

## **College of Engineering Community**

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#### Eid Al-Adha Ceremony for the year 1439 H

The College organized on Monday 16/12/1439 H the annual greeting ceremony on the occasion of Eid Al-Adha in the presence of the College dean Dr. Waleed Zahid, the vice deans, the heads of the departments and College staff. The ceremony was attended by Dr. Abdullah Al-Salman the University vice-rector, Dr. Abdullah Al-Suqair, vice- rector for projects, Dr. Khalid Al-Zafer, the endowments trustee, and Dr. Bassil Al-Sadhan the dean of admissions and registration. During the ceremony, greetings and congratulations were exchanged on the occasion of Eid Al-Adha and the beginning of the academic year 1439-1440 H.



## His Excellency the University Rector visited the "Solar House" project

His Excellency Prof. Dr. Badran bin Abdulrahman Al-Omar, the University rector, visited on Wednesday, 8 Safar 1440 H the "Sustainable Solar Home" in the University city. He was greeted by the University's vice rectors, the College dean, the vice deans, heads of departments and a number of students and faculty members who are responsible for the design and implementation of the project. The "Solar Home" is a project that the University participates with in the International Solar Design Competition (Solar Decathlon Middle East 2018) organized in mid-November 2018 by the US Energy Agency (DEA) with the Dubai Electricity and Water Authority (DEWA) at the Sheikh Mohammed Bin Rashid Al Maktoum Solar Complex in Dubai. The KSU project proposal was selected two years ago to participate in the competition. The project was competing with projects from 21 teams from 15 countries that qualified for the final stage of the competition. This competition is held for the first time in the Middle East and Africa

region with the King Saud University team being the only Saudi team participating in the competition. The University rector toured the house, listened to the explanation given by Prof. Waleed Zahed, the College dean on the house and its characteristics, and then watched a video of the project since its inception. The solar home project is a residential building designed in a unique architectural style that can generate energy needs through solar cells and provide the home with a gray waste treatment and reuse system. The winner is chosen through a variety of criteria including innovative design, use of alternative energy technologies, water and energy efficiency as well as implementation, transportation and marketing. The participation of the University in this competition came at the initiative of the college of Engineering and with the participation of the college of architecture and planning, after the approval of the University rector and his great support. The project is mainly supported by King Abdulaziz City for Science and Technology (KACST), as well as companies that have donated some building materials (Basic Electronics Co., Al Shaheen Metal Industries, Modern Housing Company, CIBOREX, Garden Glass Company, Acuethorm). The number of participants in the design and implementation of the house is 75 students and 15 professors from the College of engineering, and 5 students and two professors from the College of architecture and planning, in addition to 29 male and female students from different Colleges for logistical support. The project is managed by Dr. Abdulmohsen bin Ahmed Al-Badah (the College vice dean for graduate studies and scientific research) and supervised by Dr. Walid bin Mohammed Zahid, the College dean. The team will move the house to Dubai and re-install it in the first half of November 2018 to be ready on 15 November for the competition.



This event plays a role in serving the Kingdom's direction towards reducing its dependence on oil and contributes to complement the academic plans by enhancing communication skills, teamwork, leadership and the student's practical skills, which positively reflects their creative ability.



## Honoring the College Students who participated in the Riyadh Metro Project Training

In the presence of His Royal Highness Prince Mohammed bin Abdulrahman bin Abdulaziz Al Saud, the vice chairman of the board of Riyadh development authority, the authority organized on Sunday, 22 Dhul Hijjah 1439H in the Tuwaiq Palace in the embassy district a ceremony to honor students participating in the summer training program in the Riyadh Metro project.

The number of students who participated in the training program for this year (1439 H corresponding to 2018) was 149 students belonging to 11 Saudi universities. A total of 109 of them were from the college of engineering. The training lasted for a period of 9 weeks and took place with the project consultant and the implementing coalitions. The training program included visits to eight countries in addition to field and office work. It is worth mentioning that the training program in the Riyadh train project started in 1436H (2015), and the number of trainees until the end of the year 1439 H reached 392 students from 15 Saudi universities, including 259 from the College.

During the ceremony, the College dean Prof. Waleed Zahid saluted the Prince and received certificates of practical training on behalf of the College students.



The College honored the sectors supporting practical training of students

Under the patronage of his excellency Dr. Waleed Zahid, the College dean, the College's vice deanship for educational and academic affairs organized on Wednesday, 22 Safar 1440H (31 October 2018), a ceremony honoring the government and private sectors that provided opportunities for practical training of students during the academic year 1438-1439H . The ceremony was attended by representatives of various training bodies, College vice deans, department heads, faculty members and students.

In his speech, the College dean welcomed and thanked all the supporting sectors in the field of practical training. He stressed that an effective partnership between the University and public and private sector companies is no longer an option but an urgent need and a national responsibility towards achieving an integrated effort in building and developing the country.

After that, the vice dean for educational and academic Affairs stressed the importance of joint cooperation for the qualification of the future engineer and the need to make efforts to provide real opportunities for practical training in order to improve student's skills.

An open discussion followed that allowed the audience to present views and suggestions, to discuss training experiences and make recommendations. At the end of the meeting, the College dean honored the partners of the College in the practical training program and presented them with commemorating shields.



KSU "Solar Home" Project Won the 10<sup>th</sup> Place in the Solar Decathlon, Middle East 2018

The "Solar Home" project sponsored by the University has achieved the 10<sup>th</sup> place in the Global Solar Design Competition (Solar Decathlon Middle East 2018) organized by Dubai Electricity and Water Authority (DEWA) in cooperation with the US Energy Department at the Sheikh Mohammed Bin Rashid Al Maktoum Solar Complex in Dubai. On behalf of HE Prof. Badran Al-Omar, the University rector, Prof. Abdullah Al-Salman, the vice-rector honored the closing ceremony.

He was accompanied by the vice-rector for academic affairs, Prof. Mohammad Al-Nami and the College dean and the general supervisor of the Solar House Project, Dr. Walid Zahid. The University vice rector congratulated the team members who attended the ceremony, the project manager Prof. Abdulmohsen Al Baddah, his assistants Dr. Muhannad Al Atta and Engineer Ibrahim Al-Muhanna, and praised the effort and hard work that took about two years from the design stage to the end construction that took only one month.

The house was moved to Dubai and re-installed during the first half of November 2018, and the exhibition began two weeks later until the closing ceremony on November 28. The house is currently being dismantled to be transferred to Riyadh and re-installed at the site of the solar home project in the University campus to be a university landmark.





Rank	Team	Score
1.	Virginia Tech	937.83
2.	UOW	905.56
3.	BaityKool	895.87
4.	EFdeN	879.47
5.	Sapienza	872.55
6.	VIRTUe	862.38
7.	TDIS	768.24
8.	Know-Howse	766.47
9.	Aqua Green	755.94
10.	KSU	734.13
11.	Jeel	719.56
12.	AURAK	652.06
13. MizanHome		599.72
14.	ORA	567.56
n/a	NYUAD	0.00

## Ceremony to Honor the Best Graduation Projects for the First Semester of 1440-1441 H

The college of engineering, sponsored by BAE Systems Saudi Arabia and its partners, held an exhibition and a ceremony under the patronage of the College dean, Prof. Waleed Bin Mohammed Zahed, Dr. Majdi Fadhil Al Dhahiri, head of human resources at Saudi Maintenance and Management Company and Dr. Ahmed bin Mohammed Al-Naim, the College vice dean for academic and academic affairs. In his speech, the College dean thanked the company for having sponsored this event for the past six years. The dean also thanked the jury responsible for selecting the best graduation projects. In addition, he extended his congratulations to the winning students and faculty members who supervised the outstanding projects.

For his part, HE Dr. Majdi Fadel Al-Dhaheri expressed his happiness with these projects and thanked the College's administration for its efforts with regard to graduation projects. His Excellency said that the company has been working for more than 50 years on national goals aimed at the transfer and localization of knowledge. From these goals, came the university cooperation program, which aims to stimulate students and encourage creativity. Dr. Ahmed Al-Naeem also thanked the sponsoring company and the academic departments for their efforts in improving the quality of the distinguished graduation projects and in organizing the ceremony.

During the ceremony, prizes and certificates of appreciation were awarded to students and professors supervising outstanding graduation projects for the first semester of the academic year 1439-1440 H. A total of sixteen awards were distributed to the civil engineering (civil engineering and survey engineering), electrical, mechanical, industrial, chemical and engineering design projects. The first and second places at the College level were awarded to projects from mechanical engineering department while the third award was shared equally between the civil engineering and industrial engineering departments. Saudi BA Systems and its partners were also honored for their continuous sponsorship and support for these projects.

(1) First place - Project title: Design of a Multi Stage Evaporative Cooler- Department of Mechanical Engineering

Supervisors: Dr. Obaidah Mohammed Abdel Rahman Zaitoun, and Dr. Abdullah Othman Al-Nhait Students: Nasser bin Ahmed bin Mohammed Al Abdulqader, Abdul Majid bin Mohammed bin Abdulaziz Al Hammad, Mohammed bin Ibrahim bin Abdulrahman Al Shuraim, Abdul Rahman bin Hamed bin Ibrahim Al Omair

(2) Second Place - Project Title: Design and Manufacture of Efficient Thermoelectric Generator System for Waste Heat Recovery of Engine - Department of Mechanical Engineering Supervisor: Ed. Mohamed Hassan Ramadan

Students: Osama Miftah Al Haq Ahmed Hussein, Abdullah Bin Mohammed Bin Yousef Al Somali, Abdul Rahman Bin Mohammed Bin Ibrahim Al Wabel, Mohammed Bin Hassan Bin Abdul Raza Bou Ali

- (3) A: Third Place Project Title: Multi-Story Car Parking Design Civil engineering Department Supervisors: Dr. Abdulrahman Sulaiman Al-Badah, Dr. Abdulrahman Al-Majid Students: Abdullah bin Saber bin Awad al-Mutairi, Abdul-Alah bin Fahd bin Mohammed Al-Jabreen
- (3) B: Third place Project Title: Design of an Integrated System for Weapon Monitoring Department of Industrial Engineering
  Supervisors: Dr.. Abdul Rahman Musbab Al-Ahmari, d. Anwar Mohammed Anwar

Students: Talal Bin Fahad Bin Talal Al Arayar, Majid Bin Ahmed Bin Abdullah Al Asiri, Mohammed Bin Saad Bin Mohammed Al Jaber, Abdullah Bin Fahd Bin Ali Al Amro





## Saudi Amateur Radio Society Visits the Ground Station for the Educational Satellite Project

As part of the efforts of the College center for students creativity and innovation to exchange experiences and partnership with local and international bodies in support of creativity and innovation and in order to achieve the objectives of its various student projects, and in preparation for the implementation of the final phase of the satellite educational project (the implementation, testing and then the launch of the satellite), a delegation from the Saudi Amateur Radio Society, composed of the Executive President of the Society, Mr. Abdullatif bin Hamad Al-Obaid, accompanied by Mr. Abdullah bin Saud Al-Otaibi, visited the educational satellite ground station at the College.

The delegation was received by the College dean Dr. Waleed bin Mohammed Zahid, the vice dean for graduate studies and research Dr. Abdulmohsen bin Ahmed Al-Badah (supervisor of the Center for creativity and Innovation), the technical director of the project Dr. Qais Belwafi, students and team members. The visit reviewed the capabilities and equipment of the modern earth station, its compatibility with the latest international standards, its ability to track and communicate with satellites orbiting space, and the future cooperation between the project and the association. It is worth mentioning that some of the employees of the association have collaborated with the project's students during the past month in accomplishing an unprecedented achievement of the ground station in the College by contacting the Saudi satellite Oscar OSCAR on the occasion of its 26th launch as it passed through the Kingdom.

The educational satellite project at King Saud University aims to provide human cadres trained in the latest technologies of design, development and operation of satellites to participate in the

implementation of the ambitious plans of the Kingdom in the field of space science and achieve the vision of the Kingdom 2030.



#### The college celebrates the international day of quality

The College held on Wednesday, 20 Rabi 'Al Awwal 1439H corresponding to 28/11/2018 the celebration of the International Day of Quality 2018 under the patronage of His Excellency the University vice rector for development and quality Prof. Saleh bin Ibrahim Al-Qasumi, who was represented by His Excellency the Vice dean Prof. Abdullah bin Dr. Mohammed Al-Haidari and in the presence of the College dean Dr. Waleed Zahid, the vice dean for development and quality, Prof. Mousaed Al-Awad, and the head of development and quality unit, Dr. Mohammad Sharaf.

Prof. Abdullah Al-Haidari opened the ceremony with a speech, and then Prof. Musaed Al-Awad delivered a speech in which he spoke about the overall quality of higher education. He addressed the concept of quality, its importance and how to face the challenges in the implementation of quality. Dr. Mohammed Sharaf, head of the College development and quality unit made a comprehensive presentation of the College strategic plan. Then Mr. Turki Al-Yami, an expert in human development and Berkman Benchmark consultant, presented a lecture on the methodology of continuous improvement (Kaizen) methodology.

At the end of the ceremony, the University vice dean for development and quality was honored with a commemorative shield from the College. Engineer Turki Al-Yami was also honored with a commemorative plaque in appreciation of his efforts. In addition, 20 prizes were awarded to the winners of the International Quality Day competition organized by the College.

The ceremony was attended by the College's vice deans, department heads, faculty members, staff and students.



## **Promotion of Six College Employees**

The College deanship extends its congratulations to its employees who were promoted during the year of 1440H, and wish them success.

Name		Rank	New Grade	Department
1	Attiah Awad Zaharani	10	Chemical Engineer	Chemical Eng. Dept.
2	Meshal Saleh Alosaimi	9	Administration development specialist	Director of College administration
3	Obid Jaza Alharbi	8	Typist	College administration
4	Fahad Mohamed Alhossein	7	Electrician	College Workshops
5	Mohamed Abdulrgamdn Alatiq	6	Typist	College administration
6	Mossad Abulkarim Sawed	5	Assistant administrator	Mechanical Eng. Dept.

#### Forum in the College on the Academic Accreditation

Within the project of the study of the impact of obtaining national and international academic accreditation on the quality of performance at King Saud University (a project supervised by the University deanship of development and quality), a team from the deanship visited the College on Tuesday, 15 Muharram 1440H, corresponding to 25 September 2018 to explore the opinions of academic leaders, faculty members, administration staff and students on the subject. The College is a pioneer in the field of academic accreditation and quality after all its programs received the national accreditation NCAAA (May 2015 - April 2023) and the international ABET (September 2010 - September 2022). The College representatives participated in the seminar effectively and filled questionnaires. The seminar was crowned with success.



## Training on six-sigma in the college

Within the framework of programs and plans aimed at developing the skills of College students, the College training and community service unit organized on 16 Muharram 1440 H a lecture entitled "Introduction to six Sigma". The lecture aimed at introducing the participants to the six Sigma methodology. The training was conducted by Mr. Bassem Al-Mohammadi from the Gulf Society for Maintenance and Reliability. At the end of the session, the lecturer and the coordinator of lecture, Eng. Assem AlQadi were honored in the presence of the College dean, Dr. Waleed Zahid, the vice dean for development and quality Prof. Mossaed Alawad, the head of development and quality unit, Dr. Mohamed Sahraf and the head of training and community service unit Dr. Aref Abdelal.



#### Patent in environmentally friendly concrete

Dr. Fahd bin Keshim bin Waaleh, assistant professor in the civil engineering department (engineering and construction management), succeeded in proving the possibility of producing green or environmentally friendly concrete from wastes of secondary industry and plastics by obtaining two patents from the US and Saudi Patent Office. Green concrete can be used in the construction of green or sustainable buildings because of its light weight, resource conservation such as energy consumption, high insulation efficiency, low construction time and total cost. It is worth noting that Dr. Bin Waaleh is currently working on developing this invention by registering two similar patents to prove the possibility of producing other construction materials that contribute to reducing the consumption of natural resources and that are less harmful to the environment.

#### Dean award for the employee of the month of Muharram 1440 H

As continuation to motivate the College staff to improve performance, speed up achievement, enhance self-confidence and encouragement of positive competition between employees as well as the promotion of innovative work methods that facilitate and increase the efficiency of work procedures and transactions between the College units, Mr. Abdullah bin Huwaidi Al-Huwaidi of the staff of the college of engineering workshops received the dean award for the employee of the month of Muharram 1440 H.



#### Honoring Eng. Abdul-Bari Al-Arifi

The department of petroleum and natural gas engineering organized in the presence of the College dean and the vice deans a ceremony to honor engineer Abdul-Bari Abdullah Al-Arifi, the lecturer in the department, for the end of his term in the department which lasted for more than nineteen years.

Abdul-Barari was an active member of the ABET and NCAAA accreditation committees at the department and college level, member of the department development committee, member of the ISO quality management committee, member of the schedules and registration committee, supervisor of the department's practical training and member of the training development committee, in addition to his cooperative role in preparation of College conferences, workshops, exhibitions and career day.

He was also the supervisor of the club of petroleum and natural gas engineering and the supervisor of the local branch of the Association of Petroleum Engineers for nine years. Eng. Abdul-Barari Al-Arifi also headed the training and community service unit at the College vice deanship for development and quality for two years.

The department and the College have benefited from the services of Eng. Abdul-Barari and from his outstanding scientific efficiency. Eng. Abdul-Barari Al-Arifi was also known for his dedication and good behavior. We wish him good success.



### Students from Bin Baz High School Visited the College

The supervisor of the College community relations unit at the College vice deanship for development and quality welcomed on 9-11-2018 a student delegation from Sheikh Abdul Aziz bin Baz high school. The visit was aimed primarily at introducing students to the University specialties and the College services.

The students were briefed on the specializations available at the College, how to choose the appropriate specialization, the many advantages enjoyed by King Saud University students, the preparatory programs and practical steps that should be taken by the enrolling students to maximize their benefits on personal and social level

Eng. Abdulrahman Salah presented a lecture about the College and its departments entitled "How to choose your specialization". He explained that the University is committed to providing real education and promising disciplines that meet the needs of the labor market in the near and long term.

The students toured the facilities of the College where they visited the laboratories of the civil engineering and industrial engineering departments as well as the student innovation center. At the end of the meeting, a commemorative photo was taken.



#### The College participates in the 8th forum of specialization

Following guidance from the College dean and the vice dean for development and quality, the College unit for community relations participated in the eighth forum of specialization. The aim of the forum was to introduce students to the University and its different disciplines. The forum took place on 3/3/1440 H in the "Model Education" schools.



#### Scientific Lecture by the Hilti Company

The community relations unit in the College vice deanship for development and quality organized on 12-11-2018 a scientific lecture for Hilti Company. The lecture was presented by Engineer Hussein Abu Sheikha and engineer Mahmoud Aita. The lecturer reviewed the building equipment, the modern technologies that facilitate the work of the engineer, fire management systems in buildings and heat insulation systems from Hilti International.

At the end of the session, engineers Hussein Abu Sheikha and engineer Mahmoud Aita were honored with commemorating plates in the presence of Prof. Mosaid bin Nasser Alawad, the vice dean for development and quality, Dr. Mohamed Sharaf, the head of development and quality unit and Dr. Arif Abdelal, head of community relations.



The College Dean meets with the administrative staff

The College dean Prof. Waleed bin Mohammed Zahed, met with the administrative staff on Wednesday 8/2/1440 H. This meeting comes within the framework of the usual annual meetings between the College dean and the staff. During the meeting a number of issues of interest were raised and discussed as well as points concerning the development of administrative staff.

## This issue was prepared by:

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