

Hijjawi Faculty Newsletter

Issue 06 | April 1st 2023





Established in 1984



9 Engineering Departments (11 B.S.E.T / 5 M.S.)



More than **26,000** Engineering Graduates



125 Academic Staff



73 Admin Staff & Lab Engineer

Yarmouk University

Hijjawi Faculty for Engineering Technology

Our Vision

Towards a distinct faculty in teaching and research exists among 500 best faculties in the world in the various fields of engineering by the year of 2025.

Our Mission

Excellence in teaching, scientific research and community service through the provision of high-quality education in line with the latest developments in various fields of science and engineering, and closely linked with industry as well as various community needs.

Our Objectives

- Provide high-quality education in line with the latest developments in the various fields of science and engineering.
- Achieve partnership with industry to prepare qualified graduates to work efficiently in this sector.
- Establish research centers to get familiar with the community needs and work to find effective solutions to these needs.
- The presence as a strong competitor in the field of scientific research in the world, through the quantity and quality of scientific publications issued by the faculty.

Our Values

The faculty seeks to prepare the graduate to be a good person who is productive in his community and loyal to his country and nation. Therefore, the faculty focuses on developing the student's personality and inclinations, encouraging him to be creative, and developing his moral aspect, which contribute to the preparation of the elites and the leaders of the future.

Special Titles:

1.	Dean's Message	4
2.	Featured Article	5
3.	Alumni	6
4.	Faculty News	9
5.	Students' Activities	29
6	Faculty Members' News	51

Dean's Message



I'm delighted to welcome you to the first issue of the Hijjawi Faculty for Engineering Technology Newsletter in 2023, in which we attempt to portray the Faculty through the eyes of its students, faculty members, and management personnel. Here in this welcome message, I try to present what we have achieved in the first quarter of this year 2023, and I briefly touch my action plan for the next quarters of this year.

What a great kick off of this year 2023! The Faculty was able to conduct more than sixty activities with the help of its Faculty members and students. In addition to the activities, our faculty members and students demonstrated their excellence through their great achievements during this short period --something that will certainly continue exponentially in the future, with the full support we receive from the top management in the university.

We continued our great efforts to get the ABET accreditations for all ten bachelor programs. We started this year with a great news that our

second three programs (Biomedical Systems Engineering, Biomedical Informatics Engineering, and Communication Engineering), which were visted last year, received an extremely positive evaluation outcomes. This year 2023 we submitted the seventh program, which is the Electrical Power Engineering. In our plan for the next year 2024, we will apply for the rest of the programs.

Early this year, we have received the approval to establish new programs in the Faculty, namely, Bachelor in Computer Engineering/Internet of Things and Masters in Biomedical Systems and Informatics Engineering. We will continue this pattern of replacing our academic programs with up-to-date programs.

We also continued our focus on international collaboration. For instance, we just received funding from the DAAD in the field of capacity building in digital transformation.

We continue with our initiative to regularly meet students and discuss with them any topic -- the initiative is called "Wednesday Meeting with the Dean". I understand that unusual things take time to become usual. However, I see how much enthusiastic our students are to discuss and share ideas.

We continue our efforts to update our curriculum, to include up-to-date technologies and state-of-the-art knowledge -- to make it more appealing to the labor market needs. We also plan to restructure our study plans to include dual studies, tracks of technical skills, etc.

I hope you a pleasant experience as you read this issue of the Faculty newsletter. I'm sure that you will notice the energy of our students, something that makes us more confident about our future.

Prof. Mwaffaq Otoom, PhD Dean

Featured Article

Higher Education's Role in Jordan's Economic Modernisation Vision



I would like to start my article with a short quote by His Majesty King Abdullah II Ibn AI Hussein regarding the Economic Modernization Vision that said: "We want a future where we reclaim our leadership in education, advance our economy, and bolster our public sector's efficiency and capacity; a future in which our private sector thrives with opportunities increasing fairly to counter poverty and unemployment, and curtail inequality; a future that empowers our youths to soar in the skies of innovation."

That was said in a letter addressed the Jordanian people by His Majesty, where he highlighted the aspirations for Jordan's future. In His letter, His Majesty the King expressed his pride of what Jordanians have accomplished; "despite the magnitude of the hardships and challenges, they continue to prove, time after time, that their will, determination, and awareness are stronger than the fiercest storm". Furthermore, His Majesty reiterated

that Jordan's aspirations have no limit, and he has a deep belief that "we can build the bright future we all desire, a future that empowers our youths to soar in the skies of innovation".

His Majesty reassured his people that this Economic Modernization Vision would be bearing fruit as comprehensive reforms, efficient services, economic and administrative development, and job opportunities.

The Economic Modernization Vision will be implemented through eight economic growth drivers. One of these drivers is Smart Jordan, and the main factor in this driver is Higher Education, as well as TVET, R&D Innovation, and Entrepreneurship & Startups, which are also very well connected to Higher Education. This driver focuses on the development and preparation of local talents to meet the needs of future skills, required resources and institutions to accelerate economic growth and enhance quality of life.

Approximately 68,000 graduates complete their university education every year, while the economy creates a lower amount of jobs that is insufficient to absorb these graduates (across skill levels), which leads to a state of increasing unemployment. Here comes our crucial role in finding solutions for this challenge; by setting modernized programs, which focus on competencies, and presenting these programs through innovative learning and teaching methods, by using technology. We also have to find sufficient budget & financing, strong quality management, and a coherence between university skill and labor market demands.

Prof. Islam M. Massad, MD President

Alumni

Prof. Raed Mesleh



Prof. Raed Mesleh (class of 2000), is currently spending his sabbatical leave at Princess Sumaya University for Technology (PSUT) as the Dean of King Abdullah I School of Scientific Research and Higher Education. He is also a professor in the IoT and Communication department at King Abdullah II School of Engineering. He is a tenured faculty member in the Electrical Engineering Department at the German Jordanian University (GJU). He joined GJU in February 2016 where he serves as the Dean and the Vice Dean of the school of Electrical Engineering and Information Technology for about six years. He received his B.Sc. degree with honor from Yarmouk University, Hijjawi Faculty for Engineering Technology in 2000, and his M.Sc. degree in communication Technology with honor from Ulm University in Ulm, Germany. He received his PhD in 2007 from Jacobs University in Bremen, Germany. From 2007 to 2010 he was a postdoctoral fellow at Jacobs University. He was with the Electrical Engineering Department at University of Tabuk in Saudi Arabia from 2010—2015. During that period, he holds the position of department chair and the director of research excellence and intellectual property units at the deanship of scientific research. He was a visiting scholar at Boston University, The University of Edinburgh and Herriot—Watt University. His current research interests are in MIMO techniques, Tera hertz and millimeter wave communications, cell—free, physical layer security, Steiner triple systems, graph theory, and optical wireless communication. He is an inventor and coinventor of 10 patents. He published more than 200 articles in scientific prestigious journals and international conferences. His overall citations exceed 13000 with an H-index of 45. He received distinguished researcher award from University of Tabuk in 2013, and from GJU in 2016 and 2019. In December 2016, he was awarded the Arab Scientific award from Arab Thought Foundation.

Dr. Emad Abdelsalam



Dr. Emad Abdelsalam (class of 1994), is an Associate Professor at the School of Engineering Technology at Al Hussein Technical University, Amman, Jordan. He received his undergraduate degree in Electronics in 1994 from Yarmouk University, a master's degree in 1998 from the University of Wisconsin-Milwaukee, and a Ph.D. in Engineering, in 2013, from the University of Wisconsin-Milwaukee, in the USA. Dr. Abdelsalam has 18+ years of full-time industrial experience in product development in the US. His background is in solar energy, smart grid, electronics, biomedical, signal processing, image processing, machine control, automation, robotic machines, systems for non-destructive evaluation, Magnetic Resonance Imaging, and RF coils. He designed, developed, and released many products for the industry. He held many positions, including Dean of the School of Computing, Head of the Energy Department, Lead Software Engineer, Lead System Designer, Program Manager, and Principal Engineer. He has extensive experience in leading/managing global teams. Dr. Abdelsalam's expertise is in Leadership, Project Management, Program Management, RF Coils Design, Product Development, FDA/ QA and Regulatory, Design Controls, Quality Management Systems, and IEC Standards. Solar Energy, Smart Grids, Hydrogen, Al, Machine Learning, and the Internet of Things are some of his research interests. The United States Patent Office has registered two patents for Dr. Abdelsalam; several others are pending. Dr. Abdelsalam served as pi and co-pi on multiple projects over the years. He owns and founded the Multidisciplinary Engineering Research Group (www.MERG.live) and DRONA (www.htu. edu.jo/drona).

8

Eng. Emad Nawasreh



Eng. Emad Nawasreh (class of 2011), Founder and CEO of Cyber Firm, Adjunct Professor at University of Michigan – Ann Arbor, Founder and President of Jordanian American Heritage Association.

Born and raised in Jordan, graduated from Hijjawi Faculty for Engineering Technology with a B.S degree in Computer Engineering, Eng. Nawasreh has become a prominent figure in the field of engineering management and cybersecurity. With a master's degree in engineering management from Eastern Michigan University, Michigan, USA, graduated back in 2018. Eng. Nawasreh has gained invaluable experience in the field of technology and leadership, which has earned them recognition in academia and industry.

As an accomplished educator, Eng. Nawasreh has had the privilege of teaching as an adjunct professor at the top universities in the USA, including the University of Michigan, the University of Wisconsin-Madison, New York University, and Eastern Michigan University. His expertise in cybersecurity has inspired and guided students towards academic success and has helped many young minds pave their way towards successful careers in the field.

Nawasreh's professional experience in cybersecurity is impressive, having worked in the cybersecurity team for

Koch Industries, the second-largest private company in the world. His role in the company involved implementing and maintaining cybersecurity policies that helped protect the company's assets and information from cyber threats. In addition, Emad holds over 10 international certifications in cybersecurity, a testament to his dedication to the field and expertise.

Apart from his career accomplishments, Emad is also an entrepreneur and visionary, having founded Cyber Firm, a company that specializes in providing cybersecurity solutions to businesses and individuals alike. Through his leadership, Emad Nawasreh has been able to build Cyber Firm into a well-respected and trusted name in the industry, serving a diverse clientele and providing customized solutions to meet the specific needs of his clients.

Beyond his professional achievements, and as an active member of his community in Michigan, USA, Emad Nawasreh is the founder and president of the Jordanian American Heritage Association, an organization dedicated to promoting cultural exchange between Jordan and the United States. The organization has made significant strides in fostering mutual understanding and appreciation between the two countries, and Emad Nawasreh has been at the forefront of this effort.

Nawasreh's achievements have not gone unnoticed, as he has been the recipient of several accolades and awards throughout his career. His contributions to academia, cybersecurity, and community service have earned him a reputation as a respected and accomplished leader.

In conclusion, Emad Nawasreh's journey from humble beginnings to becoming a renowned figure in engineering management and cybersecurity is a testament to his hard work, dedication, and leadership. Through his achievements, Emad has made significant contributions to cybersecurity space and the community, inspired many young minds, and left a lasting impact on his community.

https://nexus.engin.umich.edu/2022 /11/ 30/ cybersecurity-emad/

1 April 2023

Issue 06

Faculty News

Hijjawi Faculty for Engineering Technology Holds a National Ceremony on the Occasions of His Majesty the King 61th Birthday and the Karamah Battle

Under the patronage of the Dean of Hijjawi Faculty for Engineering Technology, Prof. Mwaffaq Otoom, the faculty held a national ceremony on the occasion of His Majesty King Abdullah II Ibn Al-Hussein 61 birthday and the memory of the Karameh battle. The ceremony began with a speech by the Dean, congratulating His Majesty the King on behalf of the faculty. Prof. Otoom highlighted the efforts made in the university and the college to work towards achieving the vision of His Majesty the King to raise the level of students and universities towards the digital knowledge economy. The Dean concluded his speech by talking about the legacy of the Karameh battle, which constituted a turning point in the hearts of Jordanians and directing their energies towards raising the name of Jordan globally.

The ceremony continued with the poet Samir Qadisat presented a collection of his poems talking about the kingdom of Jordan, Yarmouk University, His Majesty King Abdullah II Ibn Al-Hussein, the Karameh battle and the martyrs who lost their lives protecting our country.

The ceremony concluded with a variety of performances, as Bashar Al-Azzam, Ahmed Shehab, Al-Tayyeb Rizk, Donia Obeidat and Shurouk Mahasne presented words and poems on these two occasions that are dear to the heart of every Jordanian.







Hijjawi Faculty Hosts a Ramadan Iftar

Hijjawi Faculty for Engineering Technology held a Ramadan Iftar for its students and for the teaching and administrative staff in the college building, where about two hundred students participated in the Iftar.

Iftar began with verses from the Holy Qur'an, followed by Maghrib prayer. After that, cultural, scientific and religious competitions were held, where the winners of these competitions received a group of symbolic prizes. Prof. Mwaffaq Otoom, Dean of the Faculty, praised the efforts made by the students who organized this Iftar and stressed the importance of these meetings between students and the college staff, for rapprochement and for providing an open discussion space between students and their professors









Communication Engineering Department Organize a Lecture on Cybersecurity



PROTECH, which is a company specialized in the field of cybersecurity, gave an introductory lecture on the science of cybersecurity and the latest findings of the world in this field. The lecture was given in Wissam Bushnaq Hall at Hijjawi Faculty of Engineering Technology. After the lecture, a practical session was given for the students in one of the communications engineering laboratories.

This activity was organized by Prof. Ahmad Musa, Dr. Rami Halloush, and Dr. Mohammad Shamikh, from the communications engineering department.



A Graduation Project Receives Funding from KAFD



A project for students Hossam El-Din Musallam, Afnan Al-Saqer and Muhammad Musallam, under the supervision of Dr. Sharief Abdel-Razeq from the Communications Engineering Department at Hijjawi Faculty for Engineering Technology, has received a fund from the King Abdullah II Fund for Development (KAFD) and in cooperation with the Jordan Design and Development Bureau (JODDB), as part of the Undergraduates Research and Innovation Support Project. The value of the fund is 1,300 Jordanian Dinars for the implementation of their project: "IoT-based Smart Gloves for Deaf and Mute".

A smart glove for the deaf and mute that converts sign language into a spoken language in Arabic and English and displays speech on a touch screen. Moreover, to help the elderly deaf and mute people, this glove also allows home appliances to be controlled. The glove also takes periodic readings of the body's vital signs, such as heartbeat, body temperature, and blood pressure. When abnormal readings occur, an alert is sent to the doctor or specialist to take appropriate measures using the Internet of Things (IoT) and the cellular communication network. Al-Mamlaka TV network interviewed the project's team and broadcasted the interview on its TV.



Issue 06 | 1 April 2023 13

Civil Engineering Department Welcomes the Holy Month of Ramadan

Civil Engineering Department celebrates the beginning of the holy month of Ramadan with themed banners and decorations. The civil engineering students team "Analyzer Civil" celebrated the holy month of Ramadan by hanging banners and pictures to capture the spirit of the holy month around the department. Moreover, students disrepute Ramadan packages included a holy Quran and electronic prayer beads to students and professors. The civil engineering department extends its warm wishes for everyone for the beginning of the holy month of Ramadan which resembles a month of fasting, prayer, charity and introspection. Ramadan Mubarak.

ASEE Student Chapter and the Civil Engineering Department Jointly Organize a Scientific Workshop on Earthquake Engineering

A workshop entitled "Engineering Resilience: Design for Seismic Safety" was organized by the Department of Civil Engineering at the Hijjawi Faculty for Engineering and Technology and the American Society for Engineering Education (ASEE) Student Chapter at Yarmouk University. The workshop aimed to educate civil engineering students and others about the importance of designing structures that can withstand seismic and other horizontal loads. The Dean of the Hijjawi Faculty for Engineering and Technology, Prof. Mwaffaq Otoom, and the Civil Engineering Department chairman and ASEE student chapter academic advisor, Dr. Ali Shehadeh, emphasized the importance of preparing future engineers for designing facilities that can withstand seismic loads and natural disasters. The workshop featured lectures by experts in earthquake engineering and seismic safety from the Civil Engineering Department, including Prof. Wajeeh Al-Qasem, Prof. Hashim Al-Mattarneh, and Dr. Faisal Al-Shalabi, covering both theoretical and practical applications. The workshop had over 100 participants who had the opportunity to ask questions and receive answers from the experts.





Computer Engineering Dept. Holds a Workshop on Cybersecurity in Association with EC-Council

Computer Engineering Department has organized a workshop on Cybersecurity at Hijjawi Faculty for Engineering Technology on January 11, 2023. This workshop was presented by "Class Solution" a company approved by E-Council. In this workshop, students were introduced to the essential skills needed for tomorrow's entry level

cybersecurity careers.







Hijjawi Faculty of Engineering Technology Organizes A Graduation Week

Hijjawi Faculty for Engineering Technology celebrate students graduation for the Fall Semester 2022 / 2023, students from all departments decorated the faculty each to their related engineering major. The event included student holding personalize notebook in the faculty for their fellow students to write good well wishes and share their joined memories. The event lasted for a week and included multiple recreational activities as over 250 students graduated. Hijjawi Faculty of Engineering Technology congratulate its students and wish them a bright future.



Computer Engineering Department Faculty Partcipate the Jordan Digital Transformation Conference 2023



Dr. Manal Al-Bzoor, Dr. Abedlmohdi Almomani, Dr. Ola Alta'ani, Dr. Yazan A-Issa, Dr. Mahmoud Masaadeh, and Dr. Safaa Bataineh From Computer Engineering department have attended the Jordan Digital Transformation conference 2023, Advancing the Next-Gen Technology and Global Trends for Jordan's Future Digital Transformation on March 6 - 7, 2023, in Amman , Jordan.

This conference was held under the patronage of H.E. Ahmad Al Hanandeh, Minister of Digital Economy and Entrepreneurship, and was a meeting point for Jordan's key public officials, industry leaders, national and international digitalization decision makers sharing their experience and knowledge to drive the digital transformation forward. The focus was on

the integration of advanced and emerging technologies in Jordan, including artificial intelligence, advanced analytics, blockchain and the key role of cyber security in ensuring a successful.

The faculty staff of computer engineering dept. attended several workshops and discussions related to digital transformation. The given talks included an Overview of the digital transformation impact in Jordan, Introduction of 5G services in Jordan, Sanad Gateway to Digital Government Services, Digital transformation in the Ministry of Health, and Jordan's National Cyber Security Framework. The participation also included the talk to representatives of companies and institutions including the higher council for science and technology, National Cyber Security Center, ZOHO Corporation, Innovatechs, QUILL, Mocroblink, and Denodo.



Electronic Health Solutions (EHS) Visits Hijjawi Faculty for Engineering Technology

Department of Biomedical Systems and Informatics Engineering represented by its chairman Dr. Ahmad Al-Omari invited a group of experts to deliver a talk on "Transforming Healthcare by leveraging Technology" to audiences from throughout YU University. The purpose of this discussion is to establish a link between industry and academia and identify joint interests between EHS and YU that improve the health services provided in Jordan, expand employment prospects for our graduates, and support faculty research. Following a long day.



Hijjawi FacultyHolds a Seminar on Preparing for the Holy Month of Ramadan

Hijjawi faculty for engineering technology held a seminar to welcome the beginning of the holy month of Ramadan entitled (Dialogue on the Fiqh of the Falcon) presented by Dr. Osama A. Alghnimin, Doctor of Jurisprudence and its Fundamentals at the Faculty of Sharia at Yarmouk University



The seminar started by reciting verses of the holy Quran, followed by Dr. Alghnimin introduction on the importance of preparing the soul and the heart for Ramadan. Dr. Alghnimin also talked about the importance of regulating the time between studying, worshiping and the social duties of Ramadan. The seminar included Q&A section to answer student questions on religious and spiritual matters.

The activity concluded with a video presentation filmed with faculty students welcoming Ramadan.

MathWorks Team Visits Hijjawi Faculty for Engineering Technology

The MENA Academic Team at MathWorks was invited to visit Yarmouk University on February 28th to give a talk that aims to offer support for Yarmouk University, conduct a technical seminar, meet with interested faculty, and discuss the use of MATLAB in teaching and research. The department of Biomedical Systems and Informatics Engineering was represented by its chairman Dr. Ahmad Al-Omari. Following a long day.





Bridging Generations: Civil Engineering Department at Hajjawi Faculty Visits a Seniors House in Irbid

On March 20th, 2023, a heartwarming event occurred as a group of faculty members from the Civil Engineering Department at Hijjawi Faculty for Engineering Technology, Yarmouk University, accompanied by a group of students, visited a retirement home in Irbid. This inspiring experience strengthened the bond between generations and highlighted the importance of community social engagement and volunteer work.

The visit was carefully planned, with various entertaining activities for the elderly residents. These activities included interactive discussions, where students and seniors shared their life experiences, stories, and wisdom, bridging the gap between generations. The students and faculty members joined to create an atmosphere of warmth and joy, lifting the seniors' spirits and fostering meaningful connections.

One of the key objectives of the visit was to instill in students the importance of respecting and appreciating the elderly, recognizing their invaluable contributions to society, and supporting them in their current stage of life. The visit also served as a platform to promote values of community cooperation, solidarity, and social responsibility, encouraging the students to engage in more humanitarian and social initiatives.

The visit had a profound impact on all those involved, as it not only brightened the lives of the elderly residents but also enriched the students' social and communication skills. The experience highlighted the significant role of volunteer work and community engagement in shaping young individuals' personalities and improving the quality of life for seniors.

Hajjawi faculty's commitment to social responsibility and sustainable development was evident through its collaboration with local community institutions. The faculty expressed its determination to continue working with such organizations, seeking more opportunities to serve the community and improve the quality of life for all its members.

In conclusion, the visit to the retirement home in Irbid demonstrated the power of human connection and the importance of bridging generations. As the future lies in the hands of our youth, it is essential to encourage and guide them towards initiatives that promote social engagement, foster a sense of responsibility, and positively impact the lives of individuals and communities. The event was organized by Dr. Dua'a Telfah, Dr. Musab abuaddous, Dr. Madhar Taamneh and Dr. Ammar Alshannaq.



The Industrial and The Mechanical Engineering Departments Hold a Lecture for Guest Speakers From The Petroleum Gas University of Ploiesti in Romania

The Industrial and the Mechanical Engineering Departments held a lecture for guest speakers from the Petroleum Gas university of Ploiesti in Romania. The lecture was delivered by Dr. Maria Tanase and Dr. Alexandra- Ileana-Portoaca to introduce the Petroleum Gas university of Ploiesti, Romania and provide a brief about the university and its disciplines. The speakers provided insights about the master's program and the funding opportunities available for the students. The speakers also highlighted the requirements to complete the postgraduate studies in Romania. A discussion was held at the end of the lecture with the students to answer any queries they might have about postgraduate studies in Romania. It is worth mentioning that future research collaborations with the Petroleum Gas university of Ploiesti in Romania have

been discussed as well.



The Industrial and Mechanical Engineering Departments Participate In the Scientific Day For The Faculty of Engineering at JUST

The Industrial and Mechanical Engineering departments participated in the scientific day for the faculty of engineering at Jordan University of Science and Technology held on Tuesday March 14th 2023. Faculty members from the industrial engineering department took part in The scientific day workshops and seminars. The scientific day opening ceremony included a showcase for students' graduation projects and master's projects. Several sessions were held as well, where the first session was about the fourth industrial revolution (4IR, or Industry 4.0) covering topics related to its opportunities and threats to Jordan. Other workshops and sessions included topics related to the internet of things (IOT) future technology, machine learning applied to problems in the medical field, 3D printing advanced manufacturing, unmanned Arial vehicles (UAV) applications in Jordan. Too many other workshops were also held which covered topics in strategic approach to a climate resilient water sector in Jordan, small scale water desalination, perspectives on renewable energy in Jordan, and energy security in a turbulent world. The scientific day activities provided a venue to meet and connect with peers from the faculty of engineering at Jordan University of science and technology and to discuss the latest trends in the topics delivered at the scientific day.

The Industrial and Mechanical Engineering departments Take Part in The Third International Week of Yarmouk University

The industrial engineering department participated in the Third international week at Yarmouk university held on the period from March 2022-nd 2023. Faculty members from the industrial engineering department attended the third international week activities which included several speeches and workshops being delivered by guest speakers and invited scholars from all over the world. The first day of the international week included several workshops related to the importance of inclusion in higher education, biodiversity and sustainable development, inclusion of refugees in higher education, the first session also covered topics related to EU funded scholarship opportunities, Erasmus plus and Fulbright programs in Jordan, industry academia partnership, academic mobility to Germany and study opportunities in France. A session was also held about Research and innovation support fund (SRISF). The second session also provided insights about research funding opportunities such as PRIMA, and Newton Khalid fund. Online workshops were also held in internationalization of Jordanian universities and innovation partnerships. The second day also involved topics related to equity and inclusion, digital transformation, vocational education and training among others. Integration of SDGs were covered in the third day of the international week. Several faculty members from all over the world were met at The international week and future collaborations with respect to the industrial engineering department were discussed such as partnerships for some EU funded projects, visiting scholars, industrial engineering advisory board membership, curriculum development, research collaborations and others.

The Industrial Engineering Department Welcomes the Holy Month of Ramadan

The industrial engineering department welcomes the holy month of Ramadan by banners and new IE logos and pictures. The industrial engineering department with the help of the industrial team students celebrated the holy month of Ramadan by having banners to celebrate the holy month of Ramadan and new pictures to reflect on the very nature of the industrial engineering discipline. The industrial engineering department extends its warm wishes for everyone for the beginning of the holy month of Ramadan which resembles a month of fasting, prayer, charity and introspection. Ramadan Mubarak.



Voluntary Work Activists from among the Faculty Members and Students at the Hijjawi Faculty for Engineering and Technology Participate in the 108th Hashemite Scientific Councils

The Hashemite Scientific Councils, held during this holy month of Ramadan, are sponsored by His Highness Prince Faisal bin Al Hussein on behalf of His Majesty King Abdullah II. Such Councils draw participants from various entities across Jordan. This year's event, titled "Endowments of His Majesty King Abdullah II Ibn Al Hussein for Scientific Chairs," saw the participation of voluntary work activists from the faculty and student of the Hijjawi Faculty for Engineering and Technology, including Dr. Ali Shehadeh and Dr. Musab Abu addous. Their attendance at the councils highlights the institution's commitment to promoting and advancing voluntary work and its recognition of the importance of events such as the Hashemite Scientific Councils in fostering social excellence and intellectual development. Attendees included ministers, government officials, religious leaders, scholars, and representatives from various sectors.



Dr. Abuaddous Represents Hijjawi Faculty in the DPG Closing Ceremony

On behalf of Hijjawi Faculty for Engineering Technology, Dr. Musab Abuaddous attended the closing ceremony of Digital Public Goods program of Jordan Start. The event was held at Jordan Start premises/Irbid, where Jordan Start presented the achievements and success stories of the project. The guests also toured Jordan Start's facilities, and at the end, Jordan Start honored its partners and incubated startups for their collaboration to lead this project to the success.

The DPG program is part of the Social Innovation and Entrepreneurship Program that is currently running by Jordan Start in partnership with UNICEF, and it aims to raise awareness in the field of Digital Public Goods.

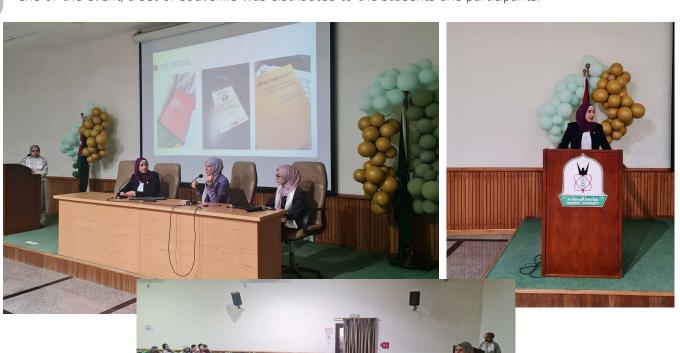


Dr. Al-Taani Organizes "Your Entrepreneurship is your life" Seminar Conducted by The YU Entrepreneurship and Innovation Center

The Entrepreneurship and Innovation Center at Yarmouk University organized an event entitled "Your Entrepreneurship is your life" on the occasion of International Women's Day, which occurs in the eighth of March every year, in Hijjawi Faculty for Engineering Technology. The event included hosting a number of successful female entrepreneurs to be a source of hope and encouragement for university students, who presented their success stories and interacted with the audience's interventions and questions.

A group of university students and graduates presented their emerging entrepreneurial projects. Student Marwa Abu Abbas, Master of Entrepreneurship and Leadership in the College of Business, presented her own project of designing fashion for people with disabilities, while student Ishtar Al Zoubi, Master of Entrepreneurship and Leadership in the College of Business, presented her project of recycling the material used in dental industry, while Shura Al-Zubaidi, a graduate from the Faculty of Fine Arts, presented her project for designing and coordinating events and weddings.

The ceremony included a discussion session moderated by the Head of the Incubators, Innovation and Training Department at the Center, Dr. Ola Al-Taani, in which the CEO of "MEHNA" company specialized in manufacturing industrial machines, Mrs. Amina Mari, participated. The session dealt with the most important challenges and problems that Mrs. Mari faced when establishing her startup, and how to deal with and solve them. It also provided a set of advice that would enhance the progress of startups. At the end of the event, a set of souvenirs was distributed to the students and participants.



Issue 06 1 April 2023

Architectural Engineering Dept. Organize a Landscape Trip to the Royal Botanic Garden

The students and supervisors of the Landscape architecture course (AE 350) at Al-Hajawi Faculty in Yarmouk University went on a scientific field trip to the Royal Botanic Garden in Tal Al-Rumman and the Abdali Boulevard in Amman on Tuesday, March 21, 2023. The trip was supervised by Eng. Imad Al-Hailat, Eng. Leen Al-Turk, and Dr. Sahar Al-Rabadi.

The trip started at 9:30 am from the university, and the team arrived at the Royal Botanic Garden in Tal Al-Rumman at 11:00 am. The garden provided an introductory lecture to the students about the plants and trees found in the garden. The team listened to an explanation about the garden's design and the site planning of its facilities, the seed bank, the plant meadow, the nurseries, and the requirements for plant cultivation. Then, the students took a tour of the garden, where they witnessed the great diversity of local and global plants and trees, including rare species. They gathered information from pictures and drawings to be used in their next project.

After the visit to the Royal Botanic Garden, the team headed to Abdali Boulevard in Amman at 2:30 pm. The students toured the Boulevard and its facilities, which is an integrated project for site planning and the design of public spaces. The Boulevard is characterized by modern design with traditional details from Jordanian culture. The students noticed the contrast between the natural site planning of the Royal Botanic Garden and the modern man-made site planning of the Boulevard. The team learned about the engineering design of the Boulevard, which considers the requirements of pedestrians and drivers, and they observed the distribution of green spaces and trees. The team also learned about the public and commercial facilities on the Boulevard, which provide visitors with a comprehensive shopping, entertainment, and relaxation experience.

The students collected information, pictures, and sketches as a task assigned to them, and it will be delivered in its final form in the next lecture. Then, the team returned to the university, arriving around 6:00 pm.



Hijjawi Faculty Newsletter

Architectural Engineering Dept. Organizes a Trip to Survey a Design Site

A group of students and supervisors from the architectural design course 6 (AE 422) at Al-Hajjawi Faculty in Yarmouk University, which is one of the main courses for fourth-year students in the architecture engineering department, visited the site of their design project on March 15, 2022. The supervisors of the trip: Dr. Sahar Al-Rabadi, Dr. Ahmad Al-Zoubi, Engineer Leen Al-Turk, and Engineer Qusai Al-Amoush.

The project involved building housing on a strategically located piece of land near the University of Science and Technology, to serve the region and employees of nearby institutions and the city of Ramtha. Sixty-two students visited the actual land to understand its real constraints and features. The visit was essential for the site analysis to understand and experience the various factors that affect the site, such as topography, roads, cars, public and basic services, surrounding areas, soil type, neighboring buildings, access to the site, and other external factors. Through the visit, the students were able to observe how these factors and conditions interact with each other on the ground.

The southern part of Ramtha was chosen as the location of the land due to its suitability for a residential project, and the students studied the needs and aspirations of the area's residents for a modern and disaster-resistant housing project, given the earthquakes occurring in the region. This would enrich the students' scientific experience and contribute to achieving the basic objectives of the course. The students also visited the University of Science and Technology as a neighboring institution of the project, and because many of the residential project's users would be its employees. After that, they traveled to Ramtha to study the needs and aspirations of the area's residents for a modern and disaster-resistant housing project, and visited the municipality of Ramtha, conducting interviews and questionnaires to gather more information. At the end of the trip, a visit was made to the University of Science and Technology to learn about its recent buildings, especially the housing area. A visit was also made to the Arab Communities Exhibition, which was held at that time as a recreational activity for students.



Hijjawi Faculty Holds a Blood Donation Day in Collaboration with the Northern Region Blood Bank

On January 12th, 2023, Hijjawi Faculty for Engineering Technology at Yarmouk University, in collaboration with the Northern Region Blood Bank, organized a blood donation campaign that aimed to increase awareness about the importance of blood donation, encourage more people to participate in such campaigns and contribute to national efforts in support of public health and social solidarity.

The campaign aimed to achieve the national goal of citizen health, emphasizing the importance of supporting the health sector, which is one of the basic building blocks for sustainable development and social responsibility. Additionally, it aimed to spread the culture of giving and altruism among members of society. Such campaigns contribute to saving the lives of patients in the community and can significantly raise awareness and encourage more people to donate blood.

By participating in the blood donation campaign, students at the Faculty of Hajjawi could contribute to their community and positively impact people's lives. Moreover, this campaign highlighted the educational value of such campaigns for students. It can help raise awareness about the importance of social responsibility and community service. They can also promote a culture of volunteerism and encourage students to give back to their communities.

The event started with an informative lecture by a medical specialist who emphasized the importance of blood donation and the procedures that donors must follow. The lecture provided valuable information about the health benefits of blood donation and its impact on saving lives. The lecture was attended by students, faculty members, and visitors to the university.

The blood donation campaign began after the lecture, and students and faculty members lined up to donate blood. The Northern Region Blood Bank team was present to oversee the donation process and ensure that all donors met the necessary requirements to donate blood. The team was also responsible for collecting and processing the donated blood.

The campaign successfully collected 70 units of blood, which is a significant contribution to the blood bank's supplies. The campaign's success was a testament to the commitment and generosity of the university community, who came together to support a worthy cause and contribute to the well-being of others.

In conclusion, the blood donation campaign organized by Hijjawi Faculty and the Northern Region Blood Bank at Yarmouk University was an important initiative that aimed to promote. The event was organize by Dr. Dua'a Telfah, Dr. Musab Abuaddous, Dr. and Dr. Ammar Alshannaq.





The Dean Meets Hijjawi students on "Wednesday Meeting"

"Wednesday Meeting" is a Dean initiative to regularly meet with students to listen to their feedback and open discussion in various topics. Students had an open discussion about the expectations for the new academic year, from increasing the number of field trips to the new students console election. The Dean also used this meeting to encourage students to increase their participation in engineering competitions locally and internationally, as the faculty and its staff is willing to support and help guiding them through competitions.



Hijjawi Faculty Organizes the RL4Eng Kickoff Meeting

Our new project for the Faculty, RL4Eng, which received funding from the European Erasmus Plus program in the field of capacity building, with a total budget of 800 thousand euros for all partners, held its kickoff meeting in YU. This project aims to develop the process of teaching engineering laboratories remotely --something that is aligned with the digital transformation strategy of the university, specifically, and of Jordan, at large.



The Robotics Team Holds an Activity for First-Grade Students

The Robotics team carried out a practical activity directed at children that promotes the principles of robotics, creative thinking, and their engineering concepts, in coordination between the Leadership and Innovation Center at Yarmouk University and the Model School of Yarmouk University, and under the supervision of Eng. Mohammed AL-Saadi. The activity aimed to motivate first-grade students to analyze and solve problems in a practical way, as children interact with the various activities. The Director of the Model School, Prof. Muhammad Al-Momani, the stage director, Mrs. Haifa Al-Hamouri, and the class educator, Safaa Aweisheh followed the workshop and thanked the team for the creative and thought-provoking ideas presented to the students during the workshop.



The Robtics Team Organizes a Workshop on SCRATCH for High School Students

The Robtics team from Hijjawi faculty for engineering technology at Yarmouk University gave a training workshop in the programming language (SCRATCH) in coordination between the Entrepreneurship and Innovation Center at Yarmouk University and the Model School of Yarmouk University. The 4 hours of training workshop targeted students from the tenth grade. The workshop aimed to motivate students to pursue a career in applied science and programming.



Industrial Engineering Dept. Holds a Workshop on Health and Safety in the Workplace

Under the patronage of the Dean of the Hijjawi Faculty for Engineering Technology, Prof. Mwaffaq Otoom, Industrial Engineering Department organized a workshop on health and safety in the workplace in collaboration with Occupational Safety and Health Institute (OSHI). The workshop was presented by Eng. Alrawashdeh from OSHI. In the workshop, students were introduced to the responsibilities of safety and health engineers, the factories and sites hazards, the work opportunities in Jordan and in the Middle East and how to build a career as a safety and health engineer.









Students Activities

ACI Receives Excellent Student Chapter Award

For the second year in a row, the student chapter of the American Concrete Institute in the Department of Civil Engineering at Yarmouk University won the Excellent University Award for its 2022 activities. This award is considered the highest level of awards offered by the American Concrete Institute to student chapters worldwide. The award comes in honor of the outstanding efforts of the team in the field of student events and volunteer activities carried out by the chapter during 2022, as it organized several distinct activities, including hosting student chapters in Jordanian universities on a scientific day and organizing several competitions for students of civil engineering to enrich their practical skills.



As for international participation, the team has participated in the Big-5 international exhibition in the United Arab Emirates, where they participated in the workshops and scientific lectures that were held at the exhibition. The team has also carried out several interactive activities that serve the students of the Civil Engineering Department, such as holding a documentary film that includes the construction process of Burj Khalifa.

EMBS Team Organized an 'EMBs Introduction Day' Event

IEEE Engineering in Medicine and Biology Society (EMBS) team organized an event called 'EMBs Introduction Day' that was held at Fayez Alkhasawneh auditorium at Yarmouk University. Dr. Ateka Khader and the EMBs team talked about the EMBs Chapter, sub-teams the team's work and achievements. One of the goals of this event was to show the students that EMBS is a widely known society. The chairwoman Matilde Rocha of the EMBS team at Aveiro university in Portugal gave a brief presentation via Zoom. She talked about her country and traditions. She then talked about their EMBS team, achievements, and their sub-teams. She also talked about the internships that are available at Aveiro university. The event was closed by talking about the new plans and the benefit of volunteering in EMBS.

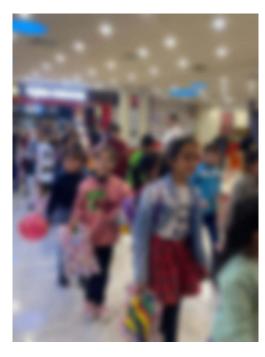


Hijjawi Faculty Students Organize a Ramadan Iftar for Orphans

Students from Hijjawi Faculty for Engineering Technology organized a Ramadan iftar for orphans in association with the Ministry of Social Development. The event started at an arched and gaming center as children enjoyed a day with the students playing before the Iftar, followed with a joined Iftar meal at a food court in a shopping mall. After Iftar the students organized some games and distributed gifts and sweets to children before going home.







A Graduation Project Wins the First Place in a Competition of the JEA

A graduation project for students in the Department of Industrial Engineering won first place in the Jordanian Engineers Association 2022 competition for the Mechanical Engineering section, for their project entitled "A developed system for storing solar energy in molten salts and generating electrical energy using electric thermal power generators."

This project was prepared by the students "Joud Suleiman, Mazen Al-Zubaidi, Shatha Awawdeh, Musab Al-Ahmad," under the supervision of Dr. Ghazi Maqableh. The students of the project received the award at the ceremony that was organized by the Jordanian Engineers Association in cooperation with the Amman Chamber of Industry and the Greater Amman Municipality. The idea of this project is that its system coincides with current challenges in electric power generation systems from renewable energy sources and contributes to sustainable development, as this system was developed and designed mainly from environmentally friendly elements.

The system relies on the use of molten salts as an element for storing thermal energy derived from the sun, to parallel in its principle of operation lithium batteries that contain toxic elements that are not degradable in the soil, such as lead, especially as they are flammable materials in cases of electrical contacts and have multiple risks. The developed system uses electrical power generators of an electric and thermal type that are not commonly used in the region to replace turbines - used globally, which require large areas, large budgets and capabilities that may be difficult to apply in different regions, and this type of turbines is not used in Our region is present in a limited number of countries in the world.

The idea of the project is based on replacing the commonly used solar panels with reflective ones that are characterized by capturing the largest amount of sunlight falling on them at their focus, which leads to the reflection of these concentrated rays on molten salts tanks, which leads to a rise in the temperature of these salts to hundreds of degrees Celsius and retains heat. For about a day, this heat will be exploited to generate electric power by using special electric and thermal generators, which makes the proposed system available for use in remote and desert areas far from electricity networks, especially since the system can be manufactured in different sizes and will be appropriate and applicable in homes and commercial establishments due to its ease of use. Its installation, its lack of need for maintenance, its ease of maintenance, and its competitive cost.

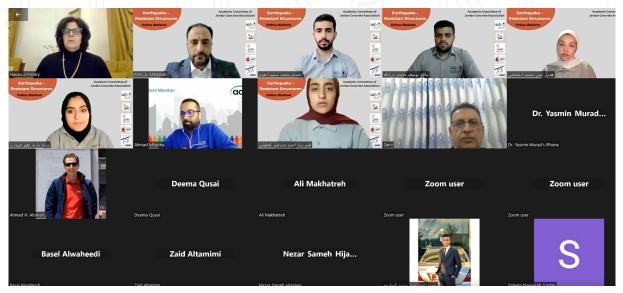




Issue 06 | 1 April 2023

ACI-YU Organizes an Interactive Online Webinar on "Earthquake-Resistant Structures"

The ACI Student chapter at Yarmouk University in cooperation with the academic committee of Jordan Concrete Association organized an interactive online webinar on "Earthquake-Resistant Structures". The webinar covered a wide range of topics in Seismic Construction, including the fundamental principles of earthquake physics, building codes, and standards, and innovative technologies for designing and constructing earthquake-resistant structures. Professor Hanan Al-Nimry from Jordan University of Science and Technology provided a talk on the design strategies for earthquake design structures. She shared her knowledge and experience with the attendees by providing practical advice on how to design and construct buildings that are resilient in the face of seismic activity. Eng. Sami Al-Habahbeh from Jordan Concrete Association delivered a speech on the evaluation of earthquake damage and seismic retrofitting, which is the process of strengthening existing buildings to make them more resistant to earthquakes. More than 250 students from Jordanian universities, faculty members, and industry experts attended the webinar.





IEEE RAS and IEEE CS Organize "Treasure Hunt" Contest

Entertaining activity for IEEE members held by IEEE RAS in cooperation with IEEE CS, The goal of the competition is to solve puzzles, promote physical activity and the spirit of cooperation between teams, the participate team solved puzzles challenging their critical thinking, problem solving ability and team collaboration.



IEEE RAS and IEEE CS Organize a Workshop on IoT



IEEE RAS organized an IOT workshop in cooperation with the IEEE CS community presented by Eng. Nawras Bani Yassin from Matrix Technology. The workshop was held at the Leadership and Innovation Center at Yarmouk University where the students learned the basics of the Internet of Things and the application through the use of Node MC controllers and learned how to program them and to connect them to the Internet and control them remotely.

The IEEE Robotics and Automation Community (RAS), Yarmouk University Branch, in cooperation with Manara Research and Development Company organized a workshop entitled "3D Printing" the workshop was Presented by the Eng. Abdel Salam Allan which include a detailed explanation of 3D printers and a practical application on the Tinkercad simulation program.





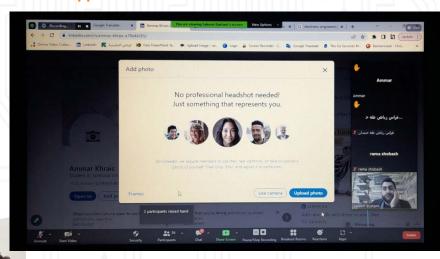
IEEE RAS Organizes a Workshop on AutoCAD

IEEE RAS organized a workshop on AutoCAD basics of remote drawing and design presented by Eng. Hamza Al-Shaloul. The workshop included several important axes of drawing, design and the importance of generating manufacturing data such as materials required for components, dimensions, model and product shapes, and component drawings.



IEEE RAS Organizes a Workshop on LinkedIn Application

IEEE RAS organized a workshop on the basics of the remote labor market in cooperation with the IEEE IAS community, presented by the trained human resources and vocational training consultant, Salim Bustami, who is accredited in the training and development of career paths and businesses. The workshop also included how to create an account on linkedin and the importance of finding job opportunities.



LinkedIn

Workshop

Labor Market Basics Workshop:

creating a professional LinkedIn account

Coach Saleem Muhammad Dirgham Al-Bistami

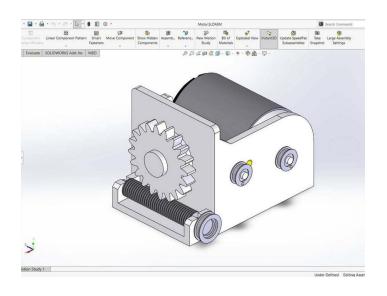






IEEE YU RAS Organizes a Workshop on SoildWorks in Collaboration with IEEE BAU RAS

IEEE RAS Yarmouk branch organized a workshop titled "Introduction to SolidWorks" in cooperation with the robotics and automation community at Al-Balqa University (IEEE BAU RAS) presented by Eng.Ghazi Al-Momani. The 24 hour workshop dealt with the three-dimensional mechanical design program, which provides an integrated solution to view engineering designs in a three-dimensional and realistic way and its ability to simulate designs that helps engineers to create a clearer view of their designs.



IEEE WIE Organizes a Matlab Workshop

IEEE WIE organized a full month workshop that includes all the basics of Matlab, as it is one of the most important programs for an engineer. The workshop was presented by a IEEE volunteer member with two classes per week covering the fundamental bases of the program to help student developing their programming skills. The workshop was held via Zoom and attracted over 200 participants.



IEEE WIE Organizes "The New Year's Welcoming"

IEEE WIE organized an event titled "The New Year's Welcoming" aiming to gather professors and student for an open discussions and maintaining communication between students and their teachers dynamically as well as between students among themselves. The event also includes two workshops, one revolving around the basics of graphic design and the other about the basics of Python. The session concluded with a question game conducted on Kahoot, where the winners were presented with small gifts.



The new year's welcoming



Issue 06 | 1 April 2023

IEEE WIE Organizes Workshop on Time Management and Planning

IEEE WIE organized a practical workshop on the importance of time management and how to achieve it in a way that increases productivity while maintaining balance. Practical activities offered during the workshop allow participants to practice the skills that are taught.









IEEE-ComSoc Yarmouk University branch organized a workshop on 5G applications and future presented by Engineer (Al-Harith Amira), the workshop represent the evolution of 5G technology and introduce the fundamental of aspect of it and the its application in everyday tasks, furthermore Eng. Amira explained the challenges facing the wide spread of the technology in globally scale. The workshop concluded with the effect of the new technology on the Jordanian working market and the skills need for it.

Issue 06 | 1 April 2023

IEEE-ComSoc Organizes a Workshop on IoT

IEEE-ComSoc organized workshop on IOT (The Internet of Things) held by Eng .Lujain Annab. The workshop introduces the participants to the possibilities of technology to be integrated in everyday activity of the consumer, the main focus of workshop was on the Jordanian mark regarding the IOT, as the possibility to be integrated to aspect such as health sector , small business , education and mobility, where such aspects are compatible to the Jordanian manufacturing capability and needs. The workshop represented multiple studies and case of integrating the technology such as controlling your home equipment through phone and the ways to improve upon it.





IEEE-ComSoc Organizes a Workshop on Python Programming

IEEE-ComSoc organized workshop on Python presented by Eng.Afnan Al-Saqer, the 18 hour workshop was divided between face-to-face sections and via Zoom sections. The participated students were taught the use Python software for engineering purposes. The workshop introduced the student to theuse of the programming language in statistical applications and data modeling for engineering analysis and evaluation. The participants were rewarded with a certificate of attendance.



Issue 06 | 1 April 2023

IEEE-ComSoc Organizes a Workshop on Time Management and CV Writing

The introductory workshop included many recreational and educational activities such as games, competitions and CV writing, starting with a speech from the Dean of Hijjawi Faculty for Engineering Technology Prof. Mwaffaq Otoom, followed by a presentation on IEEE Yarmouk branch and ComSoc in particular, presenting the branch achievements, workshops, events, activities and participation throw the past year of 2022. The presentation concluded with the branch plans and vision for the new year. The presentation was followed by an interactive section head by Dr. Sherif Abdel Razek, Dr. Mohamed Rouhi and Dr. Musab Abuaddous on time management for student and how to synchronize between studying, extra curriculum activities and social duties. The event concludes with a presentation by Eng. Fatima on CV writing and how to distinguish yourself from others in the current work market.





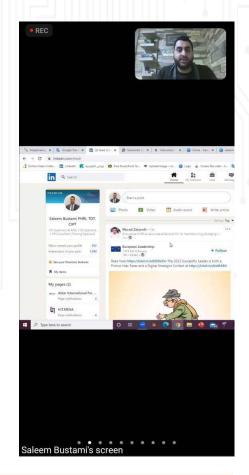
IEEE-IAS Organizes a Workshop on Scientific Writing



IEEE-IAS organized presented by Eng. Al-Quran. The workshop introduced the participants to the fundamentals of scientific writing. As scientific writing follows certain conventions related to format, citation, design, voice, tense, concision and organization that may differ from writing in other contexts. The workshop also discussed the publication process, field topics and journals scopes.

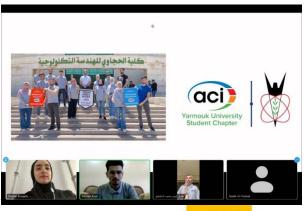
IEEE-IAS Organizes a Workshop Entitled "Fundamentals of the Labor Market"

A workshop entitled "Fundamentals of the Labor Market" presented by the human resources consultant trainer Salim Bustami. The workshop focused on the marketplace of Jordan and Middle East area from the job opportunity for engineers, skills needed to join the work force, and how to build connections within the work field. The workshop also focused on the importance of LinkedIn application as the it's become the main gate to seek job opportunities on global scale and how to build CV, how to find opportunities, and how to distinguish your profile. Its focus was to learn about the and how to create your professional account.



The ACI-YU Student Chapter provided an Introductory Session

The ACI Student Chapter at Yarmouk University participated virtually in the introductory session for the ACI Student Chapter at the University of Sharjah in the UAE. The ACI-YU team members: Qamar Al-Aoqaily, Hadeel Al-Shakhti, and Ahmed Abu Al-Foul presented the achievements of the chapter in addition to the importance of joining the ACI family for students. The students spoke briefly about their experience in the student chapter and made recommendations to the interested students attending the session.



Excellent & Outstandin g University Award



Student Ahmad Abo Al Foul Participates in the Third Scientific Surveying Day

Ahmad Abo Al Foul, Civil Engineering Student, participates in the third scientific surveying day, which was held under the sponsorship of the Jordanian Engineers Association at the Royal Hotel - Amman.

The day included several activities, including educational workshops, lectures, and interactive sessions, which focused on the progress and development of the surveying sciences, it also included discussion session on the most important challenges facing surveying at the local and international levels.

The scientific day ended with an exhibition presenting by leading companies and offices in surveying field presenting the latest surveying equipment, where the levels of development in surveying was introduced.



Hijjawi Faculty Organizes an Arduino Workshop



The Deanship of Hijjawi Faculty for Engineering Technology under the supervision of Dr. Musab Abuaddous and in cooperation with the E-Committee team held an 18 hours Arduino workshop over 6 days for engineering students. The workshop explained the basics of the C language, the various types of Arduino boards and motors, and the various Types of sensors. The final part of the workshop consists of representing a number of projects for the participants. The workshop was presented by Mohammad Khaled Alzubaidi, from the Electrical Power Engineering Department and benefited over 30 students from various departments of the faculty.

CEIBA Team from Hijjawi Faculty for Engineering Technology Organizes a Competition for the Best Student Speaker

CEIBA student team organized public speaker computation at Hijjawi Faculty for Engineering Technology, to discover the hidden talent of faculty students and boost confidents of students to speak in front of a crowd. The computation was held on 3 stages over 2 weeks. The aim of the computation was to discover student talent in speaking and writing, as participants were given full control over their subject, which resulted in a diverse range of public speaking types, such as improvised speaking, written essay and poetry, stories and comedy. The computation jury consists of Dr. Musab Abuaddous, Dr. Ola Taani and Dr. Dua'a Telfah Hijjawi from Faculty for Engineering Technology, and the trainer Zikra Naamneh, Maryam Shehabat, and Ahmed Shehab from Yarmouk university.

50 students competed in the first stage (performance tests) from various engineering disciplines participated in front of the jury. 15 students were qualified for the second stage and 6 students were qualified for the final stage. Al-Tayeb Rizk from the Department of Industrial Engineering won the competition, in the second place Roua Nassar, and in third place Aya Al-Ahmad, and a special prize was also given to Namariq Bisharat and Mayas Abu Kharma for their writing skills.









Hijjawi Faculty Hosts "Ana Usharek" Booth

The Program is a partnership between the Crown Prince Foundation and the National Democratic Institute and is funded by USAID. The program targets building capabilities and skills regarding effective political participation, social work, and youth empowerment.

The Program provides training and participatory dialogue sessions aimed at strengthening the concepts and values of democracy among the participants and providing them with the necessary knowledge to enable them to engage in the political sphere and decision-making; as well as develop a sense of citizenship.



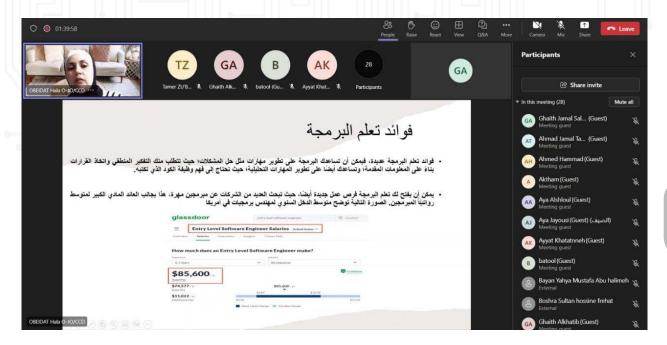
IEEE CS Organizes a Problem Solving Training

The IEEE computer society branch of Yarmouk University presented Problem Solving training in the Al-Khwarizmi building, for a period of two months. The training concentrates on preparing participant for computations locally and internationally. Participants were faced with problems designed to simulate computations formula preparing them to represent the university in local and international computations.



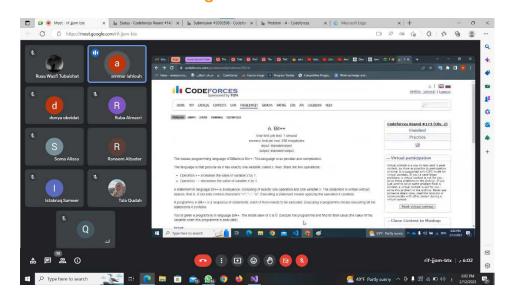
IEEE CS Organizes a "Beginner's Guide to Programming" Workshop

IEEE Computer Society Yarmouk University Branch, organized a workshop in cooperation with the Young Engineers Committee, entitled: A Beginner's Guide to Programming on Microsoft Teams platform. The workshop was led by Eng. Hala Obeidat, and included the following topics: Exploration of self and capabilities, How can I search for a job, Changing the professional path "the concept, its reasons, the mechanism for achieving it", When is the right time to change the professional path / field, Fields close to engineering/programming, Why do you even want to learn programming and Benefits of learning to code.



IEEE CS Organizes a C++ Basics Course on Problem Solving

IEEE computer society Yarmouk branch held a programming course in the C++ language, through which the necessary programming basics were given to start in the field of Problem Solving. The course contained many topics such as: data types, conditional statements, loops, arrays, strings, functions and other topics to prepare to start training in the field of Problem Solving.



IEEE CS Organizes a Trip to TechWorks

The IEEE computer society f Yarmouk Branch organized a field trip to the TechWorks factory located in the King Hussein Business Park. TechWorks is the Crown Prince Foundation's core innovation platform. It is a digital manufacturing laboratory, which includes modern devices and equipment and aims to support innovation and innovators from young Jordanian men and women, and works to encourage technical education and strengthening the innovation system in Jordan by bringing together young people and ideas, which is an integrated umbrella that brings together researchers, scholars and innovators, and gives them the opportunity to manufacture prototypes for their products using advanced technology in the fields of digital manufacturing. Students were given a workshop on digital manufacturing and the basics of using 3D printers, machines laser cutting and then put into practice what they learned.



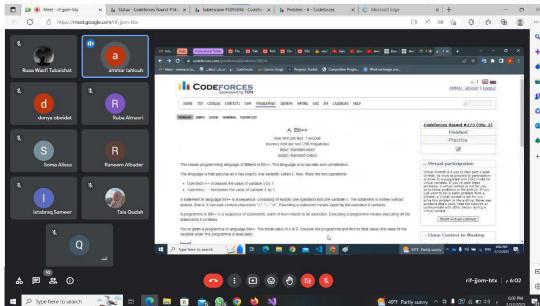




IEEE CS Organizes a Workshop on "Cybersecurity Graduate Program"

The Computer Society at Yarmouk University (IEEE CS YU), in cooperation with the Computer Society at Al-Balqa University (IEEE CS BAU) and Ctrlroot Company, organized a course (CGP - Cybersecurity Graduate Program). Ctrlroot is one of the emerging companies in the field of cybersecurity in Jordan, which specializes in providing security services to many companies to protect their systems, data and information from unauthorized access, destruction or alteration.

The 24 hours workshop held over 4 weeks consisted of 9 hours axes that were explained in detail: Network Management, Network simulation and emulation programs, Virtualization Programs, Wireless Networks, Encryption Tools, Network Security, Linux, Introduction to Big tends in IT and Hacking scenario



IEEE CS Organizes a Workshop on Problem Solving

The IEEE Computer Society in Yarmouk University organized a training workshop entitled: problem solving workshop, presented by Eng. Ammar Lahlouh.

The workshop included an introduction to the codeforces site, which is considered one of the best sites for training in problem solving, in addition to explaining questions from the site and training in ways to solve them. The duration of the workshop was 8 hours divided into two days.



IEEE EMBS Organizes an Event Entitled "EMBS Introduction Day"

EMBs team organized an event called 'EMBs Introduction Day' where they targeted Biomedical Engineering students. The event's goal was to showcase the team's work and achievements and introduce it to new students. It was held on campus in Fayez Alkhasawneh auditorium in Al-Yarmouk University.

The chairman Yanal Omar opened the event by welcoming the EMBs advisor Dr. Ateka Khader, former chairman Nour Bani Omar and the audience. He presented the new team as well. The event's first speaker was Dr. Atika Khader. She talked about the past team's achievements and how she was proud of them and ended her speech by giving the students advice about volunteering in EMBs and how it would help them build their character. The former chairman Nour Bani Omar also talked about how and when he decided to form the team. The team's secretary Mohammed Yaser and other members of the team presented the sub teams.

One of the goals of this event was to show the students that EMBs is a widely known society, as they contacted the EMBs team in Aveiro university in Portugal. The chairwoman Matilde Rocha talked about her country and traditions briefly. She then talked about the biomedical engineering degrees they offer at her university, leading to their EMBs team. She talked about her fellow teammates, their achievements, and their sub teams and finished her presentation by telling the audience about their future work. Later on she was interviewed by Vice Chairman Ghena Nsour. Matilde was asked multiple questions including the way to get an internship in her university and to if she were to give an advice to the students what would it be where she answered by saying: "I advise them to try new things and find their passion, which may be found in EMBs". The event concluded with Treasurer Faris Meqbil and Chairman Yanal Omar, as they talked about the new badge and future plans.

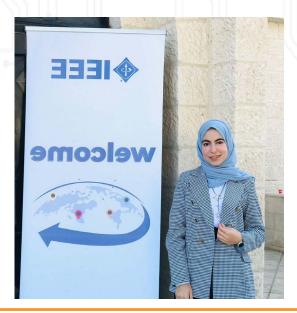




IEEE WIE Chair Shatha Athamneh Chairs a Session on "From Venus To Universe" Conference in BAU

The Women in Engineering Community - IEEE BAU WIE Launch the First Edition of "From Venus to Universe" Conference, Which Targets All Students Of Engineering Specialties As well As Students Interested In The Labor Market From All Jordanian Universities. The conference hosted specialized speakers to talk about their success stories, the labor market to help students finding their way and to show them that everyone who believes in himself reaps success in the end. The event included various competitions and special events.

Shatha Athamneh chaired a session at the conference talking about her experience as the chair of WIE in Yarmouk University and the challenges she faced to balance her study, IEEE responsibilities and her personal life.





IEEE YU Branch Hosts IEEE Branches from University of Petra and Philadelphia University

IEEE YU branch held an IEEE meeting with branches from University of Petra and Philadelphia University. The meeting was organized to share experiences and encourage collaboration between IEEE all over Jordan. The meeting included multiple session started with a session on the opportunities provided by IEEE organization, Followed by a session by IEEE Computer Society and IEEE Biomedical Engineering students.



Issue 06 | 1 April 2023 4 9

IEEE WIE Organizes "Women are the force of change in the world" in Celebration of Mother's Day and the International Women's History Month





Under the patronage of the Dean of Hijjawi Faculty for Engineering Technology, the Women in Engineering Community (Yarmouk Branch) held an event under the title "Women are the force of change in the world" in celebration of Mother's Day and the International Women's History Month to highlight vivid examples of women with inspiring success stories and send their message to the attendees. The event began with speech from Dr. Yousra Obeidat, community counselor and head of engineering women's societies, in which she talked about women and their role from various sides (religiously, socially, scientifically) and touched on the mention of distinguished Arab women, who left immortal fingerprints in the world, Followed by a speech from the sponsor of the ceremony the Dean of Hijjawi Faculty for Engineering Technology, Prof. Mwaffaq Otoom. The Dean spoke about the strength of women in balancing their lives and encouraged to support and empowerment them, as well as praising the efforts of the women working in Hijjawi Faculty.

The speakers were followed by a short video entitled "Women between the Brain and Society" in which the Palestinian woman Juman Natsheh talks during the ted talk platform about how habits are formed in a woman's brain and the impact of this on her personality and vision of the society around her.

The event continued with a discussion session titled "Work-Life Balancing" held by Dr. Yousra Obeidat, Dr. Hiam Al-Quran, Dr. Shifa Tawalbeh, and Dr. Atka Khader, where they discuss their professional journey and the challenges of managing their professional carries and their families obligations. The attending doctors were honored after the end of the dialogue on the occasion of Mother's Day. A second session was held by IEEE engineers: Rama Shubash, Yara Shalabi and Etab Obeidat. The girls talked about their experience with IEEE and the communities they joined, as well as the obstacles they faced and how they maintained their academic life alongside the organization. The girls concluded the conversation by talking about the impact of IEEE on them and the experiences gained from it.

The event conclude with a guest host Dr. Hadeel Ayoub a Saudi inventor via Zoom, where she talked about her journey in the world of inventors and entrepreneurship as a woman, and about her founding of the British-based company BrightSign and her invention BrightSign Glove dedicated to helping deaf people communicate with others.







Issue 06



Faculty Members News

Two Faculty Members Receive Funding for their Research from SRF

Two faculty members from the Hijjawi Faculty for Engineering Technology, Prof. Ahmad Dagamseh from the Electronics Engineering Department and Dr. Qasem Qananwah from the Biomedical Systems and Informatics Engineering Department, received funding for their research projects from the Scientific Research and Innovation Fund of the Ministry of Higher Education and Scientific Research.

In Prof. Dagamseh's research project, work will be done to develop an easy and reliable measurement system to detect and measure the concentration of acetone in the gaseous state in the exhaled air by using photonic technology. This system will facilitate the detection and diagnosis of many diseases associated with the presence of acetone in exhaled breath. As a case study, diabetes will be studied during the design and implementation phase. The proposed system will have the ability to map different diabetic states based on exhaled acetone concentration

In Dr. Qananwah's research project, a new technology and system will be developed that is able to measure blood flow from the heart in a non-invasive way to continuously monitor the patient. This system is based on the measurement of vital signs in the brachial artery using optical technology. Through these signals, comparing their characteristics, and analyzing them statistically, a mathematical model will be built to obtain blood flow with high accuracy.



Prof. Ahmad Dagamseh

Electronics Engineering Department



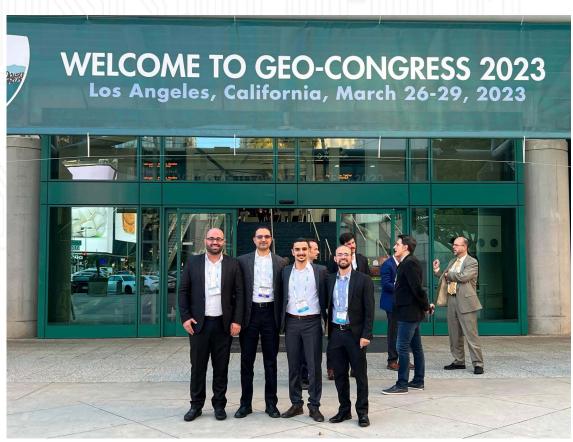
Dr. Qasem Qananwah

Biomedical Systems and Informatics

Engineering Department

Dr. Abu Qamar Participates in the GeoCongress in Los Angeles

Dr. Mu'ath I. Abu Qamar from the Civil Engineering Department partcipated in Los Angeles, CA, in the GeoCongress 2023, by presenting a research paper.



Dr. Qananwah Participates in the "Innovation Leaders Fellowships" Training program

Dr. Qasem M. Qananwah, from the Biomedical Systems and Medical Informatics Department / hijjawi faculty for engineering technology, participated in the third edition of the "Innovation Leaders Fellowships" training program, which was organized by Industrial Scientific Research and Development Fund of the Higher Council for Science and Technology and in cooperation with the Royal Academy of Engineering in Britain. Dr. Qananwah was chosen along with 9 researchers from Jordan, after a competition with 8 participating countries. It is worth noting that the program aims to build research and innovation capabilities by training a number of innovators in the field of technological entrepreneurship and building relationships.



Issue 06 | 1 April 2023 5 3

Dr. Ahmad Hani Alomari Presents at the TRB Conference in Washington DC

Dr. Ahmad Hani Alomari, from the Civil Engineering Department at Hijjawi Faculty for Engineering Technology, spoke about "Analysis of Speeding Violations Using Different Machine Learning Methods" at the Transportation Research Board (TRB) Conference in Washington, DC, in the United States, from January 8 to January 12, 2023.

Dr. Alomari work investigated speeding violations and the factors that may affect them in the United States. Several factors related to drivers, the environment, vehicles, roads, and weather were studied. The used algorithms showed an excellent ability to analyze and predict speeding violations.

TRB is the world's largest conference on road and transportation engineering. It brings together more than 10,000 transportation experts worldwide to discuss issues, research, and projects that are important to policymakers, administrators, practitioners, researchers, and representatives from government, industry, and academic institutions.



Eng. AL-Saadi Participates in the "Aqaba International Engineering" Conference

Engineer Mohammed AL-Saadi from Hijjawi Faculty for Engineering Technology participated the "Aqaba International Engineeringi" conference in Feb. 2023, organized by the Jordanian Engineers Association in Aqaba, and it was referring to trends in the application of office solutions around Oceans, energy, sustainability and safety. Which conclude with results and reminders confirming the importance of scientific research directives towards finding engineering and environmental solutions for the implementation of these solutions to anticipate any disaster.



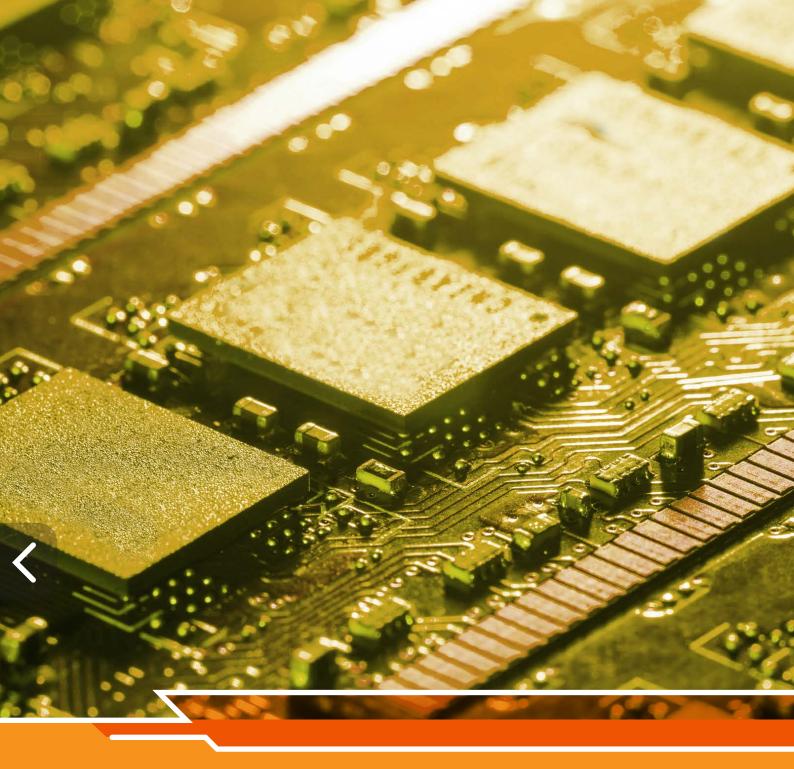
Hijjawi Faculty Newsletter

Issue 06 | 1 April 2023

Honoring Dr. Ali Shehadeh: A Role Model for Volunteerism

Muhafazati Volunteering Foundation honor Dr. Ali Shehadeh at a solemn event attended by Jordan's Minister of Culture, Her Excellency Haifa Al-Najjar. Dr. Shehadeh was among a distinguished group of volunteer activists acknowledged for their excellent services to their communities in Jordan's Hashemite Kingdom. Shehadeh's commitment to service has proven inspiring. He has actively participated in various community service programs to enhance the quality of life in his local community as a member of the Civil Engineering Department. Through the Muhafazati Volunteering Foundation, he has been actively developing and managing programs that have substantially influenced the lives of individuals in the community. Shehadeh's excellent achievements in volunteering were acknowledged by the Muhafazati Volunteering Foundation, underlining his commitment to improving the lives of people in his community. Minister Al-Najjar complimented Shehadeh for his leadership and devotion to volunteers in her speech, saying he is a role model for others to follow. Shehadeh expressed his appreciation for the honor, stating that volunteering has been a part of his life since childhood. He urged people to participate in community service projects, emphasizing that everyone has a role in bringing about constructive change in their communities. The Muhafazati Volunteer Foundation's acknowledgement of Dr. Shehadeh demonstrates the importance of volunteerism in establishing strong and thriving communities. Shehadeh also emphasized that the private sector's role in supporting volunteer work in Jordan is particularly important given the challenges facing the country, including poverty, unemployment, and environmental degradation. By partnering with volunteer organizations and supporting community service initiatives, private sector companies can help address these challenges and improve people's lives in the communities where they operate. By honoring individuals like Dr. Shehadeh, others can be inspired to get involved and make a difference in their communities, creating a better future for all.





Newsletter Staff:

Editor-in-Chief: Prof. Mwaffaq Otoom, Dean

Editor: Dr. Musab Y. Abuaddous, Assistant Dean for Students and Alumni Affairs

Designer: Prof. Mwaffaq Otoom, Dean