



Civil and Architectural Engineering Department Newsletter











Newsletter Editors: Ms. Aisha Alkuwari Dr. Alaa Al Hawari Dr. Mohammed Hussein

> Issue 8 2021

In this Issue >>>	Page No.
 Message from Head of the Department 	3
Department News	4
 Minor in Engineering Project Management 	4
 ISO certification for Civil Engineering labs 	5
 Industrial Workshops 	6
 Introductory Event for CIOB 	7
 Orientation and Welcoming Event for Civil 	8
Engineering Students	
 Competitions 	9
 Supporting of Outreach Activities 	15
 Interaction with Community and Media Public 	city 16
Subject Ranking	17
Major Industrial Projects	18
Externally Awarded Grants	18
Students Success Stories	19
 Faculty Awards and Achievements 	20
New Faculty Members	20

Message from Head of the Department

Dr. Mohammed Hussein BSc (Hons) PhD (Cantab) MIIAV PGCHE FHEA



am pleased to introduce the 8th edition of the newsletter of the Department of Civil and Architectural Engineering at Qatar University. The newsletter presents the Department's activities and news for the academic year 2020-2021. This academic year wittnessed a large number of activities and great progress for the Department in spite of the challenges in running some activities because of the COVID-19 situation.

The main achievement for the Department has been the approval of the new Minor in Engineering Project Management. The Department is also proud this year to achieve the ISO-17025 for lab testing in the field of Construction Materials as the first teaching department in Qatar University to go for and achieve labrotory certification. The Department submitted 10 methods (out of 33 methods for the whole university) and got a clean record for all methods. Beside those achievements, the Department went through internal reviews for the undergraduate program through the University Academic Planning & Quality Assurance Office and through the College of Engineering in preperation of the ABET exercise next year.

The Department continued to progress in ranking for Civil Engineering. It has moved to the 151-200 place this year compared to 201-300 place last year according to the Shanghai Ranking. It has also moved to the 126-150 place this year compared to 176-200 place last year according to the Times Higher Education Ranking. Academics in the Department continued to publish high quality papers in Civil Engineering with a recognised effort to publish in Engineering Education. A number of academics and students were recognised at different cermonies in the university for their exceptional research effort and achievements.

The Department continued its strong effort in outreach and interaction with the industry. The Department organized the Bridge Competition for high school students during Februrary to April 2021 and strongely supported the STEM-CENG activities run by YSC at Qatar University for school students. The Department also continued to organised the industrial workshops on major and important topics in Civil Engineering. The workshops continued to attract large number of students and professional engineers from the Civil and Infrastructure industry in Qatar. The Department is also proud to secure 3 new industrial projects among other projects secured from QNRF and Qatar University.

I hope the newsletter gives you a good idea about the Department's activities and news, and I hope you enjoy reading it.

DEPARTMENT NEWS

Minor in Engineering Project Management

The Minor in Engineering Project Management is a new program for Engineering students at Qatar University. The purpose of the minor in Engineering Project Management is to train the next generation of engineers in the field of engineering project management that encompasses multiple sub disciplines. The minor delivers a comprehensive approach that focuses on all aspects of an engineering project starting from the initiation, planning, scheduling, developing of cost estimates and budgets, analyzing risks, and planning risk responses and quality control.

An introduction session was held for the Minor in Engineering Project Management. The event was organized on Monday, February 1st, 2021 on Webex platform.



ISO Certification for Civil Engineering Labs



The CAE Department achieved the ISO-17025 certification for testing in Construction Materials. The Department submitted 10 methods (out of 33 methods for the whole university) and got a clean record for all methods. The Department is the first and only teaching department to do this exercise at Qatar University. The accreditation involved rigorous process and documentations that the department developed along with a great success in the virtual visit organized in Fall 2020.

Prof. Mariam Al Maadeed, VP for Research & Graduate Studies, honored the Civil and Architectural Engineering Department and the College of Engineering for this achievement in a meeting in December 2020.





Industrial WORKSHOPS



The CAE Department organized a number of workshops for students, academics and professional engineers from the industry. In the academic year 2020-2021, four workshops were organized in key topics in civil engineering. The workshops were organized online and attracted a large number of audience.



Introductory Event for Chartered Institute of Building (CIOB)

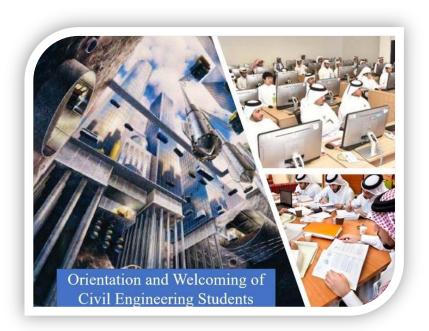


The CAE Department organized a workshop to introduce the Chartered Institute of Building (CIOB) for the Civil Engineering Students. CIOB is one of the largest organizations that supports the improvement for the quality of life for the users and creators of our built environment.

CIOB offered free membership for the students and the team presented the benefits of joining CIOB and other information about the organization, such as information about progression for the registered students in the Chartered track

Orientation and Welcoming Event for Civil Engineering Students

The Civil & Architecture Engineering Department organized an orientation and welcoming event on the 24th of August 2020. The event targeted civil engineering undergraduate students and particularly the newly admitted students.











8th Wooden Bridge Competition

The Department of Civil and Architectural Engineering organized the 8th High School Wooden Bridge Competition (HSWBC) to motivate students to join the field of engineering in general and civil

engineering in particular. Teams of high school students constructed bridge models using sticks and glue as per the instructions and guidelines provided by the faculty and staff during their visit to the school as part of the outreach program. The competition aims to equip secondary school students with the main skills of civil engineering and to enable them to test, design and



build small bridges of different usages. On the final day of the competition, loads were applied at the center of each bridge to measure how much load each bridge can withstand. The team with the largest load Carrying Capacity Bridge would win the first place. **Eighteen Independent High Schools** participated in the competition.









SR.NO.	School Name	Position
1	Jassim Bin Hamad Secondary School For Boys	1 st Place
2	Ahmed Bin Hanbal Secondary School For Boys	2 nd Place
3	Al Shahaniya Secondary School For Boys	3 rd Place

للترويج لكلية الهندسة جامعة قطر تختتم مسابقة الجسر الخشب

ع سر استراس الثانوبة فرص اعطت طلاب المدارس الثانوبة فرص مست سعب استدارس المستوقة مراصة التصميم واختبار جسوار فدرات الحجم، صما أثاع لهم استخدام قدرات على التخيل والإبداع لتصعيم س قارة على مقاومة الأحمال الم

عليها أثناء الاختبار. wew whe 15/ 45 لاستقطاب الكفاءات والطلبة الد

والمستقدم المسادات والمستقد من المدارس الثانوية من المدارس للالتحاق بكلية المندسة برامجها المختلفة، حرصا المديتمع القطري بالعبند رسبت الفائقة في مجالاتهم. الخبرات الفائقة في مجالاتهم.

التواصل المجتمعي الذي في إطال النواصل المجتمعين سي في إطال النواصل مع المؤسسات تبذله خلية اللندسة مع المؤسسات سبسه سيد المهدسه مع الموسسات المحلية والعدارس المانوية، نظام المحميد والمدارس المالويد، محمد قسم الهندسة المدنية والمعصارية في صسم الجدسه العدلية والمعتمارية في طالب الهندسة بجامعة قطر فعالميات طالبة الهندسة

ب موسسه بب معد فعار يعاسيات المنشين المنشين المسابقة الجسر المنشين المسابقة المام الكانوية المسارس الكانوية للعام الأكاديسي المسارسة المارسة المعند-1202 محمد حسين، وقال الأستاذ الدختور محمد حسين، وقال الأستاذ الدختور محمد حسين، رئيس قسم المؤدسة .2021-2020 رسيس وسم الهدسه المدينة والمعمارية: «تهدف المسابقة للترويخ رنيس قسم والمعمارية، ويودف المسابقة بمنزونتي الكلية المؤدسة بشكل عام والهندسة الكلية المؤدسة ه البندسه بسما عام ويومسه نق على وجه الخصوص بين نق على في المدارس الثانوية

الطلاب استخدموا قدراتهم للإبداع في التصميم

اختتام مسابقة الجسر الخشبي الافتراضية للمدارس الثانوية STATE OF THE STATE

«جاسم بن حمد النانوية للبنين» تقور بالمركز الاول

اختتام مسابقة الجسر الخشبي

لدارس الثانوية

سة في برامجها المختلفة، حرصاً على رفد المجتمع القطري بالمهندسين اصحاب الخبرات الفائقة في مجالاتهم. المناب لافتأ إلى الحرص على التواصل مع طلاب المرحلة الثانوية من خلال عدة فعاليات ونشاطات تشعل هذه المسابقة والمخيم

الشتوي لطلاب المرحلة الثانوية واضاف د. حسين أن القسم ينظم مسابقة الجسر الخشيي بشكل سنوي بهدف زيادة الوعي لدى طلاب المدارس بأهمية العلوم موعي بدى صدب بمدارس بحمية المنبية التعاون للقيام باي عمل مثمر. الهندسية بشكل عام والهندسة المنبية على وجه الخصوص، وهو ما بسهم في مساعدة بعض الطلاب على انتخاذ القرار لدراسة الهندسة المدنية مستقبلاً.

ورسر استسور ورسل المدنية والمشرف المشارك في المسابقة 10 على المسابقة 10 ما المسا

كلبة الهندسة بجامعة قطرمع سات المحلية والمعارس الثانوية، بأت مسابقة الجسر الخشبي الثامنة رس الثانوية للعام الإكاديمي 2020

ال الدكتور محمد حسين رئيس قسم هندسة المدنية والمعمارية بالكلية تهدف المسابقة للترويح لكلية الهندسة شكل عام، والهندسة المنبة على وجه الخصوص بين الطلاب القطريين في المدارس الثنانوية في قطر». وإضاف أن المسابقة أعطت طلاب المدارس

الثانوية فرصة لتصعيم واختبار جسور صغيرة الحجم، مما أناح لهم استخدام قدراتهم على التخيل والإبداع لتصميم



8th High School Wooden ne 8th High School Wooden ridge Competition organized the Department of Civil and richitectural Engineering at atar University. College of igneering (QU-CENG) ended the a virtual closing award remonv.

Temony.

The first place was awarded lassin bin Hamad Secondary thool for Boys, and second act to Ahmed bin Hanbal Sedary School for Boys, and third ace to Al Shahamlya Secondary.

Commenting on the event.

Commenting on the event.

Commenting of Civil and Archicural Engineering, said, "the impetition aims to promote vil engineering skills among attractional providing them with the portunity to test and design all bridges and come up with novative bridges that can bear ads. This commenting is a man as. novative bridges that can bear ads. This competition is a way showcase the principles of civil



highlight its importance to life

highlight its importance to life and industry, and to attract distinguished Qatari students to the civil engineering programme.

Concerning the competition rules and requirements. Dr. Wael Almahhal. Associate Professor in the Civil Engineering Department and the competition's supervisor, said, "16 secondary schools participated in the Competition. and 36 the competition, and 36 wooden bridges were tested. The total length of each bridge

bridges are made with wooden sticks and wood glue. With the actual number of wooden sticks used in the bridge not exceeding 20. and the width not exceeding 30 cm."

"This competition enhances the students' confidence and their ability to make scientifications based on simple principles of Civil Engineering, it also aims to provide them with cipies of Civil Engineering. It also aims to provide them with the skills to work as a team and instill a spirit of cooperation to

من طرقي الجسر، وهو ما يعني إن الجسر يمتد بحلول 90 سم بين نقاط الارتكار، لافتأ إلى أن الفرق قامت الفرق بيناء " رمد إسى أن سري الجسور باستخدام العصبي الخشبية وغراء الخشب وقال: (إزالسابقة تعزز تقة الطالب بنفسه

ويقدرته على اتخاذ قرارات علمية تستند إلى أسس دقيقة امام محكمين على قدر واسع من العلم والمعرفة، كما تهدف إلى إكسابه مهارات العمل كفريق وغرس روح وقد جرى اختبار الجسور افتراضيا بحضور الفرق المشاركة من المدارس

الثانوية، ومجموعة من الطلاب واعضاء مر المحتور واثيل الضحال الإستاذ عيثة التدريس في كلية الهندسة، وتم تكريم الفائزين

وقد فاز بالمركز الأول مدرسة جاسم بن

Senior Design Competitions



Senior Design Poster Competition Fall 2020

The Senior Design Poster Competition Fall 2020 was held on the 18th of November 2020 Online. Here are the details of the winners:

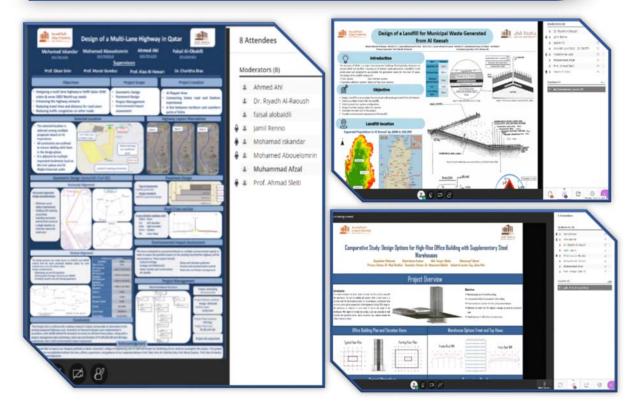
CVEN 402 Civil Engineering Design Project - II (Fall 2020)						
Positio	n	Student ID	Students name	Project Title	Supervisors	
1 st	1	201511477	Qusai Abu-Tineh	Design of an Integrated Sports Complex	M.Elshafie (P) M. Gunduz	
	2	201514048	Mostafa Tawengi		H.Eid	
	3	201601612	Yousef Mohamed			
	4	201508032	Jawdat Hussein			
	5	201403115	Loai Hamouda			
2 nd	1	201404090	Ahmed Asmer	High Rise Building	M.S.Al-Ansari (P) M.Elshafie	
	2	201408565	Bader almasri	Design		
	3	201403432	Hamza Sharif			
	4	201107864	Saeed Al-Maslamani			
	5	201306264	Saleh Hussein			



Senior Design Poster Competition Spring 2021

The Senior Design –II Poster Competition Spring 2021 Contest was held on the 12th of April 2021 online. Six groups participated in this competition. Students presented their projects to the Jury members as well as to internal and external examiners. Here are the details of the winners:

Nu	ımber	Student ID	Students name	Project Title	Supervisors	Position
	1	AlmodatherAhmed Hassan 201602430 Mohamed COMPARATIVE STUDY ON		Dr. Wael Al Nahhal (P)		
, [2	201601242	Mohammed Mashhoor Kairi Talhami	CONVENTIONAL VS. PRE-	Dr. Elshafie	1st
•	3	201604416	Abdurahman Hafez Mohammed Kashem	ENGINEERED STEEL BUILDINGS IN QATAR		151
	4	201609536	Mhd.Taisir Mhd.Mosallam Al Baba			
	1	201706034	Mohammed Said Mohammed Fawaz	Design of a Londfill for	Dr. Riyadh (P)	
,	2	201506571	Khamis Mounir Khamis Alkassas	Design of a Landfill for	Dr. Hisham Eid	2nd
-	3	201604176	Jassim Ahmad A M Al-Sanadi	Municipal Waste generated from Al-Keesah		
	4	201517433	Sadon Mohammed J H Al-Azba	II OIII AI-REESAII		
	1	201701555	Mohamad Iskandar		Dr. Okan (P)	
3	2	201705018	Mohamed Abouelomrin	Design of a Multi-Lane	Dr. Dias	3rd
۰ ا	3	201701629	Ahmed Ahl	Highway in Qatar	Dr. Al-Hawari	Sru
	4	201602302	Faisal Al-Obaidli	200 200 40	Dr. Murat	
1		201703105	Mahmoud Walid Mahmoud Salem	Assessment of Geometry,	Dr. Wael Al hajyaseen (P)	
4 2	201603841	Ahmed Basheir Mahgoub Abdelkarim	Control and Drainage of Road Section in Doha City	Dr. Dias	3rd	
	3	201703908	Sam Verniel Patan Iral		Dr. Al-Hawari	



Senior Design –II Contest Fall 2020

The Senior Design –II Fall 2020 Contest was held on the 19th of November 2020 in the College of Engineering. Students presented their projects to the Jury members as well as to internal and external examiners. Here are the details of the winners.

CVEN 402 Civil Engineering Design Project - II (Fall 2020) BCR - I -210 (19th Nov - Thursday)						
Positio	n	Student ID	Students name	Project Title	Supervisors	
1 st	1	201511477	Qusai Abu-Tineh	Design of an	M.Elshafie (P) M. Gunduz H.Eid	
	2	201514048	Mostafa Tawengi	Integrated Sports Complex		
	3	201601612	Yousef Mohamed			
	4	201508032	Jawdat Hussein			
	5	201403115	Loai Hamouda			
2 nd	1	201404090	Ahmed Asmer	High Rise	M.S.Al-Ansari (P) M.Elshafie	
	2	201408565	Bader almasri	Building Design		
	3	201403432	Hamza Sharif			
	4	201107864	Saeed Al-Maslamani			
	5	201306264	Saleh Hussein			





Senior Design Contest - 19th of November 2020

Senior Design -II Contest Spring 2021

The Senior Design –II Spring 2021 Contest was held on the 6th of May 2021, ONLINE. **Six groups** participated in this competition. Students presented their projects to the Jury members as well as to internal and external examiners. Here are the details of the winners:

SDP –II Contest Winner Details:

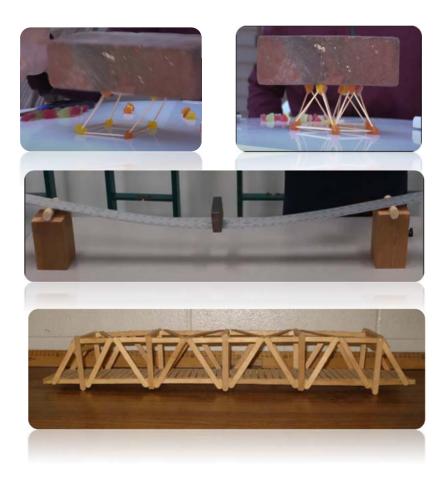
Positions		Student ID	Students name	Project Title	Supervisors
1 st	1	201602430	AlmodatherAhmed Hassan Mohamed	Comparative Study: Design	Dr. Wael Al Nahhal (P Dr. Elshafie
	2	201601242	Mohammed Mashhoor Kairi Talhami	Options for High-Rise Office	
	3	201604416	Abdurahman Hafez Mohammed Kashem	Building with Supplementary Steel Warehouses	
	4	201609536	Mhd.Taisir Mhd.Mosallam Al Baba		
2 nd	1	201601600	Ahmed Amr Mohamed Farag Madkoor		Dr. Ansari (P) Dr. Murat
	2	201702363	Yousef Ahmed Mohamed Refaat Tolba	Sports City Hotel	
	3	201604198	Abdullah Yousif Eisa Mohamed Osman		
	4	201607606	Mohammed Ahmad Q A Al-Ajbar		
3 rd	1	201706034	Mohammed Said Mohammed Fawaz	Design of a Landfill for	Dr. Riyadh (P)
	2	201506571	Khamis Mounir Khamis Alkassas	Design of a Landfill for	Dr. Hisham Eid
	3	201604176	Jassim Ahmad A M Al-Sanadi	Municipal Waste generated from Al-Keesah	
	4	201517433	Sadon Mohammed J H Al-Azba	Hom Arkeesan	





Supporting of Outreach Activities

The Department of Civil and Architectural Engineering strongly supported the activities of the Young Scientists Center, with the aim of encouraging and attracting Qatari students to join the Civil Engineering major. Presentations to the students included introductions about the civil engineering branches, and areas of work that support the development of Qatar and its future projects. The department also participated in educational activities and practical experiments targeting high school students from the different grades. The activities introduced the basic concepts of civil engineering by building models such as domes and wooden bridges that meet specific guidelines and standards. The students were given the chance to examine the models to discover the weakness and improve their designs.



Interaction with Community and Media Publicity





Dr. Mohammed Hussein, guest in TV program "Fee Al-Dhaha" to talk about precautions against COVID-19, Qatar TV, 22nd of Sep. 2020



The Department of Civil and Architectural Engineering has continued progressing forward in ranking tables of the Shanghai Ranking and the Times

Higher Education

Shanghai Ranking's Global Ranking Academic Subjects				
Year	2019	2020		
Ranking position	201-300	151-200		

Times Higher Education World University Ranking			
Year	2019	2020	
Ranking position	176-200	126-150	





Major Industrial Projects

The CAE Department started new projects with grants from the industry, namely Dolphine Energy, the Supreme Committee for Delivery and Legacy, and Qatar Rail.



The Department secured a grant to work on the sate-of-the-art utilization of technology such as drones for supporting digital infrastructure. The project is funded by Dolphine Energy and led by Dr. Khalid Naji.



The Center for Advanced Materials (CAM) in collaboration with the Department of Civil and Architectural Engineering secured a grant from the Supreme Committee for Delivery and Legacy for documenting the infrastructure and construction engineering work of the 2020 World-Cup stadiums. The Work is led by Dr. Nasser Alnuaimi (Director of CAM) and Dr. Mohammed Elshafie.



The Department secured a grant from Qatar Rail on modelling of train induced vibration and the assessment of mitigation measures. The Work is led by Dr. Mohammed Hussein with Dr. Jamil Renno from the Department of Mechanical and Industrial Engineering.

Externally Awarded Grants



The Department of Civil and Architectural Engineering at Qatar University was recently awarded a project to use Hydrogel Agriculture to Support Food Security in Qatar. The project is in response the Food Security First Call from the Qatar National Research Fund and Ministry of Municipality and Environment, and aims to increase Qatar's food security in a sustainable manner. The project is led by Dr. Alaa Al Hawari and was the only project awarded to the College of Engineering in the first cycle of the food security call and one of the three projects awarded to Qatar University.



The Department of Civil and Architectural Engineering was recently awarded an NPRP project in the 13S cycle from the Qatar National Research Fund. The project is entitled: Advanced Composites for Internal and External Reinforcement of Concrete Structures: Experimental and Life Cycle-Assessment Studies. The project is led by Dr. Usama Ebead.



STUDENT SUCCESS STORIES



Mustafa Suhail Sulaiman Almallah

Won the best poster award for graduate students for the Information and Communication Technologies category at Qatar University Annual Research Forum and Exhibition 2020. The honoring ceremony was held on the 28th of October, 2020 at Ibn Khaldoon Hall in Qatar University.



Tadesse Gemeda Wakjira

Won Qatar University Graduate Research Award Sciences at Qatar University Annual Research Forum and Exhibition 2020. The honoring ceremony was held on Wednesday, the 28th of October 2020 at Ibn Khaldoon Hall in Qatar University.





& ACULTY AWARDS AND ACHIEVEMENTS



 Dr. Khalid Naji has been promoted to Associate Professor in Civil Engineering



 Dr.Nasser Alnuaimi has been promoted to Associate Professor in Civil Engineering



Dr. Alaa Al Hawari has been promoted to Full Professor in Civil Engineering.



Dr.Okan Sirin has been promoted to Full Professor in Civil Engineering.



 Dr. Mohammed Hussein has been promoted to Full Professor in Civil Engineering.



Dr. Riyadh Al-Raoush



Dr. Usama Ebead



Dr. Mohammed Hussien

Three members of the Department were among the the top 2% world researchers for 2019 citation impact, according to the new comprehensive list published by Stanford University. The researchers in the list from Qatar University were honored by Qatar University President on the 11th of April 2021

New Faculty Members



The Department of Civil and Architectural Engineering would like to welcome Dr. Vagelis Plevris who joined the department in Spring 2021.