seventh Student Research Day. A total of (48) scientific research papers were presented under the supervision of faculty members at the college, and during the event, the winning student groups in the research poster competition were honored.

[https://x.com/Med\\_iau/status/1916746561360380378](https://x.com/Med_iau/status/1916746561360380378)

[https://x.com/IAU\\_KSA/status/1914051189425009129](https://x.com/IAU_KSA/status/1914051189425009129)

## 7. College of Medicine, IAU received Gold Medal in the International Exhibition of Inventions in Geneva



The college administration congratulates Her Excellency Dr./Amal Al-Adaini from the Pathology Department at the College of Medicine (IAU) on receiving the Gold Medal during her participation in the International Exhibition of Inventions in Geneva.

[https://x.com/Med\\_iau/status/1912112972769395141](https://x.com/Med_iau/status/1912112972769395141)

## 8. IAU achieved First Place for Creativity and Innovation Track



The college administration congratulates His Excellency Prof. Reem bint Youssef Al-Jandan on her honoring by His Royal Highness the Prince of the Qassim Region for achieving first place 🏆 (Creativity and Innovation Track), as part of the honoring ceremony for the winners of the “Shuqaiq Al-Rijal” Award in its fifth edition.

[https://x.com/Med\\_iau/status/1922523255736357203](https://x.com/Med_iau/status/1922523255736357203)

[https://x.com/IAU\\_KSA/status/1922335282935791817](https://x.com/IAU_KSA/status/1922335282935791817)

## 9. IAU participated in the Commercial Innovation Opportunities Meeting



Imam Abdulrahman Bin Faisal University participated in the Commercial Innovation Opportunities Meeting as part of the @MonshaatSA facilities tour in the Eastern Region, aiming to enhance the innovation environment and support entrepreneurship.

Dr. Khulood Al-Ghamdi, Dean of the Innovation and Entrepreneurship Institute, also spoke during a dialogue session about the university's role in promoting a culture of innovation and entrepreneurship among its affiliates and supporting the knowledge-based economy.

[https://x.com/IAU\\_KSA/status/1978116066950705429](https://x.com/IAU_KSA/status/1978116066950705429)

## 10. Marine Engineering Students of IAU had a Field Visit to the Zamil Shipbuilding and Repair Company



The Department of Marine Engineering organized a field visit for the first cohort students to Zamil Shipbuilding and Repair Company, where the students were introduced to the various fields of work in the shipbuilding industry, as a step aimed at enhancing the practical aspect and preparing them for the job market.

[https://x.com/CE\\_IAU\\_SA/status/1976558183708848151](https://x.com/CE_IAU_SA/status/1976558183708848151)

## 11. IAU Consulting Center for Buildings Energy

The given webpage link (refer to About section and Scope of work section) describes about the “consulting center for buildings energy”, a body accredited by IAU Institute of Consulting Studies to deliver training and consulting services in field of engineering related rationalization of energy consumption. Its scope of work includes training, education and workshops in the areas of sustainability, green buildings and energy conservation. It also includes energy efficiency studies and audits of existing buildings; consultations about the efficiency of air conditioning systems; and consultations about the solar energy.



The screenshot shows the website for the Consulting Center for Buildings Energy at Imam Abdulrahman Bin Faisal University. The page features a dark blue navigation bar with links for Home, About Us, Study with Us, Colleges, Research, Community Service, Campuses, Administration, and University Hospitals. Below the navigation bar is a search box and a main menu. The main content area is titled "Consulting Center for Buildings Energy" and includes sections for About, Dean's Message, Organizational Structure, Services, Experience Houses, Publications, Gallery, Our Partners, and Contact Us. The "About" section describes the center as a body accredited by IAU Institute of Consulting Studies to deliver training and consulting services in the field of engineering related rationalization of energy consumption. The "Vision" section states: "Toward a specialized hub for consulting services and training in field of buildings energy." The "Mission" section states: "High quality services of innovative methods for achieving development socially, economically, and environmentally." The "Objectives" section lists: "To invest the capabilities available at the university in terms of laboratories, simulation software."

<https://www.iau.edu.sa/en/administration/centers/institute-of-consulting-studies/services/experience-houses/consulting-center-for-buildings-energy>

## 12. Mechanical and Energy Engineering Laboratories at IAU

The given webpage link (refer to Mechanical and Energy Engineering Laboratories) shows the presence of the **Mechanical and Energy Engineering Laboratories** in the College of Engineering of IAU. Among various labs, **the renewable energy lab** is the one that has essential equipment with full instrumentation to allow students to investigate the effective use of **solar energy** as a renewable, environmentally friendly energy source.

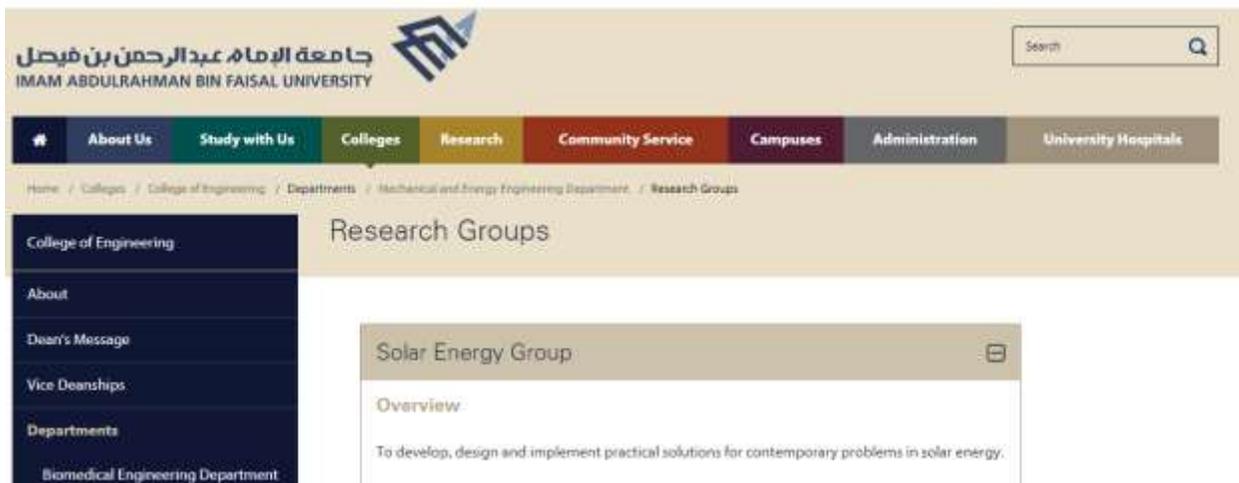


The screenshot shows the website for the Mechanical and Energy Engineering Laboratories at Imam Abdulrahman Bin Faisal University. The page features a navigation menu with options like 'About Us', 'Study with Us', 'Colleges', 'Research', 'Community Service', 'Campuses', 'Administration', and 'University Hospitals'. The main content area lists several laboratories: Thermodynamics Lab, Fluid Mechanics Lab, Refrigeration and Air Conditioning Lab, Heat and Mass Transfer Lab, and Renewable Energy Lab. The Renewable Energy Lab section includes an 'overview' and a brief description: 'The Renewable Energy lab houses some essential equipment with full instrumentation to allow...'

<https://www.iau.edu.sa/en/colleges/college-of-engineering/labs-and-equipment/mechanical-and-energy-engineering-laboratories>

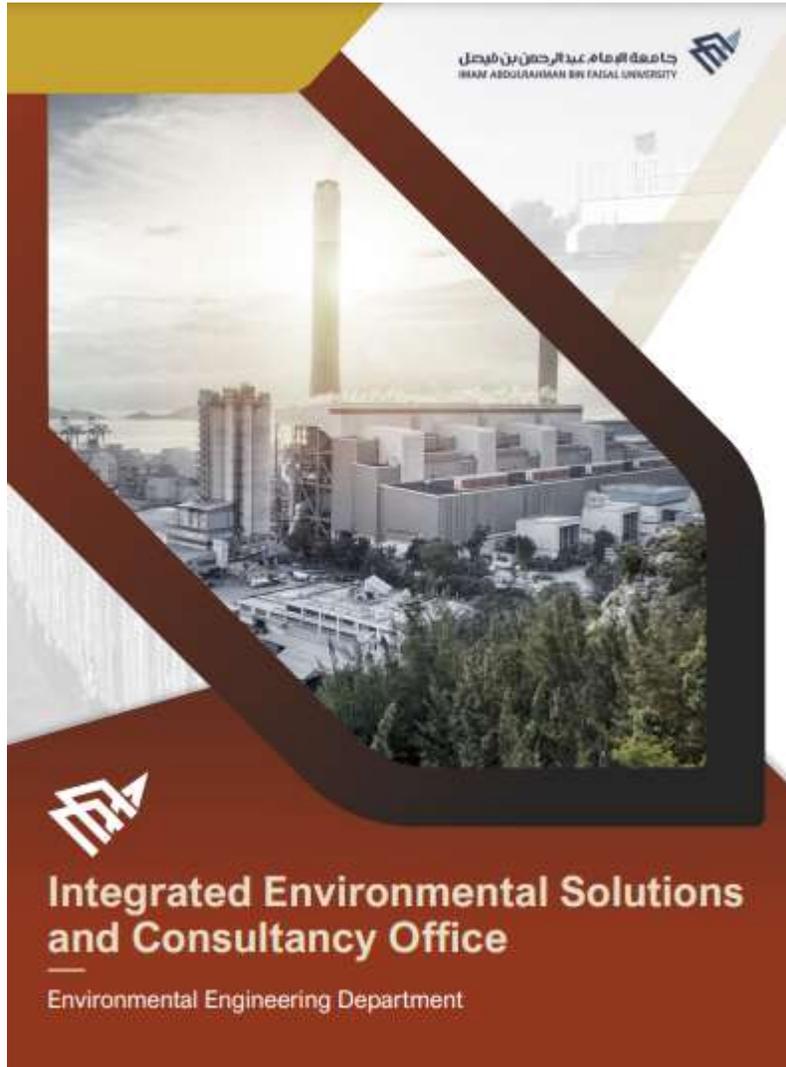
### 13. Research Groups at IAU for Renewable Energy

The given webpage link (refers to research groups section) shows the presence of the **research groups** in the College of Engineering of IAU. The research groups include **solar energy group, wind energy group, and air conditioning and energy storage group**. These research groups aim to develop, design, and implement **practical solutions for contemporary problems** in solar energy, wind energy, and air conditioning and energy storage. The objectives of these groups encompass conducting **market-relevant commercial research**, supervising students, cooperating with research, and publishing high-quality papers.



<https://www.iau.edu.sa/en/colleges/college-of-engineering/departments/mechanical-and-energy-engineering-department/research-groups>

## 14. Integrated Environmental Solutions and Consultancy Office



## INTEGRATED ENVIRONMENTAL SOLUTIONS AND CONSULTANCY OFFICE (GAMEP Authorized)



The department of environmental engineering is considered as a pioneer since it is the first department to offer the bachelor's degree environmental engineering in the kingdom of Saudi Arabia.



The Integrated Environmental Solutions and Consultancy Center established by Imam Abdulrahman Bin Faisal University in 2020 and Authorized by the Presidency of General Authority of Meteorology and Environment Protection (GAMEP).



The distinguished experience, expertise, and capabilities are utilized to develop engineering solutions that meet the customers' needs and local standards. The services include providing optimum air quality management and solutions on the indoor/outdoor air pollution and industrial emissions from oil and gas, energy, mining, and minerals sectors.



The Consulting and Engineering Office is dedicated to working with clients to implement compliance solutions using innovative approaches and advanced technologies. The measurement and analysis are conducted following stringent environmental laboratory protocol and best quality practice.



**The multi-disciplinary consultants engineering office includes:**

<b>01</b> Environment services including environmental studies, design, and supervision	<b>05</b> Physical, chemical, and biological procedures and mechanisms accountable for the proclamation, conveyance, alteration and preservation of pollutants.
<b>02</b> Professional training for environmental specialists and technicians	<b>06</b> Pollutant control procedures (predominantly the exclusion of trace & toxins or pollutants).
<b>03</b> Short and long Certificate programs in environmental specialists and engineering field	<b>07</b> Basic ideologies of physical, chemical, and biological conduct know how for water, wastewater and solid wastes scums or residues from different sources.
<b>04</b> Third-party inspection and opinion work to ensure compliance with the project specifications, codes, and standards.	<b>08</b> Pollutant control measures for Air, other contaminants removal from air & its monitoring (gases, Particulate matters & Meteorological parameters etc.).

### 1. Division of Solid and Hazardous Waste Management



This consultation office offers consultation services, conducting studies, third-party testing, inspection, and training in the field of environmental engineering and waste management, including industrial, medical among all other types of solid waste. In Addition, we offer short courses related to the area of solid waste management. The office is part of the Integrated Environmental Solutions and Consultancy Center established in 2020 by Imam Abdulrahman Bin Faisal University. All laboratory analysis are conducted following an approved environmental laboratory protocol.



#### Our services include:

- Inspecting, analysis, and assessment of all types of hazardous waste.
- Industrial waste collection and disposal
- Landfill and incineration design
- Medical waste management, disposal, and incineration
- Best applicable technology
- Radioactive waste management
- Oil waste management and reuse
- Contaminated solid purification



### 2. Division of Wastewater Treatment and Reuse:

water/wastewater team in IAU consultation office specializes in providing solutions for the industry's water/wastewater treatment challenges. We can guide you for the operations of wastewater system, provide troubleshooting, and can help or manage your analytical testing. We offer consulting services for both water and wastewater treatment plants. We offer consultation services, conducting studies, measurements, and training in the field of wastewater engineering, treatment, optimization, reuse, and design.



**Our consultation services and laboratory analysis are authorized by the Presidency of Meteorology and Environment (GAMEP).**

- Conducting analysis and modeling on the existing design of wastewater engineering systems and finding cost-saving opportunities that provide a return on investment.
- Designing, implementing, and upgrading wastewater treatment systems
- Advice on best practicable and cost-effective solutions for wastewater treatment.
- Wastewater analysis and characterization
- Marine pollution and deep discharge design
- Blue flag services and consultation
- Water footprint calculations and simulations
- Wastewater plant modelling and simulation studies



### 3. Division of Air Quality and Emission Control

Offering consultation services, conducting studies, third-party testing, inspection, and training in the field of environmental engineering, indoor and outdoor air quality assessment, emission inventory calculation, dispersion modeling, health risk assessment, dose calculation.

- Mobile station air quality monitoring for EIA studies
- Stack Gas Monitoring
- Designing Innovative Air Pollution Control Technologies
- Optimizing Current Air Pollution Control Technologies
- Short courses and training
- Calibration and maintenance
- Bioaerosol Sampling and Analysis
- Noise Pollution Monitoring, Mapping, Modeling, and Control
- Monitoring of Meteorological Parameters
- Air Toxics Health Risk Assessments
- Dispersion Modeling
- Source Apportionment Modelling
- Air Quality Program Management
- Air Pollution and Air Quality Mapping
- GIS maps for measured pollutants
- Source and stack emission monitoring
- Ambient air quality studies
- Mobile lab services
- Environmental management plan (EMP)
- Environmental impact assessment studies (EIA)
- Life cycle assessment studies (LCA)
- Pollutants dispersion modelling (AREMOD)
- Risk assessment and dose calculation
- Auditing and inspection
- Energy efficiency
- Carbon footprint
- Global warming and greenhouse gases
- Ambient/Indoor Sampling, Monitoring, Analysis of Air Pollutants



**Mobile Air Quality Monitoring Station**



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IMAM ABDULRAHMAN BIN FAISAL UNIVERSITY



## Integrated Environmental Solutions and Consultancy office

**One-Stop-Shop.**  
Backed up with our well-equipped laboratories enables us to test and diagnose prior to consultation

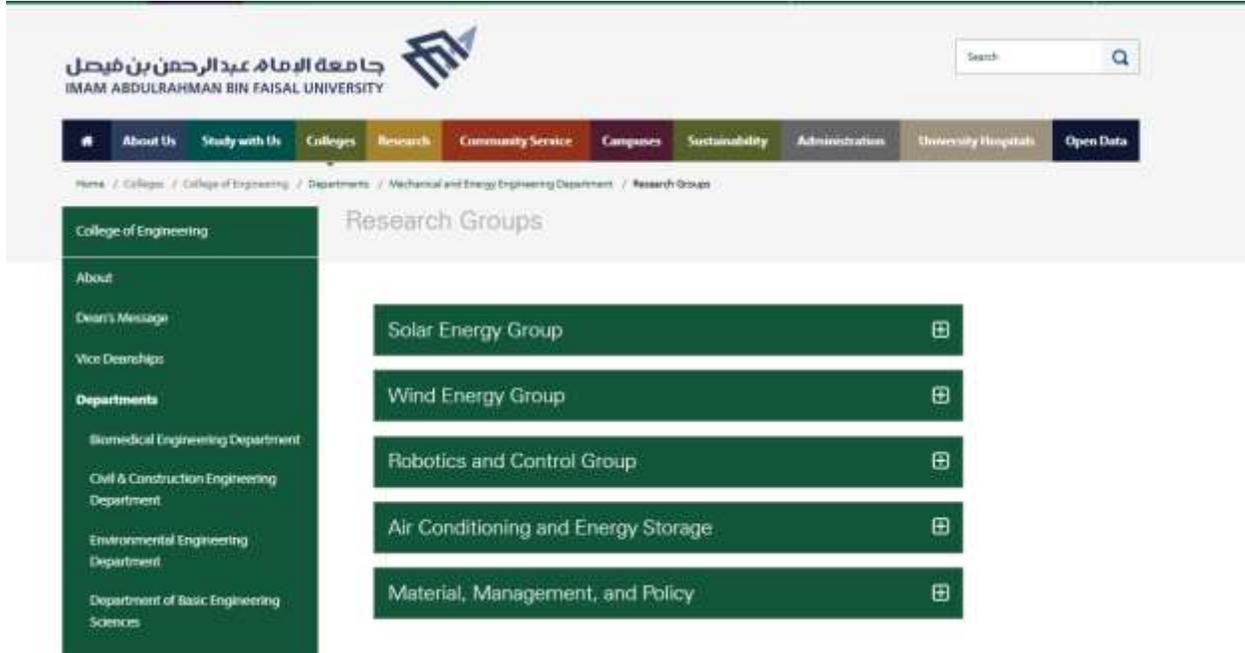


**FLIP LINK**  
<https://simplebooklet.com/Y3PjySVJ0PTkaCE6vOKo5y>

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[https://www.iau.edu.sa/sites/default/files/resources/general\\_introduction-compressed.pdf](https://www.iau.edu.sa/sites/default/files/resources/general_introduction-compressed.pdf)

## 15. Research groups on Energy at IAU



The screenshot displays the website for Imam Abdulrahman Bin Faisal University. The header includes the university's name in Arabic and English, a search bar, and a navigation menu with categories like About Us, Study with Us, Colleges, Research, Community Service, Campuses, Sustainability, Administration, University Hospitals, and Open Data. The breadcrumb trail indicates the path: Home / Colleges / College of Engineering / Departments / Mechanical and Energy Engineering Department / Research Groups. The main content area is titled 'Research Groups' and lists five groups: Solar Energy Group, Wind Energy Group, Robotics and Control Group, Air Conditioning and Energy Storage, and Material, Management, and Policy. A sidebar on the left provides navigation for the College of Engineering, including sections for About, Dean's Message, Vice Deanships, and a list of departments: Biomedical Engineering Department, Civil & Construction Engineering Department, Environmental Engineering Department, and Department of Basic Engineering Sciences.

<https://www.iau.edu.sa/en/colleges/college-of-engineering/departments/mechanical-and-energy-engineering-department/research-groups>

## 16. College of Engineering of IAU participated in the Solar Energy and Storage Exhibition

Dean of College of Engineering of IAU, Prof. Dr. Fahd Al-Omari, and Head of the Mechanical and Energy Engineering Department, Dr. Mosaid Al-Zahrani, participated in the Solar Energy and Storage Exhibition, and presented two scientific papers that enhance the college's research and industrial role in sustainable energy in support of the Kingdom's Vision 2030.



[https://x.com/CE\\_IAU\\_SA/status/1983180226118201404](https://x.com/CE_IAU_SA/status/1983180226118201404)

## 17. IAU Engineering College Students participated in developing the High Concentrated Photovoltaic (HCPV) system

Supported by #ImamAbdulrahmanBinFaisalUniversity, #Engineering College participated in developing the High Concentrated Photovoltaic (HCPV) system in collaboration with King Abdullah City for Atomic and Renewable Energy and the American company "Arzon Solar," achieving highly efficient results under harsh desert conditions and high temperatures.

التصميم الهندسي لتطوير نظام الطاقة الكهروضوئية المركزة (HCPV)

### تطوير نظام الطاقة الكهروضوئية المركزة (HCPV)

#### استكمال ونجاح للمشروع

بشراكة بين مدينة الملك عبد الله للطاقة الذرية والمتجددة، وجامعة الإمام عبد الرحمن بن فيصل، والشركة الأمريكية "أرزون سولار"

#### ما هي مميزاتة؟

- فترة نوعية مصممة لتحمل الظروف الصحراوية القاسية ودرجات الحرارة المرتفعة
- تقنية متطورة بعدادات عالية الكفاءة لتكبير ضوء الشمس على كغيا
- شمسية متعددة الطبقات
- 40% هي كفاءة التحويل

#### إطلاق مشروع المسح الجغرافي لمشروعات الطاقة المتجددة

1,200 محطة لربط الطاقة الشمسية وطاقة الرياح في مختلف مناطق المملكة

أسندت عقود تنفيذ المشروع إلى شركات وطنية

[https://x.com/CE\\_IAU\\_SA/status/1916507044275798342](https://x.com/CE_IAU_SA/status/1916507044275798342)

## 18. IAU Engineering College Students participated in the events of the third Renewable Energy Symposium and Exhibition

The #College\_of\_Engineering of IAU concluded the events of the third Renewable Energy Symposium and Exhibition, after days filled with scientific contributions and fruitful workshops, thanking all participants and supporters for their contributions to the success of this event.



[https://x.com/CE\\_IAU\\_SA/status/1912930146014703621](https://x.com/CE_IAU_SA/status/1912930146014703621)

## 19. Participation of College of Engineering of IAU in Energy Debate

#College\_of\_Engineering of IAU proudly participates with its teams in the Energy Debate at King Fahd University of Petroleum and Minerals, where the college team secured second place 🏆 among the universities of the Eastern Region.



[https://x.com/CE\\_IAU\\_SA/status/1884486325786604026](https://x.com/CE_IAU_SA/status/1884486325786604026)

## 20. Participation of College of Engineering of IAU in Energithon Event at King Fahd University of Petroleum and Minerals

As #College\_of\_Engineering of IAU proudly shares, its team participated in the "Energithon" event at King Fahd University of Petroleum and Minerals as the only team from outside the university, achieving second place 🏆.



[https://x.com/CE\\_IAU\\_SA/status/1884528765310517480](https://x.com/CE_IAU_SA/status/1884528765310517480)

## 21. IAU Female Engineering Students achieved two positions at the Second Conference on a Sustainable Green Future

Female students from the College of Engineering (Environmental Engineering Department) at #Imam\_Abdulrahman\_Bin\_Faisal\_University achieved two positions among the top three at the Second Conference on a Sustainable Green Future in the Kingdom 2025, organized by the Center for Environment and Marine Studies at King Fahd University of Petroleum and Minerals.



[https://x.com/IAU\\_KSA/status/1886644022736724043](https://x.com/IAU_KSA/status/1886644022736724043)

## 22. IAU Participation in "Green Homeland, Sustainable Tomorrow" forum

Under the patronage of His Excellency the **President of #Imam\_Abdulrahman\_Bin\_Faisal\_University**, Prof. Fahd bin Ahmad Al-Harbi, #College\_of\_Engineering was honored by the Vice President of the University for Development and Community Partnership, Prof. Asim bin Abdulrahman Al-Ansari, in recognition of its environmental initiatives and participation in **the accompanying corner of the "Green Homeland, Sustainable Tomorrow" forum.**



[https://x.com/CE\\_IAU\\_SA/status/1919419153871405218](https://x.com/CE_IAU_SA/status/1919419153871405218)

## 23. Approval for the Establishment of Saudi Building Code Academy by IAU

The happiness of the Dean of #College\_of\_Engineering, Dr. Murad Al-Thubaity, appreciates the Cabinet's approval for the establishment of the **Saudi Building Code Academy**, which will mark a qualitative leap **in the development of engineering education, and enhance the academic and technical efficiency of students and engineers in the civil engineering sector.**



[https://x.com/CE\\_IAU\\_SA/status/1899946964969476345](https://x.com/CE_IAU_SA/status/1899946964969476345)

## 24. Dialogue session on "Future Energy and 500 Days of Work" at IAU

An aspect of the dialogue session "Future Energy and 500 Days of Work" Hosted by Professor Dr. Fahad Al-Omari and in partnership with the Cultural Club, the session addressed important and enriching topics in the field of energy and its sources.



[https://x.com/coec\\_iau/status/1788278005501976664](https://x.com/coec_iau/status/1788278005501976664)

## 25. IAU College of Engineering Students won Second Place for Project producing Biofuel from Coffee Beans

We are proud of the Achievement of the students of #College\_of\_Engineering from the Department of Mechanical Engineering and Energy, Abdullah Al-Harbi, Jarrah Al-Qassim, Saud Al-Sarhani, Ibrahim Al-Yousifi, and Ghazi Al-Otaibi, who secured second place in the CITEthon Hackathon with their project to produce biofuel from coffee beans.



[https://x.com/CE\\_IAU\\_SA/status/1912918031505686531](https://x.com/CE_IAU_SA/status/1912918031505686531)

## 26. Consulting Center of IAU towards Sustainable Built Environment

The given webpage link (refer 2<sup>nd</sup> paragraph first 4 lines) describes about a consultancy center established by College of Architecture and Planning of IAU. This center aims to take a leading role in directing the community towards a more sustainable built environment. It organizes a number of short training courses and offers professional services to both the public and private sectors.

<https://www.iau.edu.sa/en/colleges/college-of-architecture-and-planning/deans-message>

