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GLOBAL COLLEGE OF ENGINEERING AND TECHNOLOGY 7<sup>TH</sup> Issue December 2023

## **Promoting Student Engagement and Community Affairs**



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## **GLOBAL COLLEGE OF ENGINEERING AND TECHNOLOGY**

## **NEWSLETTER**

7<sup>™</sup> ISSUE **DECEMBER 2023** 

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**GCET Staff Football Group** 

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### **COLLEGE NEWS | DEAN'S MESSAGE**



Salam Alaykum!

Dear Treasured Colleagues, it has been 3 years since we started these GCET Newsletters.

In the last 3 years, we have matured and grown into an institution with robust academic and administrative infrastructures. We have increased student recruitment numbers, and we have exceeded actual target numbers for the last four recruitment periods. I am indebted to all my treasured colleagues for their hard work in the Academic Departments, RARO, and MPRO, who were instrumental in delivering this success. We grow and benefit together as a GCET family.

The theme of this issue is 'Promoting Student Engagement and Community Affairs'. This theme allows us to show and demonstrate all the extensive work we do as an institution to provide our students with extracurricular activities, and provide wider engagement with the community at large in Muscat. We offer events to people outside the institution, and students and staff engage with people within the wider community. We also offer our facilities and services to the community, for example, the Watan Theatre Troupe, to enable them to rehearse and practice for plays and concerts; and we provide charity to the community at different times. I hope this issue of the GCET Newsletter will provide some insight into these activities.

As for Student Engagement, this is a critically important aspect of life at GCET. We promote and encourage our students not only in their studies but also in extra-curricular activities. I am indebted to the Student Council and students at large for their promotion and leadership in delivering, in partnership with staff, some fantastic events, such as the National Day, the Cultural International Day, and Omani Tree Day, to name but a few events in the past year. Again, I hope this issue of the GCET Newsletter will provide some insight into these activities.

Overall, it has been a busy time since the last Newsletter! We have recently graduated over 350 students in a fantastic Graduation Ceremony at the OCEC in October 2023 in the presence of the Vice Chancellor of the University of the West of England (UWE) who conferred the awards to our students. I am particularly grateful to His Excellency Sayyid Salim Musallam Al Busaidi, the Under Secretary of the Ministry of Labour for Human Resources Development for his important patronage and endorsement of the Graduation Ceremony.

In July 2023, we received the OAAAQA Institutional Report for Stage 1 of the Audit and Review process. The report made a number of recommendations that are helpful to enable the institution to refine its systems and processes. Overall, there were no major issues raised in the report; but we must ensure from this semester onwards that we

plan for Stage 2 of the OAAAQA Audit and Review visit (that may be in the Academic Year 2024-2025.

I am delighted that we have appointed 2 new Academic Heads of Departments who have the energy and commitment to take their departments forward and add value to the Institution. I warmly welcome the new Heads of Departments, Dr. Khoula Al Harthy, as Head of Computer Science and Creative Technologies (CSCT), and Dr. Mira Chitt, as Head of the Department of Mechanical Engineering. I wish them well and hope they will receive all the support they deserve. We have also recruited a number of other staff in the academic departments and administrative departments who are formally welcomed in this issue of the GCET Newsletter. I am also delighted to say that the Post-Graduate Program portfolio has grown from 1 program three years ago to 3 programs now with the recent approval by MoHERI of the MSc Cyber Security.

In the last 3 years, I have seen an improvement in the way we operate and the professional approach to our work and activities as individuals and as an institution. The work put into marketing and publicity over the last 18 months has been outstanding. The commitment by Al Hussain and his MPRO Team is exceptional. I am grateful to the MPRO for improving our visibility and College position in the Higher Education sector; and adding value to the institution. I have also seen growth in the professional way we register and enroll students through RARO. I am grateful to RARO for all their dedication and hard work. I hope with improved ICT systems in the future, we can become even more efficient and effective in this regard. In SSSO, I have seen great work and achievements in the last 18 months in engaging students in community events and how we prepare students for employment. Our approach to preparing and up-skilling students (referred to as promoting 'employability skills') has become very professional and I was delighted to attend the 1st GCET Job and Career Fair this year - it was a great success. Again, I see great value added to the student experience

across many departments; encouraging students to engage with important extra-curricular and employability agendas. More regarding these areas can be found in this issue of the GCET Newsletter along with photos and articles on student and community engagement. I am also grateful to Mr Taimoor and his Graduation Team of staff for producing the best and most professional Graduation Ceremony we have hosted in October 2023. It was a wonderful spectacle, and everyone involved appreciated the organization of the Graduation Ceremony. Thank you to everyone involved. This year, we are trying to support and expand ICTSSO to recruit more staff in this area. I have seen exciting plans by ICTSSO to ensure a robust and new secure server infrastructure and the implementation of a new Student Information System (SIS), and HR system, that will add further value to the institution in the future. Finally, I wanted to reflect on the Staff Performance Appraisal Process.

The outcomes of the updated Staff Performance Appraisal system were completed in late summer/early Autumn 2023.

As you know the appraisal process is structurally aligned with the staff performance and reward system. This academic year, due to progress and growth in many areas of the College, we have been able to ensure that all staff will receive an increment and, where appropriate, a financial bonus for their dedication and commitment to the College. As we grow as an institution, it is my desire to ensure that all staff benefit from our growth and success, whether that be through promotions, new job descriptions, increments, and bonuses: and I shall continue to implement this approach for as long as it is benefiting staff and working for the betterment of the College. I have been in Higher Education, teaching, research, and management, for 35 years; and I can state honestly that we operate to a

high level of effectiveness as a GCET Family. We have matured from a small institution to become a medium-sized (and growing) higher education institution with committed staff. I continue to be proud to be with you and share our success together. I hope you will find this issue of the GCET Newsletter informative and interesting. I would like to thank Mr Mario (The Editorial staff), Mr Tassawar (The Editor), Ms Pooja (The Proofreader), and Mr Ronaldo (The designer) for their effort and energy in producing the Newsletters every 3 or 4 months. This is the 7th issue of the GCET Newsletter. It continues to be a wonderful and highly valuable publication for the College.

Good luck with the remainder of Semester 1 and I wish you (in advance) a happy and peaceful Oman National Day Holiday this month.

Kindest wishes, Geoff.

## Memoranda of Cooperation (MoUs)

By: Prof. Geoffrey Elliot | Dean-President of College



### **Engineering Village**

The Global College of Engineering and Technology continues to develop good partnerships with other Higher Education Institutions (HEIs) in the Sultanate of Oman. These memoranda of Understanding and Memoranda of Cooperation agreements largely benefit from benchmarking and enable the understanding and development of academic and administrative practice. I'm pleased to inform you that since May 2023, we have signed MoUs with ICEM to benchmark GFP and staff and student activities; with the Engineering Village to explore and promote educational opportunities and knowledge transfer opportunities; with the Oman Society of Engineers to promote educational developments in engineering for staff and students; and with Bug Bounty, Oman LLC, to encourage student participation in Bug Bounty programs and develop a vibrant student community for cybersecurity.



Memoranda of Cooperation (MoUs)







Memoranda of Cooperation (MoUs) Oman Society of Engineering









**Dr. Sulaiman Al Hasani**Deputy Dean
(Academic Affairs and Resources)

## Oman Quality Day

On the occasion of the Oman Quality Day, celebrated from 15 to 16 November 2023, GCET participated in the event, with Dr. Sulaiman Al Hasani participating as both a presenter and panelist. The Oman Quality Day was hosted by the Military Technical College of Oman and organized by the Oman



Association of Quality in Higher Education (OAQHE). Under the esteemed patronage of Her Excellency Prof. Rahma Al Mahrouqi, the Minister of the Ministry of Higher Education, Research, and Innovation, this event marked a significant milestone in the pursuit of excellence within Oman's higher education landscape.

The central theme of the presentation was "Leadership Commitment to Quality" " within the context of the rapidly evolving higher education sector in



Oman. The presentation explored the transformative power of benchmarking, shedding light on its pivotal role in driving excellence and innovation within higher education by adopting best practices from the sector and beyond. The presentation emphasized the power of benchmarking, its benefits, and strategies for implementation, and how benchmarking serves as a catalyst for continuous improvement and the elevation of quality in processes and practices.

## MoHERI Block Funding Program Awarded Projects Call 2023

Dr. Amjed Sid Ahmed | Director of Research & Innovation Office

Global College of Engineering and Technology (GCET) participated in the Ministry of Higher Education, Research, and Innovation (MoHERI) Block Funding Program (BFP) call 2023. This was the third time that the college participated since its establishment in 2014. In total, four proposals were awarded funds; two under BFP-Research Grant (RG), one under BFP-Graduate Research Grant (GRG), and one under BFP-Undergraduate Research Grant (URG). A total of 29,800 OMR in research funding was allocated by MoHERI.

Under the BFP-Research Grant (RG), a project in renewable energy area titled "A Solar-Biomass-powered Plant for Co-generation of Electricity and Freshwater to Supply Water for Cultivation Environments in Coastal Areas of Oman" received a fund of OMR 16,100. The project will be conducted by

Dr. Mira Chit as a Principal Investigator from the Department of Mechanical Engineering and Dr. Morteza Khashehchi as Co-Principal Investigator from the same department.

The main objective of this project is to develop a renewable-based plant that will provide electricity and fresh water at the same time. In this context, solar energy and biomass are used as two important renewable resources for energy supply. On the other hand, the proposed system focuses on the supply of fresh water for the irrigation of crops grown both in the open field and in greenhouses, where the only available water source is the sea. Therefore, an environmentally friendly plant for the simultaneous production of electricity and fresh water will be built to enable the production of crops and create wealth. The implementation of such

renewable energy projects can also support the further development of the region by providing electricity, water, and agricultural products.

A second project funded under the BFP-Research Grant (RG) titled "An investigation into Graduates' Employability Attitudes in Oman; The Significant Role of Protean Career Attitudes" received a fund of 9,200 OMR. The project will be conducted by Dr. Mohammed Latif Khan as the Principal Investigator from the Academic Department of Mechanical Engineering and Dr. Morteza Khashehchi as Co-Principal Investigator from the same department.

This project seeks to provide information on the psychological predispositions for protean career attitudes and explore the link between protean career attitudes and graduates' employability with the help of organizational career management



To address the issue of graduates' employability in Oman, data will be gathered on a sample of graduate students from all around the country who are entering the job market. The results of a structural equation modeling (SEM) analysis will provide fresh perspectives on what motivates protean career attitudes and demonstrate how other behavioral abilities influence the protean career approach.

Under the BFP-Graduate Research Grant (GRG) a project in the renewable energy area titled "Neural Network Modelling of Solar Cell for Optimisation Purposes" received a fund of 3,000 OMR. The project team consists of Mr. Baseem Al Falahi from the Electrical and Electronics Engineering Department as a Principal Investigator and Ms. Ibtisam Alhatmi as a Co-Principal Investigator from the

same department the project supervised by Dr. Nemat El Hassan Electrical and Electronics Engineering Department.

This project presents the development of a novel and accurate PV model by utilizing the neural network and Finite Element Method (FEM) techniques that can be used to optimize and study different PV structures, and materials, and most importantly, incorporate environmental factors into different system configurations. As Oman has the benefit of an important geographic location that is exposed annually to large solar irradiation, the proposed PV model will result in significant economic benefits to Oman in successfully implementing the optimized PV cells, and it will help in the contribution of Oman's 2040 vision goal of making solar irradiation-based renewable energy generation the

logical choice for the Sultanate. Under the BFP-Undergraduate Research Grant (URG), a project titled "A comparative study of Land Evaluation for agriculture by using soil moisture content with Remote sensing technology" received a fund of 1,500 OMR. The project is led by Ms Issra Al-Sawafi and mentored by Mrs Sazya Firdus, Urban Planning and Environmental Management Department. This project is significant because it allows the examination of different soil textures on various lands and determines whether the area is appropriate for planting various food commodities, such as fruits and vegetables. It is also necessary to determine whether the property is appropriate for the construction of landmarks or not. The goal of this project is to determine soil fertility. Furthermore, because the residents are known to cultivate their own food, measuring the soil fertility will make it easy to determine the suitability of a site for agricultural activity.

GCET appreciates the efforts that both teams made in order to receive these funds, congratulates fund receivers, and wishes them all the success and best of luck with their projects.

## Mr. Syed Imran Ali Kazmi

System Infrastructure Manager and Assistant Professor

In a significant stride toward fostering cutting-edge education and industry-aligned learning, the Global College of Engineering and Technology (GCET) is proud to announce a groundbreaking Memorandum of Understanding (MoU) with Red Hat Linux Academy.

Fueling Technological Excellence:

# GCET Joins Forces with Red Hat Linux Academy for Academic Advancement





This strategic affiliation signifies GCET's commitment to providing students with unparalleled opportunities for growth and skill development in the realm of open-source technology. Red Hat Linux Academy, renowned for its expertise in Linux and cloud solutions, brings a wealth of resources and industry insights to complement GCET's academic prowess.

### Key Pillars of Collaboration:

Comprehensive Curriculum: GCET students will now benefit from a world-class curriculum curated by Red Hat Linux Academy, offering in-depth

insights into Linux systems, cloud computing, and open-source technologies. This curriculum is designed to not only meet academic standards but also to align with the current and future needs of the tech industry. Certifications Career Empowerment: The partnership unlocks a gateway for GCET students to pursue globally recognized certifications from Red Hat, empowering them with a competitive edge in the job market. These certifications are highly esteemed in the industry, opening doors to a myriad of career opportunities.

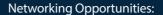
### Faculty Development:

The collaboration extends beyond student enrichment. Faculty members at GCET will have access to professional development opportunities, ensuring they stay abreast of the latest industry trends and methodologies. This, in turn, enhances the quality of education delivered to students.

Hands-on Learning Resources: Red Hat Linux Academy provides a suite of hands-on labs, projects, and assessments, enriching the learning experience for GCET students. Practical, real-world scenarios prepare students for the challenges they'll encounter in their professional journeys.

### **Networking Opportunities:**

Through this affiliation, GCET students gain access to a robust network of professionals within the Red Hat ecosystem.



Through this affiliation, GCET students gain access to a robust network of professionals within the Red Hat ecosystem. This network not only facilitates knowledge exchange but also opens doors to potential internships, mentorships, and job placements.

## A Shared Vision for Technological Advancement:

Commenting on this landmark collaboration, Dr. Khoula, Head of Computer Science and Creative Technologies at GCET, expressed enthusiasm, stating "This partnership aligns seamlessly with our vision of providing a holistic and industry-relevant education to our students. We believe that joining forces

with Red Hat Linux Academy will not only elevate the academic experience at GCET but also empower our graduates with the skills needed to thrive in the tech landscape."

As GCET embarks on this transformative journey with Red Hat Linux Academy, the institution looks forward to shaping the next generation of tech leaders, armed with knowledge, certifications, and a passion for innovation. This partnership reflects GCET's unwavering dedication to staying at the forefront of technological education, preparing students for success in an ever-evolving digital era.

Stay tuned for more updates as we embrace this exciting chapter in our academic journey!



Mr. Taimoor Al Nadabi
Head of Student Engagement
and Employability Office (SEEO)

## GCET's Collaboration with Al Watan Theater

Global College of Engineering and Technology (GCET) has partnered with the Al Watan Theatre Group to promote cultural and artistic exchange. GCET is providing the Theatre Group with a dedicated space on its premises for rehearsals and storage. This collaboration reflects GCET's commitment to supporting artistic talent within its community and offering a platform for the Watan Theatre Group to flourish. In return, GCET gains valuable benefits from the artistic expertise of the Watan Theatre Group. The partnership allows the college to access the experience and creativity of the Theatre Group members. Workshops covering various topics, including acting techniques, crafting theatrical texts, film makeup, and insights into professional theatre team dynamics, are being conducted for GCET students. This exchange enhances the educational experience, combining academic excellence with hands-on exposure to the performing arts.

This collaboration marks a significant step towards integrating education with the arts, creating a more holistic learning environment at GCET. As this innovative partnership unfolds, both institutions anticipate a future filled with creativity, inspiration, and mutual growth.









Mr. Al Hussain Al Mossawi
Head of MPRO

## Strengthening GCET's Presence in the Community

Among other goals to make our presence felt in the global educational market, GCET also recognizes the significance of community outreach and engagement as one of the vital components of our mission to connect with and support the local community. This report highlights our active participation in higher education exhibitions and school visits throughout various regions in Oman during 2023.

## HEI Exhibition 2023



At the HEI (Higher Education Institution) Exhibition 2023, we continued our commitment to engaging with prospective students and their families. Our participation involved informative seminars, personalized consultations, and the dissemination of promotional materials. The exhibition served as an effective platform to communicate our educational objectives and establish connections with potential applicants.

## Participation in the Higher Education Exhibitions

## GHEDEX 2023

GHEDEX 2023, held in Muscat, provided an excellent platform for our organization to showcase our academic programs and interact with prospective students. Our engagement included interactive displays, program presentations, and one-on-one discussions with attendees. The event garnered positive attention and enabled us to connect with a diverse range of students and parents seeking higher education opportunities.





## EduTrac 2023

EduTrac 2023, a prominent educational exhibition, gave us a chance to engage with a wide audience from various educational backgrounds. Our team conducted informative sessions, distributed prospectuses, and engaged in meaningful conversations with attendees to provide insights into our academic offerings. The event facilitated valuable networking opportunities and allowed us to reach students from different age groups.





## **School Visits and Outreach**

Throughout the year, our team visited numerous public and private schools in regions such as Sur, Sohar, Salalah, Aamirat, and A'Sharqiyah. These visits involved interactive presentations and career counseling sessions. Our engagement with students in grades 11 and 12 was well-received, fostering a sense of connection and enthusiasm about pursuing higher education at our institution.



## **Community Engagement Initiatives**

In addition to our participation in exhibitions and school visits, our organization organized community engagement initiatives, including scholarship information sessions, workshops on career readiness, and collaborative events with local SMEs. These initiatives aimed to foster a sense of partnership and mutual support within the community, further strengthening our ties with the regions we serve.

The collective efforts of our outreach activities resulted in direct engagement with over 15,000 students and parents across the various events and school visits. Feedback received highlighted the positive impression created by our institution's programs and the personalized approach of our representatives. Notably, several partnerships with educational institutions and community organizations were established, enhancing our ability to support students' academic pursuits.

GCET's commitment to community outreach and engagement has yielded considerable benefits for both our institution and the communities we serve. As we move forward, we remain dedicated to nurturing these connections.



## GCET hosts Embassies Representatives and Cultural Attachés

By: Dr. Suliman Al Hasani and Mr. Al Hussain Al Mossawi

As part of its keen efforts and continuous support for its students beyond graduation and to attract more international students, the Global College of Engineering and Technology (GCET) hosted representatives of many embassies during an introductory meeting; the representatives gathered on Monday, 17th July 2023, at GCET's premises. This move to invite embassies' officials served as a prime platform for GCET to showcase its comprehensive programs and vibrant activities, and, most importantly, to explore potential collaborations in advanced education and pioneering research initiatives. Esteemed Ambassadors, delegates, and cultural attachés from the Kingdom of Saudi Arabia, Qatar, United Arab Emirates, Arab Republic of Egypt, Republic of Iraq, Tunisia, Palestine, Republic of Sudan, Republic of Tanzania, Syria, UK, Pakistan, Morocco, and India honored the event.

GCET endeavors to secure global recognition by opening up avenues of worldwide employment for its graduates. It is committed to surpassing conventional norms, particularly in its support for its students, by extending its assistance even after graduation to facilitate greater global opportunities. This meeting proved to be an exceptional opportunity to engage with representatives from diverse nations and explore collaborative prospects.

GCET takes pride in its diverse student body, representing numerous nationalities, with international students making up more than 8% of the overall student population enrolled in over 10 academic programmes in the different disciplines of engineering and technology. These programmes are offered through a privileged academic affiliation with the University of West of England (UWE), UK. During the event,

Uwe and GCET staff presented several information sessions on the benefits of student exchange, the 2+2 agreement, and postgraduate studies. UWE representatives (MrTod Burton, Deputy Head of College, and Mrs Hayley Iovannelli, Head of International Business Development) discussed the arrangements for the 2+2 and the student support that UWE will provide to GCET students transferring to the UWE campus.

By Hosting such events, GCET reaffirms its dedication not only to academic prowess but also to creating a globally interconnected community of scholars and professionals. This proactive approach ensures that GCET remains one of the leading private higher education colleges of choice for engineering and technology in the Sultanate of Oman and the wider MENA region.







2023 GHEDEX Award for Excellence in Education: Category of Diversity of Teaching Faculty - Researchers Ratio

By: Dr. Amjed Sid Ahmed | Director of Research & Innovation Office

GCET won 'The GHEDEX Award for Excellence in Education: Category of Diversity of Teaching Faculty - Researchers Ratio' in May 2023. The college won this award after competing with all the other Colleges and Universities in the Sultanate of Oman. This award reflects the hard work and dedication of the staff in the research and innovation area, which allowed the college to present its achievements and excellent required evidence in order to win this award. The college is proud of receiving this award and acknowledges and appreciates the staff's efforts to make this happen.





## The 6th Graduation Ceremony: An Emotional and Memorable Event

By: Taimoor Al Nadabi | Head of Student Engagement and Employability Office (SEEO)

On 11 October 2023, the Global College of Engineering and Technology celebrated its 6th batch graduation ceremony, creating a memorable and emotional experience. The atmosphere was filled with a sense of accomplishment for both graduates and proud parents. The event was well organized by dedicated staff and enthusiastic student volunteers and unfolded with various heartwarming moments.

The ceremony began with the recitation of the Holy Quran. Mr. Tod Burton declared the opening of the Awards Ceremony. Professor Geoffrey Elliott delivered an inspiring address to the graduating class followed by a warming speech from The Vice-Chancellor, President, and CEO of UWE, Professor Sir Steve West who graced the occasion as the Chief guest. Two UG students Ms. Zainab Al Balushi and Mr. Mohammed Ali Alsaidi conducted the stage throughout the event.

The highlight of the ceremony was the individual recognition of graduates and the conferring of their well-deserved degrees. The stage radiated with pride as each student received their symbolic parchment, reflecting years of hard work and dedication. A touching moment occurred with a specially curated video presenting the essence of the day. This emotional montage included heartfelt messages from parents to their graduating children, creating a deep connection between generations and acknowledging the shared journey and sacrifices made for academic excellence.

At the end, Dr. Abdullah Abbas, the esteemed Head of our Board of Trustees presented special gifts to our Chief Guest from the Sultanate of Oman, H.E. Sayyid Salim Al Busaidi.

The 6th batch graduation ceremony at the Global College of Engineering and Technology was a resounding success, marking a new chapter in the graduates' lives. As they begin their professional journeys, the memories of this day will remain with them as a source of inspiration, reminding them of their families' unwavering support and the collaborative spirit that defines their alma mater.





#### **COLLEGE ACTIVITIES**



**Mr. Suleiman Al Balushi**Student Career Counselling Officer

The first job fair at GCET was held on May 1-2, 2023 under the auspices of Sayyid Munther bin Saif bin Hamed Al Busaidi, Chairman of the Oman Equestrian Federation, and in the presence of many eminent dignitaries from various institutions from both the public and private sectors.

Twelve prominent companies representing various sectors were represented at the fair. A long list of employers was invited to the fa; this included ministries, companies, and manufacturing companies from Madayn. The event attracted many students from undergraduates, graduates, alumni, staff and external visitors.

The job first fair was held to facilitate the employment needs of GCET graduate students and job seekers and to provide a venue to bring together employers and graduate students. The main objectives of the job fair were to enhance employer perceptions about GCET graduates and GCET facilities, and to promote GCET among the industries in Oman.

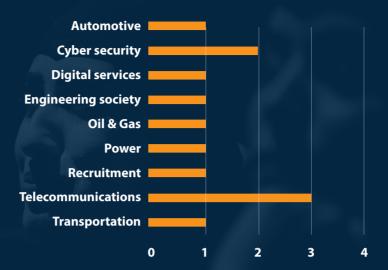
The event was covered by Oman TV, local newspapers, and GCET social media outlets.

A snapshot of the numbers involved with the event indicated the following:

Number of Employers Registered: 15 Number of Employers Attended: 12 Number of Employer Participants: 34 Number of Industries Represented: 9 Number of students benefited from the event: +300

The following sectors were represented at the job fair:

## GCET Organized the First Job Fair



employers were satisfied with the job fair. 100% reported that they would participate in another job fair organized by GCET.

Participants highlights were encouraging as well, including:

- 65% of students indicated they met with 1-5 employers.
- 35% met with 6-10 employers.
- 15% were interviewed by more than three employers
- 30% reported finding a job through the job fair
- 75% felt the job fair helped them.

The exhibitors and participants commended the fair as a "success", contributing to the organization and effort that the SSSO team had put into the event.





**Participating Companies** 

























## Carnival – The Inaugural Edition

By: Taimoor Al Nadabi | Head of Student Engagement and Employability Office (SEEO)

On March 14th, 2023, the Global College of Engineering and Technology organized its first-ever carnival, creating a memorable occasion for students, faculty, and attendees. The festivities took place from 3pm to 9pm, turning the college campus into a lively hub of entertainment and cultural exchange.

The event featured a variety of engaging games across the college grounds, from electric scooter races to strategic ball games and mind-bending puzzle challenges, creating a friendly atmosphere of competition.

The carnival showcased not only playful activities but also a marketplace of creativity. Numerous stalls offered a range of crafted household items, delicious cakes, and handmade crafts. This blend of commerce and art added a unique dimension to the event, allowing students to appreciate and support each other's talents.

The highlight of the day was the mesmerizing performances on stage. The college's musical band took center stage, delivering a captivating repertoire of songs that echoed throughout the campus. External bands joined the celebration, contributing to a rich tapestry of musical genres and cultural influences, and showcasing the diversity within the college community.

Carnival Day was more than just a series of events; it was a manifestation of the college's commitment to fostering a sense of community and cultural appreciation. Students enjoyed the joyous atmosphere and made new connections.

As the sun set on this inaugural carnival, the echoes of laughter, music, and lively conversations lingered in the air. The Global College of Engineering and Technology looks forward to future editions of this event, anticipating even more exciting showcases of talent, creativity, and cultural diversity.







**Stella Da Silva**Training Consultant

## Tajseer Program at GCET

Greetings, Graduates and Future Professionals!

I am excited to share the remarkable success of the Tajseer Program at the Global College of Engineering and Technology. This initiative was designed to empower graduates and soon-to-be graduates with essential skills to excel in various sectors of the workforce.

1. Crafting CVs Fit for Purpose: The program began by honing the art of creating CVs that truly showcase the unique value each individual brings to

the table. I emphasized the importance of tailoring CVs to specific roles, allowing graduates to stand out in a competitive iob market.

2. ATS Compliance for CVs: In today's digital age, Applicant Tracking Systems (ATS) play a pivotal role in recruitment. The graduates were equipped with the knowledge and skills to ensure that their CVs are ATS compliant, ensuring that they reach the eyes of potential employers.

3. Mastering the Art of Interviews: Navigating interviews can be a daunting task. I provided comprehensive guidance on the dos and don'ts of interviews, empowering the graduates to present themselves with confidence and professionalism in front of interviewers and panels.

4. Elevating Your LinkedIn Presence: In an era of professional networking, a strong LinkedIn profile is indispensable. The program delved into optimizing LinkedIn profiles, enabling graduates to approach potential clients with confidence, share valuable content, and utilize the platform's job search features effectively.

Results and Benefits: The impact of the Tajseer Program has been profound. Graduates reported heightened

confidence and a newfound ability to communicate their value to prospective employers. They have gained essential tools to not only secure employment but to thrive in their chosen fields.

I am immensely proud of the strides our graduates have made through the Tajseer Program. As they embark on their professional journeys, I have no doubt they will continue to thrive professionally, and wish them all nothing but the best.

Thank you, Global College of Technical Engineering, for allowing me to play a small part in ensuring the continued success of these graduates.



#### **COLLEGE ACTIVITIES**



**Ms. Pooja Chhabra** Senior Lecturer (English)

The transition from school to college can be a challenging and crucial phase for GFP students. At this stage, they leave the comfort zone of school life with limited hours of studying and enter into a new phase of their educational journey. Initially, most of the students feel tired and nervous physically and emotionally. Here comes the role of GFP CLUB; first to bring the newcomers at ease with the change; then, develop their talents, gradually exposing them to various in–house activities and community engagements.

## Students' health – Mind, Body and Soul



In the beginning of every semester, GFP Club focuses on providing a warm and homely environment to freshmen. The club considers students' mental and physical health as the top priority before introducing any academic or non-academic activities or competitions. Once they are acquainted to the place, various health related programs are organized throughout the semester. The GFP Club initiated a workshop on 'Improving Focus, Confidence & Energy' by a well experienced speaker and a yoga and meditation expert, Mr. Rajiv Ahuja. He introduced some breathing techniques to students to release stress during presentations, exams or even to combat with real life stress.

## GFP Club's Kaleidoscope 2023

Breast Cancer Awareness – HSE and GFP Club collaborated to spread awareness on cancer, especially among female students. Two well-trained doctors were invited from different hospitals in Muscat to give a talk on cancer. They spoke about various aspects of breast cancer and the possible ways to combat with the disease.



Autism Awareness – To celebrate the autism awareness month, two experts from Care and Special Education, a branch of Indian School Muscat for autistic students, came to give a workshop on Autism. The workshop on such a common yet sensitive topic was an eye opener for students and staff on prevailing misconceptions about autism. Through various activities and videos, they made students understand the way autistic children perceive things.



**Community engagement** – Learning experience outside classroom

GFP Club assures beyond classroom experiences for foundation students by arranging various types of community engagement events that include volunteering for social causes and getting involved in learning about different cultures.



A group of students volunteered to visit the Care and Special Education Centre located in Indian School Muscat, Ruwi where they met autistic children of different age groups. The students spent a good time with the children, learnt about their behavior and some of the students even distributed toys and chocolates to socially victimized children.

On a different occasion, a Korean Cultural event was organized at GCET for GFP students for which six Korean nationals were invited to acquaint students about their clothing, cuisine, and language. The event was quite interactive and kept the audience engaged throughout.



#### In-house competitions and activities

Focus on enhancing students' exposure to public and life skills

The Club organized In-house speech competition, Search of Math Wizard and an ICT competition providing fair chance of improvement in all the subjects they learn at GFP level. Such competitions and events not only develop students learning but also boost confidence, a sense of responsibility, competitiveness, teamwork, self-sufficiency, self- esteem and dedication.



#### Inter College Competition

Interaction with students from other institutions

After sufficient training with in-house competitions, the GFP Club initiated an Intercollegiate Debate Competition. It was a platform where many colleges and institutions participated. The debate was a great interactive experience on the topic which was based on Artificial Intelligence.

GCET Students' participation in other colleges' competitions – One step forward towards growth



#### **COLLEGE ACTIVITIES**

GFP Club strives hard to train students to compete at competitions organized by other colleges. Through a range of selection criteria, students are shortlisted to participate in competitions organized at other institutions.

GFP students participated in the speech competitions at Middle East College and Oman Tourism college. While at Scientific College of Design, they took part in a spelling bee competition. All the students performed well at their levels. One student won second position at 'Speak on Spot' competition at Oman Tourism College.



Our respected dean Professor Geoffrey Elliott awarded them with a certificate of appreciation to motivate them to keep up the good work and also to become an inspiration to other students.

The GFP club will continue striving for the best for students' all-round development and to bring laurels to our beloved Global College of Engineering and Technology.

## EEE Department Induction Day: Illuminating the Path to Excellence



Mrs. Mohsina Mirza
Student Support / Assistant Lecturer

The Electrical and Electronic Engineering (EEE) Department Induction Day is a highly anticipated event held on 24/9/2023, that ushers in a new era for students embarking on their academic journey in the field of electrical and

electronic engineering. Chaired by the Head of the Department and the Program Leaders, the event serves as a crucial foundation for fostering a sense of belonging, instilling a passion for learning, and providing a roadmap for success.

## The Welcome Address:

The day commences with a warm and inspiring welcome address by the Head of the Department, Dr.Javeed Hussain. This speech sets the tone for the entire event, emphasizing the significance of electrical and electronic engineering in today's world. It highlights the department's achievements, research endeavors, and commitment to nurturing budding engineers who will be at the forefront of technological advancements. It also guides students to various campus facilities and resources.

## **Program Overview:**

Following the welcome address, the Program Leaders, Dr.Irfan Memon and Dr.Mohammed Mohataram, take the stage to provide an overview of the academic journey that awaits the new students. They introduce the curriculum, detailing the core courses and electives that students will explore during their time in the department. This overview is essential for students to gain a clear understanding of the program's structure and the possibilities that lie ahead.

## **Quality Assurance Overview:**

The Quality Liaison Officer of the EEE Department, Dr. Nemat El Hassan delivers a presentation that outlines the department's commitment to maintaining and enhancing the quality of education. She discussed the department's

quality assurance measures, including accreditation, program evaluations, continuous improvement processes, Ethics and Plagiarism policies and student late submission windows among others.

#### Curriculum and Research:

The head of the Research team for the EEE section, Dr.Taleb talked about the research opportunities. He discussed the importance of staying current with industry trends and research developments. The induction day serves as a platform for students to understand the department's vision and how their academic journey will align with it.

Support Services: The student support center at the EEE department briefed the students on the various support services available to them to support their learning journey, especially for flexible learners. It emphasizes the department's commitment to ensuring that every student has access to the necessary resources for their success.









**Dr. Pooyan Rahmanivahid**Associate Professor

## ME Department Induction Day

During the induction day at GCET on Sunday, September 24, the Mechanical Engineering Department introduced the varied academic offerings, including the MSc in Engineering Management, BEng in Building Services Engineering, and three distinct pathways within the BEng Mechanical Engineering program: Manufacturing, Vehicle Technology, and Mechatronics. Detailed study plans for each program were presented, explaining the curriculum, learning objectives, and potential career paths for students to explore. The informative sessions facilitated a comprehensive understanding of the academic landscape. A significant aspect of the day involved touring the newly equipped mechanical labs. The occasion effectively encouraged a sense of friendship among both students and faculty, establishing a robust groundwork for a collaborative and rewarding academic journey within GCET's Mechanical Engineering Department.

## Teachers' Day Celebration on College Campus

By: Taimoor Al Nadabi | Head of Student Engagement and Employability Office (SEEO)

On March 2, 2023, the Global College of Engineering and Technology celebrated Teacher's Day, aiming to foster a collegial spirit. The day featured engaging games encouraging problem-solving, teamwork, and creativity, involving everyone from the dean to dedicated staff. This inclusive celebration allowed all staff members, regardless of their position, to participate, promoting open communication and strengthening bonds beyond professional roles. Laughter filled the air, achieving the goal of providing a break and enhancing the college community's connections. The Teacher's Day celebration highlighted the institution's commitment to building a cohesive community based on collaboration, shared knowledge, and a collective sense of purpose.





**Dr. Amna Al Saadi**Head of

Academic Department of UPEM

In the dynamic landscape of Built Environment Knowledge studies, students are immersed in research and innovation at our Higher Education Institute. Amidst this academic fervor, it's essential to acknowledge the need for students to reconnect with themselves, fostering an understanding of their inner feelings. This introspection not only enhances their self-awareness but also cultivates a heightened consciousness of others and ignites innovative thinking.

To stimulate the creativity of GCET students, the Academic Department of Urban Planning and Environmental Management has orchestrated a series of creativity workshops under the guidance of Dr. Zahra Akbari. In the words of Thomas Merton, "Art enables us to find ourselves and lose ourselves at the same time."

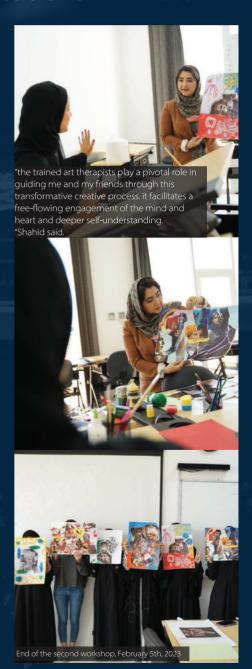
Art therapy stands at the intersection of mental health and expressive art forms. Utilizing art media and the creative process, individuals explore their thoughts

## Nurturing Creativity and Inner Balance The Role of Art in Student Wellness

and emotions, harnessing their potential for psychological healing.

Within the realms of psychology and therapy, art therapy serves as a specialized avenue. Al-Zahraa Al Sakiti, UPEM student, said, "Employing art materials and creative methodologies helps me and my colleagues navigate emotions, alleviate anxiety, boost self-esteem, and address various psychological challenges. It's not just a therapeutic procedure for initial treatment; rather, it can evolve into a habitual practice, preserving and maintaining mental well-being".





#### **COLLEGE ACTIVITIES**



**Dr. Eman Hanye Mohamed Nasr**Associate Professor

The Academic Department of Urban Planning and Environmental Management, under the supervision of Dr. Eman Nasr, organized a lecture on Sunday, 21 May, 2023, titled "Real Estate Development Project", presented by Eng. Tamer Kamal Yassein, Chief Technical Officer at Sandan Development LLC. The lecture was designed for the students of the Urban and Regional Planning program in order to help them understand how to complete a successful real estate development, the types of real estate, how to master planning development

## Guest Speaker Presentation by CTO in Sandan Development

and marketing services, and a case study for the development of Sendan City.

The quest speaker shared his practical experiences in the market and real estate development projects as well as the steps for the development of Sendan City. The students interacted with the presenter and asked about the different procedures and the development processes to make a link between the academic study and the market requirement to be able to develop their coursework for different projects and reports for urban development. The UPEM department is working on inviting guest speakers from different levels for different purposes to enhance students' knowledge and make a linkage with the market requirements to prepare students for practical life and help them understand the connection between academic study and the market requirements.





**Dr. Javeed Hussain**Head of Academic Department of
EEE & Associate Professor

We are happy to announce that the IET (Institution of Engineering and Technology) Academic Affiliate Program now proudly counts the Global College of Engineering Technology (GCET) as a partner. This collaboration marks a critical turning point for our college and offers our faculty and students a wealth of new and exciting prospects.

## GCET-IET PARTNERSHIP AS ACADEMIC AFFILIATE

The IET Academic Affiliate Program is well-known for facilitating connections between academic institutions and the International Engineering and Technology Advancement Society (IET), a global professional organization. GCET will be able to provide our academic community with a wide range of beneficial materials and experiences because of this partnership.

What's the significance of this partnership for GCET?

1. Access to World-Class Resources: GCET teachers and students will have unlimited access to excellent resources, such as papers, journals, and digital libraries, thanks to its status as an academic affiliate of IET. Having access to this information will be very helpful for academic research and maintaining current industry advancements.

- 2. Global Networking and Collaboration Opportunities: Membership in IET provides access to a global network of contacts and cooperation. In addition to attending international conferences and taking part in a variety of IET events, our instructors and students have access to specialists in the field. These kinds of exchanges can yield priceless knowledge about the engineering and technology industries.
- 3. Research and Educational Initiatives: GCET and IET will be able to work together on research projects, educational programs, and technological and technical innovation. Together, we will be able to support our organization to support innovative breakthroughs and industry best practices.
- 4. Career Advancement: GCET students will be more prepared for prosperous

careers in engineering and technology with the help of IET's resources and contacts. Prospective employers frequently view applicants who belong to esteemed professional associations such as IET favorably.

What's the next step for GCET?

GCET will be working hard to incorporate the advantages and opportunities that this exciting cooperation with IET offers into our curriculum and educational experience as we go forward. Our goal is to make sure that our staff and students take full advantage of this association and all its services.

We desire every student to explore the excess of information, studies, and activities offered by the IET.

activities offered by the IET.

**Dr. Taleb Moazzeni**Associate Professor

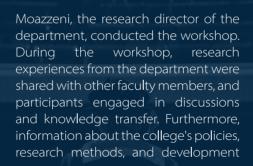
On September 11, 2023, the Department of Electrical and Electronics Engineering organized a workshop on research opportunities in Oman and around the world and global research trends for the faculty members. Taleb

Faculty members can broaden their perspectives and make a positive impact on the worldwide engineering and technology community.

Our goal at GCET is to provide the best engineering and technology education possible, and our cooperation with IET only helps to make that goal stronger. We are eager to see the beneficial effects that this partnership will bring to our organization and, above all, to the future professional paths of our students in the dynamic domains of engineering and technology. Keep checking back for more information on the fascinating advancements and chances that our academic community will benefit from the GCET-IET cooperation.



Knowledge Transfer Workshop on "Research Opportunities: Globally and Locally





incentives and available research budgets within the college and the country, from publication to startup company establishment. The workshop also covered government financial support programs for research projects in Oman and the relevant policies for submitting the grant proposal.

## GCET Tech Connect By: Mrs. Mohsina Mirza | Student Support / Assistant Lecturer

The GEETECH Society at the Electrical and Electronics Engineering (EEE) Department at our institution recently hosted a two-day technical event called 'TechConnect' Dated May 16 & 17 2023, connecting engineering students and industry experts with engaging activities that not only showcased the department's academic prowess but also fostered a spirit of innovation and collaboration among its students. These activities served as a testament to the

department's commitment to holistic learning and practical application of knowledge. The highlights of day 1 activities were the "Analytics and Advanced Analytics". A technical talk delivered by Mr. Kamal Ahmed, Research Analyst, Arabian Research, was followed by the EEE Skills Contest (game) held by the GEETECH students that encouraged students to think beyond the classroom and apply their technical knowledge to solve real-world problems. The day ended

with a workshop titled Fundamentals of Computer Hardware for Robotics Workshop at Robotic System Laboratory by Eng. Saba Jayyusi Technical Demonstrator, IET Student Committee Chair, and Eng. Baseem Al Falahi Technical Demonstrator. These experts shared their insights and experiences, providing students with a unique opportunity to bridge the gap between theoretical knowledge and practical application.

#### **COLLEGE ACTIVITIES**



Topics ranged from the latest advancements in electrical engineering to the impact of electronics on various industries. Day 2 kicked off with a technical talk on Technology and Entrepreneurship held online by Eng. Syed Rizwan, an UWE Alumni, Industry Consultant and Assistant professor at Bahria University, Karachi, Pakistan. followed by a GCET Buzzer (game) held at the Reception Area by GEETECH students followed by Marine Robots Workshop held at the reception area by iLab Marine Company. These activities not only enriched the academic

experience in the EEE Department but also fostered a sense of community and camaraderie among students and faculty. The department's commitment to offering a well-rounded education is evident in these initiatives, which combine academic excellence with real-world application and innovation.



## Technical report writing: A guide for engineering students

By: Mrs. Mohsina Mirza | Student Support / Assistant Lecturer

A Technical report writing webinar was held in the college auditorium by Dr.Nemat on March 15, 2023 which is a critical aspect of an engineer's academic and professional journey. It plays a pivotal role in communication, knowledge dissemination, and decision-making in engineering fields. To equip engineering students with the skills and knowledge needed to excel in this domain, the "Technical Report Writing" seminar was organized. The primary objective of this seminar was to impart a comprehensive understanding of the principles, best practices, and tools for effective technical report writing.

## Seminar Highlights:

Understanding the Purpose: The seminar commenced with an exploration of the fundamental purpose of technical reports in engineering. Participants learned about the various contexts and scenarios in which technical reports are essential, from documenting experiments and design processes to presenting findings and recommendations. Structuring the Report: The workshop then delved into the critical aspects of structuring a technical report. It provided insights into creating a clear and logical flow, including sections such as the introduction, methodology, results, discussion, and conclusion.

Attendees were guided on how to organize their information coherently to ensure readability and comprehension.

Technical Language and Style: Effective technical report writing demands a precise and formal style. Participants were exposed to strategies for using technical language appropriately, maintaining consistency in terminology, and avoiding jargon or ambiguous terms that can impede communication.

Citing and Referencing: To produce credible and well-researched reports, proper citation and referencing are crucial. The seminar provided an overview of different citation styles commonly used in engineering and shared guidelines for referencing external sources accurately. Data Presentation: The seminar also addressed the art of data presentation. Students learned how to use visuals effectively, such as charts, graphs, and tables, to convey complex technical information clearly and succinctly.

Proofreading and Editing: The importance of revising, proofreading, and editing to eliminate errors and improve the overall quality of a report was emphasized. Attendees gained insights into strategies for self-editing and seeking external feedback.

Interactive Exercises: The seminar featured interactive exercises where participants had the opportunity to apply the knowledge they acquired. These exercises simulated real-world technical report writing scenarios and allowed attendees to practice what they had learned.

The "Technical Report Writing: A Guide for Engineering Students" seminar provided a valuable platform for engineering students to enhance their technical report writing skills. By understanding the purpose of technical reports, mastering report structure, using appropriate language, citing sources correctly, and presenting data effectively, students are now better equipped to create impactful technical reports in their academic and professional careers. The interactive exercises further reinforced these concepts, making the seminar a practical and insightful experience for all attendees.

This seminar served as a vital stepping stone for engineering students, enabling them to develop the expertise needed to communicate their ideas, findings, and recommendations with clarity and precision in the field of engineering.

Mrs. Greenal Burboz Senior Lecturer (English)

One way of promoting community affairs is through engagement with other educational institutes. This helps in supporting and encouraging not only the talent but also opens doors for long-term collaboration. Moreover, it also helps to spread goodwill among society.

One such initiative was at the Indian School Al Wadi Al Kabir school, where GCET was the sole sponsor of the ACUITY competition held on 28th August 2023. This annual inter-school software development competition on network security encourages young minds from Indian schools across Oman to discover their ingenious software skills.

A total of nine schools participated in this competition, with Indian School Sohar bagging the first prize. Dr. Sulaiman inaugurated the event and was amazed at the potential and talent displayed at the competition.

GCET has a good opportunity to attract such talent with many such initiatives.



## **Outreaching to Indian Schools**





### **COLLEGE ACTIVITIES**



**Dr. Mohammad Mohatram**Associate Professor



**Dr. Taleb Moazzeni** Associate Professor

#### Introduction

On October 15th, an insightful industrial visit to the Oman Fiber Company, accompanied by our dedicated staff members, was organized by the department of Electrical and Electronics Engineering Department under GEETECH student society. A total of 25 people accompanied by 4 staff, visited the industry. We would like to express our sincere gratitude to Mr. Suleiman Al Balushi and Ms. Maryam for their exceptional support and invaluable assistance during the visit. Your unwavering commitment to enhancing our students' educational experiences is truly commendable, and we deeply appreciate your efforts.

### Objective of the Visit:

The primary objective of the industrial visit to Oman Fiber was to provide students with practical exposure to the processes and technologies involved in fiber manufacturing. This visit aimed to bridge the gap between theoretical knowledge and its practical application

## Industrial Visit to Fiber Optic Oman

in the industry. Additionally, it sought to enhance students' understanding of the concepts covered in a variety of modules in Electronic and Telecommunications programs such as Radio Frequency and Microwave Circuit Design, by showcasing real-world examples and applications.

### Module Linked to the Visit:

The visit to Oman Fiber is closely linked to the Radio Frequency and Microwave Circuit Design Module. RF/microwave circuits may use amplifiers, filters, and mixers, while fiber optic systems rely on lasers, detectors, and optical switches for signal processing. In some applications, fiber optics can be integrated with RF or microwave systems. For instance, in RF over fiber (RFoF) systems, RF signals are modulated onto an optical carrier using fiber optics for long-distance signal transmission. The visit provided students with hands-on experience and visual reinforcement of the concepts discussed in the classroom.

### Introduction to Oman Fiber:

The Oman Fiber Company has been established with the primary objective of fostering knowledge and expertise in the field of fiber optics. Its educational initiatives are tailored to cater to the requirements of both industry professionals and individuals seeking to enhance their skills through further training. Specifically designed to be accessible to beginners, the company's program, Fiber Awareness, offers a foundational understanding of key concepts in fiber optic communication. Through its use of clear and straightforward language,

along with illustrative examples, the program serves as an entry point for those looking to grasp the fundamental principles of fiber optics and its applications in communication.

#### Manufacturing Process Tour:

Students were taken through each stage of the fiber manufacturing process, from the handling of raw materials to quality control measures.

#### Interaction with Industry Experts:

Students had the opportunity to engage in discussions with engineers and experts in the field, gaining insights into industry trends and challenges.

#### **O&A Session:**

A question and answer session allowed students to clarify doubts and seek further information about the manufacturing processes.

## Demonstrations and Hands-on Experience:

Students were given the chance to observe live demonstrations of certain processes and equipment. Some students were even allowed to participate in specific tasks under expert guidance.

#### Conclusion:

The industrial visit to Oman Fiber proved to be an enriching experience for both students and staff. It provided a unique opportunity to bridge the gap between theoretical knowledge and practical application. The visit directly complemented the Radio Frequency and Microwave Circuit Design, offering students a deeper understanding of the subject matter. Additionally, exposure to industry practices and networking opportunities greatly benefitted the participants.





**Dr. Nemat Elhassan**Associate Professor

#### Introduction:

On Tuesday 17th Oct 2023, an insightful industrial visit to the GSME OMAN -Global Semiconductor Microelectronics, accompanied by our dedicated staff members was organized by the Department of Electrical and Electronics Engineering under the GEETECH student society. A total of 30 students accompanied by 8 staff members visited the industry. We would like to express our sincere gratitude to Mr. Suleiman Al Balushi and Ms. Maryam for their exceptional support and invaluable assistance during the visit. Your unwavering commitment to enhancing our students' educational experiences is truly commendable, and we deeply appreciate your efforts.

## Objective of the Visit:

The primary objective of the industrial visit to GSME OMAN was to provide students with practical exposure to the processes and technologies involved in semiconductor chips design and fabrication. This visit aimed to bridge the gap between theoretical knowledge and its practical application in the industry. Additionally, it sought to enhance students' understanding of the concepts covered in the modules listed below by showcasing real-world examples and applications.

Modules Linked to the Visit:

Electrical and Electronic Principles A Electrical and Electronic Principles B Introduction to Robotics and Electronics Signal Processing and Circuits

## Industrial Visit to GSME OMAN

Mechatronics
Practical Electronics
Group Design and Integration
Project
Digital Design

The visit to GSME OMAN is directly linked to all modules listed above. These modules explain different levels of complexity and multiple contexts of electronic circuit design and implementation. The visit provided students with hands-on experience and visual reinforcement of the concepts discussed in the classroom.

### Introduction to GSME OMAN:

GSME (GS Microelectronics, U.S. Inc.) is a global provider of customized silicon solutions including RF design, power management ICs, manufacturing operations, and Quality Assurance (QA) to IC design and system companies. With a focus on leading-edge manufacturing technology for next-generation applications, GSME takes the hassle out of semiconductor manufacturing processes by providing cost-effective and faster time-to-market solutions. Currently, GSME supports high-end GPUs, specialized CPUs, low-power IoT devices, and wireless products. GSME also specializes in providing customized power management (PMIC) and mmWave front-end IP portfolio.

### Presentation by GSME Team:

Students were taken through each stage of semiconductor design and manufacturing process starting from design, layout, wafer itching, annealing, sputtering, cutting, and packaging.

## **Interaction with Industry Experts:**

Students had the opportunity to engage in discussions with analog and digital design engineers and experts in the field, gaining insights into industry trends and challenges.

Talk by Farhat Jahangir, Founder, President & CEO of GSME:

A talk was delivered by Mr. Jahangir the Founder, President & CEO of GSME, explaining the business prospects and the industry requirements of graduates and offering collaboration with GCET in multiple areas including training students and use of GSME lab facilities.

#### **Q&A Session:**

A question-and-answer session allowed students to clarify doubts and seek further information about the manufacturing processes.

#### Conclusion:

The industrial visit to GSME Oman proved to be an enriching experience for both students and staff. It provided a unique opportunity to bridge the gap between theoretical knowledge and practical application. The visit directly complemented the teaching of many subjects taught in Electrical and Electronic Engineering department, offering students a deeper understanding of the subject matter. Additionally, the exposure to industry practices and networking opportunities greatly benefitted the participants.



#### **COLLEGE ACTIVITIES**

**Dr. Morteza Khashehchi**Associate Professor



Mr. Moustafa Al Shaik Technical Demonstrator

## Industrial Visit - Oman Mall Solar Panel Power Plant

During our recent field trip to the parking solar panel power plant at Oman Mall, students and I had the opportunity to witness the remarkable intersection of renewable energy and sustainable solutions. The solar power plant, boasting a capacity of 2.6 MW, left a lasting impression as it harnessed the abundant solar energy to power a significant portion of the mall's energy needs. This trip illuminated the vital role that solar power plays in reducing the environmental footprint of large commercial establishments like Oman Mall. We were able to observe the vast expanse of solar panels neatly arranged in the parking area, capturing the sun's energy and converting it into clean electricity. The efficiency and scale of this renewable energy project were impressive, serving as a beacon of inspiration for our generation and highlighting the need to adopt more sustainable energy sources.

As we delved into the details, it became evident that the solar power plant played a crucial role in offsetting the mall's power consumption, which stands at approximately 16 MW. The plant's ability to generate a substantial portion of this energy showcased the practicality and potential of solar energy as a clean alternative to conventional power sources. Not only did this field trip provide a valuable educational experience, but it also underscored the pressing need for businesses to embrace sustainable practices and invest in renewable energy solutions to mitigate the environmental impact of their operations. Overall, our visit to the Oman Mall solar power plant served as a vivid reminder of the importance of harnessing the power of the sun to transition towards a greener, more sustainable future.





## GCET Students' Beach Trip - Exposure to The World Beyond Academia

Mr. Taimoor Al Nadabi | Head of Student Engagement and Employability Office (SEEO)

Global College of Engineering and Technology organized an exciting trip to Bandar Al Khiran island on March 8, 2023, aiming to enhance its students' experience outside the classroom. The event offered a mix of adventure, skill development, and mutual friendship.

The day began with students being transported from the college to Qantab by bus. From there, they enjoyed a scenic boat ride to explore Bandar Al Khiran, providing a refreshing break from their regular academic routine.

The college also arranged a delicious buffet breakfast and lunch, along with a continuous supply of water throughout the day.

The trip included engaging games designed to enhance essential skills such as leadership, patience, analytical thinking, and problem-solving. These

activities serve as a platform for holistic skill development, aligning with the college's commitment to nurturing well-rounded individuals.

Water-based games like Jet Ski, Banana Boat, and Crazy Sofa were highlights, adding fun and encouraging teamwork and strategic thinking in a dynamic environment.

This excursion not only offered a break from academic routines but also contributed to students' overall personal and professional development. By combining adventure, skill development, and social interaction, the college continues to shape students into well-rounded individuals prepared for the challenges of the dynamic world beyond academia.



## NEW GCET ACADEMIC AND ADMINISTRATIVE ACADEMIC YEAR 2023-2024

The College welcomes the newly additional members of GCET family from the different academic and administrative department. The new staff members are appointed from the academic year 2023-2024. Join us in welcoming the new members of GCET staff and provide them all the needed support to help them achieve their respective role in the college.



**Dr. Khoula Said Al Harthy**Head of Department of
Computer Science
and Creative Technologies



Mr. Saif Al Reasi Lecturer (Math)



Mr. Syed Imran Ali Kazmi System Infrastructure Manager and Assistant Professor



Ms. Amal Al Kaabi Lecturer (English)



Mr. Hisham El Fadil Lecturer (UPEM)



Ms. Aisha Al Busaidi Assistant Professor (UPEM)



Mr. Panfilo Morandante
Senior Lecturer (Math)



Ms. Alya Al Amri Lab Technician (ME)



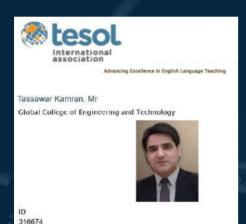
Ms. Jamana Al Maamari Technical Demonstrator (CSCT)

#### STAFF NEWS / PROUD MOMENTS



**Mr. Tassawar Kamran**Senior Lecturer (English)

## TESOL Member Global Professional



Member Type

Global Professional

Mr. Tassawar Kamran, the Senior Lecturer from the Academic Department of Foundation Studies, has secured the membership of TESOL International Association as a Global Professional. His dedication to the field of Teaching English to Speakers of Other Languages (TESOL) is evident in this prestigious recognition. This achievement highlights his individual success and contributes to the broader community of TESOL professionals worldwide. As a Global Professional member, Mr. Tassawar Kamran is well-positioned to make valuable contributions to advancing language education and cultural exchange, internationally.

## **IET Academic Accreditor**

By: Dr. Javeed Hussain

Head of Academic Department of EEE & Associate Professor

We are pleased to announce that the Institution of Engineering and Technology (IET) has chosen Dr. Javeed Hussain, a renowned and accomplished academic in the field of Electrical Engineering, to serve as an academic accreditor. Dr. Hussain is a prime candidate for this esteemed position due to his broad experience and proficiency in the field of Electrical Engineering. His appointment is evidence of his constant dedication to the field, as his efforts to promote excellence in engineering education and guarantee the highest standards in academic programs perfectly align with the IET's mission.

Dr. Javeed Hussain will be essential in assessing and approving engineering programs at different universities in his capacity as an IET academic accreditor. His careful evaluation methodology and extensive subject-matter expertise will surely support the preservation and improvement of engineering education across the globe. The choice of Dr. Hussain represents not only a merited acknowledgment of his exceptional accomplishments but also a positive step forward for engineering education going forward under the direction of the IET. We're excited to see how his efforts, which continue to promote quality in engineering education, will benefit society.



## GCET Staff Invited as Speaker at Innovation and Entrepreneurship Conference - Exhibition World Bahrain

By: Amjed Sid Ahmed Mohamed Director of Research & Innovation Office



Director of Research and Innovation Office, Dr. Amjed Sid Ahmed, has been invited as a speaker at the Conference on Innovation and Entrepreneurship which was held in Exhibition World Bahrain from 7 to 8 May 2023. Dr. Amjed briefed the audience about the challenges of transforming Universities into Entrepreneurial Universities and what are the essential elements to achieve this goal. Dr. Amjed also explained the relationship between Innovation and the Knowledge Economy, and showcased the importance of the Innovation and Incubation Centre (IIC) at GCET and the services it provides.

## GCET Staff Appointed as External Reviewers for OQF with OAAAQA.

By: Amjed Sid Ahmed Mohamed Director of Research & Innovation Office

Following the Launching Ceremony of the Oman Qualifications Framework (OQF) in the 31st of May 2023 and the capacity-building workshops organized by Oman Authority for Academic Accreditation and Quality Assurance of Education (OAAAQA), Dr. Eman Al-Naamani (Deputy Dean for Quality Assurance and Students Engagement) and Dr. Amjed Sid Ahmed (Director of Research and Innovation Office) have been appointed as External Reviewers for OQF effectively from July 2023.

The Oman Qualification Framework is an instrument to describe; compare; and classify qualifications from all education and training sectors in Oman. It is based on one set of generic Level Descriptors, which describe the expected outcomes at each of its ten levels.

The OQF provides a reference point for qualifications delivered and awarded in Oman; the comparison between Omani and Foreign or International qualifications; and the Recognition of Prior Learning.





**Dr. Amjed Sid Ahmed**Director of
Research & Innovation Office

# GCET Staff Received Education Leadership Award

Dr. Amjed Sid Ahmed, Director of the Research and Innovation Office received the Education Leadership Award from the World Education Congress—the award ceremony held in Crown Plaza Muscat (OCEC) on the 25th of July 2023.



## GCET Go Green PV Solar Station

By: Amjed Sid Ahmed Mohamed
Director of Research & Innovation Office

Embracing Oman Vision 2040 and the Oman Energy Master Plan, GCET is proud to unveil the PV Station, which serves as the first step towards an environment for research and education purposes.

As part of the 'GCET Go Green' initiative, under the Research and Innovation Office (RIO) at GCET, this pioneering project sets the stage for research and education, propelling us toward a sustainable future. Our future research goals, as part of this initiative, focus on expanding into other areas like Wind Turbines and Green Hydrogen. The college is committed to making a positive impact in the clean energy sector.



#### STAFF NEWS / PROUD MOMENTS



Mrs. Mohsina Mirza
Student Support / Assistant Lecturer

## Conference Attended

Mohsina Mirza, a dedicated and ambitious Ph.D. aspirant, from the Academic Department of Electrical and Electronics Engineering( EEE), recently presented her review paper at the IEEE indexed Conference at the 5th International Conference on Smart Systems and Inventive Technologies (ICSSIT 2023) held on 23-25 January at Tirunelveli, India Mirza's research focuses on Software Defined Networking and Network Virtualization.

The link to her paper can be found at https://ieeexplore.ieee.org/document/10060883



#### STAFF NEWS / PROUD MOMENTS



**Dr. Sivasakthivel Thangavel**Associate Professor

## GCET Staff Authored a Research Book

Dr. Siva has authored a research book in collaboration with CRC Press of the Taylor and Francis Group. The book, titled "Highly Efficient Thermal Renewable Energy Systems: Design, Optimiza tion, and Applications," is practical in nature, emphasizing crucial concepts in renewable thermal energy storage. It comprehensively presents the latest methodologies, models, techniques, and applications, providing a detailed account of modeling, optimization, and experimental works in the energy sector.

Here are some of the salient features of the book. The book:

- Discusses the roles and integration of solar, geothermal, and hydrogen-based thermal energy storage (TES) technologies in various sectors for space heating and cooling applications.
- Covers mechanical modeling and optimization of hybrid energy storage systems for performance improvement, emphasizing hydrogen production, storage, and safety measures.

- Explores the integration of IoT and global energy interaction technologies, highlighting their potential benefits in propelling the transition towards a sustainable and resilient global energy system.
- Explains different aspects of clean technologies such as batteries, fuel cells, ground energy storage, solar thermal systems, and the role of green hydrogen in decarbonizing sectors like transportation and energy.
- Showcases a clear idea of sustainable development using renewable energy, with a focus on policy making, challenges in transitioning from conventional to renewable energy, and future directions in the energy sector.

## GCET Staff Presented a research paper

By: Dr. Mohammad Mohatram | Associate Professor

Dr. Mohammad Mohatram, a distinguished leader in the field of Instrumentation and Control Engineering, made a significant contribution to the academic community by attending and presenting a groundbreaking paper at the SIVAS II International Conference on Scientific and Innovation Research. The conference, which took place both online and in person on September 15, 2023, provided a unique platform for researchers and scholars to exchange ideas and insights. Dr. Mohtram's paper, undoubtedly a highlight of the event, showcased his innovative research and expertise in the field, further solidifying his reputation as a leading figure in the world of instrumentation and control engineering. His participation in this esteemed conference underscores his commitment to advancing knowledge and fostering innovation within the scientific community.





**Ms. Ayah Abbasi** Assistant Professor

On May 25th, Mrs. Ayah Abbasi, program leader of the Urban Planning Program, was invited to participate in the jury panel to assess the Graduation year project at the Faculty of Engineering, Department of Architecture. Eng. Ms. Ayah joined Ms. Khulood Al Danaqi the HOD, and Dr. Daad, professors from UTAS along with Dr. Sameer from the University of Nizwa.

Students presented their projects individually. The projects discussed and proposed very interesting architecture

and urban contextual solutions and concepts in order to propose innovative and futuristic designs in Oman.

CERTIFICATE

Mohammad Mohatram

Presentations were very successful, and most of the project fulfilled the requirements and criteria in different ways. A very strict assessment process was adopted for the presentations followed by informative feedback for students to develop and understand the opportunity for enhancements. Such activities play a significant role in terms of Community and industrial engagement, along with initiating collaboration between our college and

other academic institutions.



## The International Conference on Business, Communication, and Technology (ICBCT 2023)

By: Ms. Pooja Chhabra | Senior Lecturer (English)



Ms. Pooja presented a paper entitled "Exploring the Significance of Group Work to Promote Speaking Skills in EFL Classrooms – A Case Study at Global College of Engineering and Technology" at The International Conference on Business, Communication, and Technology (ICBCT 2023) held online on 19th October, 2023.

## 6th Sohar University Teaching and Learning Conference

By: Ms. Pooja Chhabra | Senior Lecturer (English)

Ms. Pooja presented a paper at the 6th Sohar University Teaching and Learning Conference "Innovations and Applications in Teaching and Learning" on 3rd March 2023. Her title of presenation was "Applying Process-based Approach in Teaching Writing Skill using Grammar."



## Adjudication of Comedy Speech Competition at ISTF 2023

By: Ms. Pooja Chhabra | Senior Lecturer (English)

The annual INDIAN SCHOOLS TALENT FEST stands out as the largest art and cultural extravaganza organized by any Indian school in the Sultanate of Oman. The fest was hosted by the Indian School Muscat, under the auspices of the Board of Directors of Indian Schools Oman. The two-day cultural celebration featured 30 competitive events at 8 different venues and a non-competitive event known as UTAR (Unique Talent Recognition).

I was honored and privileged to be invited there as an adjudicator for one of the events during the grand cultural competition. It was exciting to witness students of different levels of enthusiasm, energy, and zeal towards their performance.





Mr. Abdelhamied Fadl
Technical Demonstrator/Lecturer

## Discover The World of Automation Via PLC Automation Lab

The Academic Department of Electrical and Electronics Engineering( EEE) at GCET brings you the latest news on our PLC (Programmable Logic Controller)

#### STAFF NEWS / PROUD MOMENTS

lab and the incredible opportunities for hands-on learning, experimentation, and skill development. Whether you're a student, a professional looking to expand your knowledge, or just curious about the fascinating world of automation, our PLC lab is the place to be. Programmable Logic Controllers, or PLCs, are the heartbeat of automation in countless industries. From manufacturing and robotics to energy management and smart buildings, PLCs are the brain that controls complex processes. Understanding how to program and work with these devices is a highly sought-after skill in today's job market. Our state-of-the-art PLC lab is designed to provide a hands-on learning experience that's both engaging and informative. Here's what you can expect when



you step into our lab:

- 1. Cutting-edge Equipment: We have a wide range of PLC models from different manufacturers, ensuring you get exposure to a variety of platforms. Whether you're working with Siemens, LG, or other brands, you'll find the tools you need.
- 2. Real-world Scenarios: Our lab is equipped with simulations of real industrial processes, so you can learn to program and troubleshoot PLCs in a practical context.
- 3. Expert Instructors: Our experienced instructors are passionate about sharing their knowledge and helping you become proficient in PLC programming and automation.
- 4. Networking: Meet fellow enthusiasts, students, and professionals who share your interests. The lab is an excellent place to build your network in the field of automation.
- 5. New final year project ideas: Whether you're a morning student or a flexible student, you can select the project based on a PLC system like SCADA systems

#### STAFF NEWS / PROUD MOMENTS

Future Courses and Workshops
We will offer a range of courses and
workshops to cater to different levels of
expertise. Whether you're a complete
beginner or an experienced programmer looking to enhance your skills, we
have something for you. Some of our
offerings include:

- 1. PLC Basics for Beginners: Learn the fundamentals of PLC programming and operation.
- 2. Advanced PLC Programming: Dive deeper into complex automation tasks and tackle real-world challenges.
- 3. Industrial Automation Workshops: Hands-on sessions to apply your knowledge to practical scenarios.







**Dr. Mira Chitt** Head of Academic Department of ME

## ME Labs receiving new 3D Printers

3D printers have revolutionized mechanical engineering labs, becoming indispensable tools for innovation and prototyping. The importance of these devices lies in their ability to translate intricate design concepts into tangible, three-dimensional models remarkable precision. This capability accelerates the product development cycle, allowing engineers to quickly iterate and refine their designs. The benefits extend beyond rapid prototyping, as 3D printers enable the production of complex geometries and intricate structures that would be challenging or impossible to achieve through traditional manufacturing methods. Additionally, these printers facilitate hands-on learning experiences for students, offering a practical understanding of design principles and manufacturing processes.

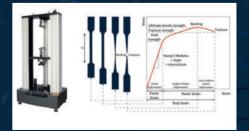
## Igniting ME Student's Passion Through Interactive Labs

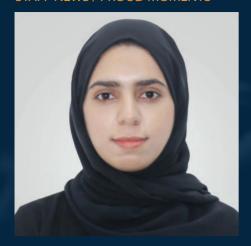
There are now four 3D printers in Lab BG.2. These printers vary in specifications, including print resolution, build volume and printing speed. Fused Deposition Modeling (FDM), Stereolithography (SLA), and Selective Laser Sintering (SLS) are some of the prominent printing technologies. Each technology has its advantages, catering to different applications and industries, from rapid prototyping to custom manufacturing.



Mr. Moustafa Al Shaik
Technical Demonstrator
Universal Tensile Testing Machine
The Universal Tensile Testing Machine

(UTM) is a versatile tool with a wide range of applications across industries. In material testing, it determines tensile and yield strength, elongation, and modulus of elasticity. It is crucial for quality control in manufacturing and understanding material behavior under tension. In construction, it evaluates the strength of materials like concrete and steel for structures such as bridges and buildings. For plastics and polymers, the UTM assesses mechanical properties like tensile strength and impact resistance, aiding in component design. Research and development benefit from the UTM by exploring new materials and studying their behavior under various conditions, contributing to innovation. Quality control relies on the UTM to verify the mechanical properties of raw materials and finished products, meeting industry standards. In our labs, it will serve in interpreting stress and strain curves and studying failure analysis and material behavior. It allows our students to set up tests, operate the machine, and witness firsthand how different materials respond to various forces.





Ms. Khulood Al Ghafri
Lab Technician





## Importance of lab sessions for students:

In the realm of academic exploration, laboratories emerge as pivotal catalysts for enriching students' studies at the Global College of Engineering and Technology, especially the mechanical engineering students. These laboratories serve as vibrant hubs where theoretical

knowledge seamlessly transforms into practical understanding. Here, students engage in hands-on experimentation, applying classroom theories to real-world scenarios. Through this immersive approach, labs not only

reinforce theoretical concepts but also instill a profound sense of curiosity and problem-solving acumen. As students manipulate equipment, conduct experiments, and analyze results, they not only deepen their understanding of their field but also develop crucial skills that extend beyond textbooks. These experiential learning environments are indispensable, nurturing a holistic educational experience that empowers students to excel in their studies and prepares them for the challenges of their future careers

## THE STUDENT ADVISORY COUNCIL (SAC)

By: Hanin Al Mudailwi | President - SAC

At the beginning of October 2023, GCET held elections that lasted for a month till the new, varied, and hardworking team committed to serving the interests of our student body was formed.

Student Advisory Council (SAC) is a dedicated group of students who confidently demonstrate their suitability for the positions they apply for. They are structured in this form:

- 1) President.
- 2) Vice-president.
- 3) Head of the academic committee and its members.
- 4) Head of activities & initiations committee and its members.
- 5) Head of the student services committee and its members.

SAC is the link between the student body and the deanship. It consists of students from different countries and cultures with diverse majors, levels, and experiences, which grants them the opportunity to boost adaptation and communication skills among them. This also increases teamwork since a lot of thoughts and perspectives are shared and implemented.

Moreover, the student advisory council's primary goal is to establish a safe and inclusive environment, fostering a vibrant and stress-relieving atmosphere on campus while striving hard for academic excellence by ensuring all students have the resources needed to succeed in their studies. In addition, SAC believes that it is important to participate in improving and developing the educational processes and services provided to students.

The council has already taken its first step in its journey, and with the help of SSSO, it has made a positive impact by holding solidarity with Palestine. A seminar was organized featuring Dr. Jumah bin Khalfan Al-Batrani from the Ministry of Endowments and Religious Affairs - First Religious. Also, numerous students and staff expressed their feelings by writing wishes and prayers to the Palestinian people.

This marks the beginning of SAC's journey, with endless adventures and challenges waiting for them on the horizon. Lastly, with the right support from students, SAC will rise and develop to benefit the student body and strengthen the link between them and the deanship.



#### STUDENTS NEWS



Mrs. Maryam Alamri Head of Student Welfare and Counselling Office (SWCO)

GCET strives to provide a democratic platform to students at all levels ranging from the General Foundation Program to the Undergraduate Programs. To align the graduate attributes of the institution with the program's learning outcomes, it becomes important to collect students' inputs on various academic and non-academic issues. At the initial stage, student representatives are chosen from all levels, with the mutual consent of the nominee and the classmates. The number of representatives may vary from one level to another depending on the strength of students in that particular level. At the GFP level, representatives are also chosen from the flexible students. These representatives work as a channel between students, academic departments, and the administrative office. Their responsibility is to gather feedback from their peers on academic and non-academic facilities at college.

Further, a Staff-Student Liaison Committee for each department is formed which includes student representatives, the head of the Student Services Unit, the head of the Registration office, the head of IT, the head of the department, and the faculty. The committee holds its meetings twice a semester in which student representatives get a fair chance to express the feedback that they collect from their respective levels. Flexible students get the privilege to join online.

The Staff-Student Liaison Committee records students' views, feedback, complaints, and suggestions. The academic heads and administrative heads then mutually discuss and resolve the issues

## Cohort Gathering with Student Representatives

or plan to reform weak practices. The committee thus becomes the students' voice at GCET which further leads to academic excellence and improvement in the infrastructure.

The table below displays the list of student representatives from all the departments at GCET for 2023-24.



Ms. Pooja Chhabra Senior Lecturer (English)

	Senior Lecturer (English)
Name of the Department	Student Representatives
Academic Department of Foundation Studies (FS	1.Ruaa Al Maqbali 2.Retaj Abdul Salam 3.Shahd Ahmed Hekal 4.Murad Ali Murad Al Balushi 5.Lama Al Ghafri 6.Zahra Yahya Said Alradini
Academic Department of Computer Science and Creative Technologies (CSCT)	BSc(Hons) Computer Security and Forensics Yomna Gamal Hamada Fouda Arjwan Nasser Sultan Al Mashaykhi Albatul Ali Salim Al Sidairi Manar Al Wahaibi Zainab Othman Qader Baksh Al Balushi, Amir Mehdi Ali Memari, Muayid Ahmed Mubarak Al-Owaisi Faisal Al Rahbi BSc(Hons) Business Computing Maryam Alrawahi Marwa Al Shibli Mohammed Al Hajri Fatma Hilal Ali Al Wahaibi, Mohamed Reza Salim Al-Shashai MSc Data Science Khalfan Mubarak Hamdoon Al Manji Mohammed Saif Salim Saoud Al Sulaimani
Academic Department of Electrical and Electronics Engineering (EEE)	BEng (Hons) Electronics and Telecommunications Engineering Lina Belal Sudqi Abu Mweis Nayaf Al Abri Jihad AlBalushi BEng (Hons) Instrumentation and Control Engineering Ayman Sameer Salim Ahmed Thani Anfal AlRahbi BEng (Hons) Automation and Robotic Engineering Marwa AlMaamari Sarah Shaheen Salma AbdelHafez
Academic Department of Mechanical Engineering (ME)	BEng(Hons) Mechanical Engineering and Technology Salim Abdullah Salim Al Saqri Ali Salim Ali Al-Maqbali Sultan Ahmed Al Busaidi Saleh Said Salim Said Al Shibli Ali Abdul Rahman Jumaa Jumaa Hamyar Saif Sulaiman Al-Riyami Lojin Fares Jawad Luc Daniel Weber Ahmed Al Habsi BEng(Hons) Building Services Engineering Emad Abdallah Hamood Ali Al Saidi Badar Saud Ali Al Balushi

Name of the Department	Student Representatives
Academic Department of Mechanical Engineering (ME)	Hooda Al Riyami Mukhtar Al Shukaili MSc Engineering Management Fakhara Al Shamsi Al Najood Obaid Moosa Al-Busaidi Abdul Aziz Saif Said Al-Mamari
Academic Department of Urban Planning and Environmental Management (UPEM)	BSC (Hons) Urban and Regional Planning Raya Salah Khalfan Said Al Rawahi Shahad Khalid Saif Mohammed Al Mamri Fatema Nasser Saif Al-Maawali BSC (Hons) Environmental Management and Practice Al Yaqeen Faisal Said Al-Mamari Zainab Ahmed Alghul Al Rawahi Alghaliya Asaad Khalifa Al Amri BSC (Hons) Architectural Technology and Design Thuraiya Hilal Omar Al Siyabi

## **UPEM participation in 2nd Students' Research Day**

By: Dr. Eman Hanye Mohamed Nasr | Associate Professor

The Academic Department of Urban Planning and Environmental Management always encourages students to participate in department activities. A recent endeavor was to encourage the students from the highest levels of three different running programs in the department, which are level 2 of URP, level 2 of EMP, and level 0 of ATD, to participate in the 2nd Students' Research Day along with the senior students from other departments who were presenting their Final Year Projects, to prepare them for the presentation of the Final Year Project next year under the supervision of Dr. Eman Nasr. Three projects from each program have been presented. The students performed excellently in the poster presentation. The UWE visitors and guests from academia and industry interacted with the students' presentations and recommended the high performance of the students' works and their confidence and knowledge. Students were so active and excited to present their projects that showcased their dedicated work.





#### STUDENTS NEWS



Ms. Saba Mohammad Jayyusi
Technical Demonstrator

Introduction: The GEETECH Fresher's Day 2023 was held on Tuesday, October 10, 2023, in the main lobby of Block B and was a day brimming with enthusiasm and purpose. The event was thoughtfully orchestrated to warmly embrace our incoming students embarking on their academic journeys in the Graduate Foundation Program (GFP) and Undergraduate (UG) programs. Its overarching aim was to ensure their smooth integration into our academic community and inspire them as they begin their educational path.

Objectives: The GEETECH Freshers' Day 2023 was guided by a set of distinct objectives including, providing new students with a warm and inclusive welcome to GEETECH, fostering academic enrichment, and promoting interactive engagement. The event aimed to impart a profound sense of belonging, pride, and heritage among the students. expose them to real-world perspectives within the engineering industry, and encourage camaraderie, creativity, and teamwork through enjoyable and interactive activities. Additionally, it sought to offer students a practical, hands-on experience to complement their academic learning.

The day commenced with an inclusive and heartfelt welcome by the dedicated GEETECH volunteers, setting the stage for the day and providing an overview of the exciting events to follow. Subsequently, the GEETECH Volunteers unveiled the tapestry of GEETECH's achievements, instilling a sense of belonging among the new entrants.

## **GEETECH Fresher's Day 2023**

Following these introductory sessions, the freshers had the privilege of hearing from Eng. Mohammed Al Hinai, an On Job Trainer (OJT) at Occidental Petroleum Corporation. His profound insights from the industry bestowed invaluable real-world perspectives upon our eager students. Dr. Gulam Dastagir Khan, Assistant Professor at the College of Engineering, Sultan Qaboos University, conducted an enlightening seminar on Robotic Micro-Manipulation in the Robotic System Lab (BG.13). This session was met with enthusiasm and provided a valuable academic perspective.

In the afternoon, a dose of fun and teamwork was injected into the program with the "Ingenious Sketch Race." This activity allowed freshers to unleash their creativity and collaborative skills. The "Vision Voyage" game fostered critical thinking and teamwork as students tackled challenges together. The day concluded with a hands-on workshop led by GEETECH volunteers in the Robotic System Lab (BG.13). This provided a practical, hands-on experience, reinforcing the topics discussed during the earlier seminar.

Throughout the day, refreshments including tea, coffee, water, and snacks were available to ensure attendees remained energized and engaged. Furthermore, IET and IEEE booths were thoughtfully placed in the Main Lobby, where students could explore and register for memberships, paving the way for a promising association with these esteemed engineering institutions.

## Conclusion:

The GEETECH Freshers' Day 2023 was an unequivocal success, serving as an informative and warm introduction for GFP and UG students. It was a day replete with profound industry insights, educational games, and opportunities to connect with prestigious engineering organizations. The event witnessed a remarkable turnout and marked the commencement of an exciting academic journey for the incoming students at GEETECH.





## Thank You Ceremony for GEETECH Volunteers

Mrs. Mohsina Mirza | Student Support / Assistant Lecturer

The Thank You Ceremony for GEETECH Volunteers held on 31 May, 2023, was a heartwarming event aimed at expressing our deep appreciation to the dedicated volunteers who have contributed their time and efforts to make GEETECH a success. This event provided an opportunity for the volunteers to share their experiences, receive certificates, enjoy refreshments, and engage in group discussions to further strengthen our community.

1. Opening Remarks: The event commenced with a warm welcome and opening remarks by the Head of Department (HoD), expressing gratitude towards the volunteers for their selfless service and dedication. The HoD highlighted the significant impact of the volunteers' work on GEETECH's mission and values.

2. Volunteers' Experiences: Several volunteers were invited to the stage to share their experiences. They spoke passionately about their journey, the challenges they faced, and the rewarding moments they encountered while contributing to GEETECH. Their stories served as a source of inspiration for both fellow volunteers and the organiz ing committee.

3. Certificate Distribution: Following the volunteers' testimonies, certificates of appreciation were distributed to all the volunteers. The recipients received personalized certificates that acknowledged their commitment and recognized their valuable contributions to the organization. The moment of receiving the certificates was marked by applause and cheers from the attendees,

4. Refreshment: After the formal part of the ceremony, a delightful refreshment break was arranged, allowing attendees to socialize, network, and enjoy light snacks and beverages. The refreshment breaks encouraged volunteers to connect with one another and build stronger bonds within the GEETECH community.

5. Group Discussion:

The event concluded with a group discussion session, where volunteers were divided into smaller groups to discuss their future plans, share ideas, and offer suggestions for improving GEETECH's volunteer programs. This interactive session allowed for brainstorming and collaboration, ensuring that the

volunteer experience remains enriching and purposeful.

The Thank You Ceremony for GEETECH Volunteers was a resounding success. It not only acknowledged the significant contributions of our volunteers but also fostered a sense of unity and shared purpose among the GEETECH community. The event left everyone inspired and motivated to continue their voluntary efforts and further enhance the organization's impact.



#### Robotics League 2K23

Mrs. Mohsina Mirza | Student Support / Assistant Lecturer

The GCET, EEE (Automation and Robotics Engineering Program) Team triumph in the Robotics League 2K23 at Modern College of Business and Science (MCBS) held on 15 November 2023 was an exhilarating moment for the institution. The competition, attracting over 130 participants from 15 different institutes all over Oman, including college teams from over 19 + colleges, around 30 school teams, and the number of institutes was 12, was a rigorous test of technical prowess, creativity, and teamwork. The challenge mandated students to construct a maze-solving robot, and while the competition proved to be demanding, the students demonstrated a commendable level of proficiency. The GCET team members -Ahmed Al-Haddabi, Ammar Al-Balushi, and Jawaher Al-Saadi showcased exceptional skills and determination and secured third place in the competition.

Under the guidance of their dedicated supervisor, Mr. Waleed Al Maawali, the team not only demonstrated technical brilliance but also exemplified effective collaboration and leadership. The support team, including Mr Baseem Al Falahi, Miss Saba Mohammad Jayyusi, and Mrs Ibtisam Suliman Al Hatmeia, played a crucial role in providing the necessary resources and encouragement.

This achievement not only brings pride to the individual team members but also reflects the commitment of GCET to nurturing a culture of excellence and fostering skills that extend beyond the classroom. The success at MCBS is a testament to the EEE department's dedication to empowering students to excel in real-world, competitive environments, setting a benchmark for future achievements. The GCET EEE department celebrates this triumph and looks forward to more milestones in the realm of robotics and technology.



# GFP students' expressions after visiting the Care and Special Education Centre in Ruwi



Ms. Masomah Al Balushi (202211072)

would like to express my heartfelt gratitude to Ms. Pooja and the teachers at the Care and Special Education (CSE) Indian school for letting us visit and learn so much about their amazing work. It was a really eye-opening experience. We got to see how dedicated and skilled the teachers are in helping children with various conditions, across different age groups. They know just how to engage and support these special kids, making sure they learn and grow in the best possible way. This was my first visit, but I know it won't be my last. It had such a strong impact on me that I aspire to become a volunteer in the future to assist children with special education. I can't wait for that chance to make a positive impact in their lives.

#### **Rufaidah Al Rashidy**

(202211130)

A few days back, I received an email from Ms. Pooja about a visit to CSE. In the beginning, I was not interested because I did not understand what this visit was for exactly. Then the teacher talked about it in a way that made me excited to join them. This visit was very useful and had a lot of emotions and information.

I reached college at 9:15 am that day. The bus moved at 9:30 am. Road distance did not take long until we arrived. It was a huge school, but it had a dedicated section for children with special disabilities. First, they welcomed us and introduced us to some of the



Ms. Halima Dad Rahim (202111368)

#### 18th March, trip to CSE:

I was obsessed with this trip, as it was the first trip I went to from college. I have always heard about cases of people with disabilities and special needs, and I used to see them from afar, but it was the first time in my life that I saw close-up children suffering from autism, Down syndrome, and other conditions. Children with innocent faces, the creatures of our Lord. For a moment, I thought, why do we always see our society that they do not consider them a part of it? They are like us, they are from us, they only need our care, they need our attention. Sometimes, our kindness and our good dealings with them can make them people like us. They did not choose to be like that. but God chose them and created them. I really want to make changes and make the society a better place where they can live. I appreciate everyone who gave me a chance to discover what is actually happening and how they are living in CSE and other organizations like these.

diseases that a child may suffer from, such as Autism and Down syndrome. Then, they told us to divide and every two enter into a class. They divide the children according to their age. I entered a class at the age of five or seven years old. They were just there with two teachers. The delightful thing is that one of them can go to normal school soon. They have two teachers



Mr. Abdulnoor Al Hinai (202211080)

Our visit to the Care & Special Education (CSE) center was a transformative experience that expanded our understanding of inclusivity and empathy. We were welcomed by a loving and dedicated atmosphere and had the opportunity to interact with resilient students. Through learning about the tailored programs and witnessing the staff's passion, we discovered the immense potential of individuals with special needs. This visit shattered misconceptions and inspired us to advocate for their rights. It was a profound learning experience that reinforced our belief in the power of education and compassion to build a more inclusive society. We express our gratitude to the CSE community and commit to promoting awareness and support for special education.

in this class because they need a lot of attention, and it is hard for one to get an interest in them. After that, we moved from class to class and met autistic children of various age groups.

In the end, we gathered again in a hall. They answered our inquiries and listened to our feedback. Moreover, taking the pic at the end is so important, so we took some pictures. We also distributed gifts to children. Unfortunately, they don't know how to play it, not all of them, at least some of them.

The visit has left a permanent mark on my heart.



**Dr. Mira Chitt**Head of Academic Department of ME

Renewable energy-based hybrid systems consisting of two or more energy sources that have been recognized in recent years as an effective solution for power generation or simultaneous production of two or more products. Combined systems can play an important role in minimizing pollution and energy losses, and maximizing efficiency, savings, and optimal use of renewable energy. Solar energy and biomass, two renewable energy sources, can play an effective role in dealing with hybrid systems with the simultaneous production of multiple products. Solar energy is considered the most accessible renewable energy source in the world, and incinerators are also considered a suitable solution for the optimal management of municipal waste; however, by-products such as biochar can be obtained from it.

Converting agricultural development to sustainable intensification is a strategic way to efficiently use natural resources, including water. The concept of sustainable development means producing more from the same amount of land, taking into account resource conservation, mitigating negative environmental impacts, and enhancing natural capital and the flow of ecosystem services. In this context, the use of Renewable desalination technology to meet water needs in agriculture is considered a sustainable solution.

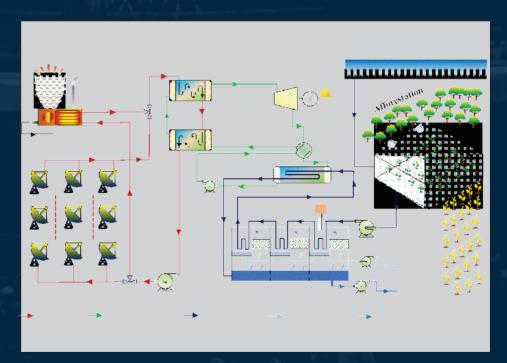
To evaluate the whole system, a parametric study will be carried out on the main components of the system and their energy and exergy efficiency,

## A Solar-Biomass-powered Plant for the Co-generation of Electricity and Freshwater to Supply Water for Cultivation Environments in Coastal Areas of Oman

#### TRC PROJECT WINNING CONCEPT

taking into account the annual and hourly time base under changing climatic parameters at the site. Given the working hours in each configuration, the water and electricity generation capacity, energy and exergy efficiency, and economic analysis are performed for each scenario, and the results obtained are compared to find the most suitable scenario. The electricity generated can be used to meet the electricity demand of the desalination plant as well as for other applications around the site. To evaluate the economic viability of the system, the most common cost parameters of leveled cost of electricity (LCOE), leveled cost of water (LCOW), the cost of construction

(CC), and the return on investment (PR) are calculated and compared considering the mentioned electricity supply scenarios. With the power and water supply required for the proposed system, the possibility of producing agricultural products in coastal areas where there is good access to land, especially in the case of greenhouse cultivation, can lead not only to income but also to employment. Due to the favorable potential for access to solar radiation as well as saltwater resources in the coastal areas of the Gulf of Oman and the Arabian Sea, it will be quite possible to use a desalination system that can provide some of the required electricity from solar energy.



#### **FEATURED ARTICLES**



**Dr. Taleb Moazzeni**Associate Professor

How many numbers of data points, at least, are required to have a normal distribution?

Do we need a minimum amount of data for a set of statistical data to be normal, or can we have such a distribution with any number of data points, like a uniform distribution?

We frequently assume normality for various statistical distributions with little scrutiny. Is this assumption valid?

Let's assume we have 40 students in a class, and their grades list is such that we have a certain number of grades in each range. For example, approximately 10 students have grades between 1 and 25, another 10 students have grades between 26 and 50, approximately 10 students have grades between 51 and 75, and around 10 students have grades between 76 and 100. If this is the case, we can assume it to be a uniform distribution. However, in practice, we observe that in a classroom, most grades are around the average. This is similar to what we have in a normal distribution.

The normal distribution follows an exponential model called the Gaussian function. Exponential means that the probability of events is not just several times higher but exponentially (power-wise) higher than other events. This means that a certain number of events must be much, much higher than the others, ensuring that the probability of those events occurring is much higher than the rest. This necessitates a large

# 352-Minimum Sample Size for Assessing Normal Distribution

number of total events. In simpler terms, for the example of student grades, the number of grades in the class must be very large.

How large should this "very large" be? I am interested in finding this number.

To approximate the Gaussian function with discrete points, I considered 9 points as independent variables for the function. I considered these 9 points to be unequally spaced; in such a way that the function's value at those points aligns most closely with the exact Gaussian function. I have asked the computer to search through all possible positions as much as possible. As a result, these points were obtained: -3.03, -2.17, -1.69, -0.40, 0, 0.40, 1.69, 2.17, 3.03

If we fit a Gaussian function with a scale parameter of 1 (variance of 1) on these points, we will see that the maximum error is approximately 0.0075. This means that the maximum distance the continuous Gaussian function finds with the corresponding discrete function is 0.0075.

These 9 points are, in fact, the values of our random variables. The next step is to determine how many of each of these 9 random variable values we should have. To do this, we first find the value of the discrete Gaussian function at each point and then sum them up by multiplying the sum by an unknown constant coefficient and setting all equal to one. By obtaining that constant coefficient, one may find those counts as,

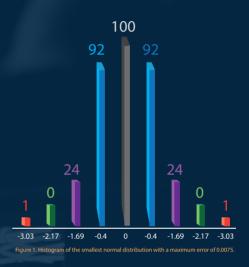
1, 9, 24, 92, 100, 92, 24, 9, 1 By adding up these counts, we reach the total count, which is:

352

In conclusion, if we want to have a normal distribution with a maximum error of 0.0075, we need to have 352 data points, with approximately 100 of them centered around the mean value. As shown in Figure 1., around 92 of them should have a value close to 0.4, 24 of them should be around 1.69, 9 of

them should be around 2.17, and one of them should be around 3.03.

Additionally, in the same manner, we should have the same counts in the same quantities, for the corresponding numbers on the left side of the mean.



If we need a smaller error and want our distribution to be closer and closer to a normal distribution, we need a greater number of events.

Another point for normality is that it's not only the quantity of events that matters, but also the value of those events

In fact, in the realm of probabilities, both the value of the random number and the number of occurrences at that point are important. From this perspective, a random variable can be viewed as a complex quantity, where it can be imagined with both magnitude and angle.

In the future, I plan to consider finding a transformation that takes the probability distribution function, maps it into a complex space, and conversely, maps it back from that complex space to the original distribution function accurately.



**Dr. Mohammad Mohatram**Associate Professor

Power factor is a fundamental concept in electrical engineering that has far-reaching implications in terms energy efficiency, equipment performance, and the stability of electrical/electronic systems. Low or poor power factor can lead to increased energy expenses, operational challenges with equipment, and reduced system reliability. Identifying the causes of low power factor and implementing appropriate solutions is essential for maintaining efficient electrical systems and reducing energy waste. By recognizing the importance of the power factor and taking steps to improve it, electrical engineers play a pivotal role in fostering a more sustainable and reliable electrical infrastructure.

Power factor, denoted as cos d is a crucial metric in electrical/electronic engineering that indicates the efficiency with which electrical power is transformed into practical, useful work. Mathematically, it is defined as the ratio of real power (measured in kilowatts, kW) to apparent power (measured in kilovolt-amperes, kVA) within an electrical circuit. In other words, the power factor is also defined as the cosine of the phase angle (a) between the total supply voltage and the total current flowing in the circuit. This angle represents the phase shift between the voltage and the current waveforms, which is crucial in understanding the efficiency of power transfer in electric circuits.

 $\cos \cos \phi = \frac{P}{S}$   $I = \frac{P}{V \cos \cos \phi}$ 

## Unveiling the Significance of Power Factor in Electrical Engineering: Efficiency, Cost Savings, and Reliability

Thus, to transmit a constant amount of power at a fixed voltage, a larger current is necessary when the system has a low power factor. Since the maximum value of the cosine function is one, the largest possible value of the power factor is also one. For a purely resistive load, the power factor is one. Any value of power factor less than one signifies the presence of reactive components.

#### Why is the Power Factor Low or Poor?

Inductive Loads: Electric machines and appliances, for instance, induction motors, transformers, solenoids, choke coils of fluorescent tube lights, and induction heating systems draw reactive power from the supply mains. This can significantly lower the power factor. Imbalanced Loads: In a three-phase electric system, when the load is not evenly balanced, it can lead to an imbalance in the currents and voltages in the system. This imbalance can cause fluctuations in the power factor, making it less efficient. Power Factor Correction Devices: The absence or improper sizing of power factor correction capacitors can contribute to a low power factor.

## Disadvantages of Low (Poor) Power Factor

Increased Energy Costs: A low (poor) power factor results in increased apparent power, Q=S sing which necessitates the installation of larger capacity equipment. This results in increased energy costs due to higher demand charges.

Overloading of Equipment: Transformers, generators, and other electrical components are designed to handle a certain level of power. A low power factor can overload these components, leading to reduced lifespan and potential failures.

Voltage Drop: Reactive power causes voltage drops along transmission lines, which can result in reduced equipment performance and potential damage.

Reduced System Capacity: A system with a low power factor has a reduced

capacity to deliver real power, which can limit its ability to meet the demands of the load.

Increased number of Towers: A low power factor can lead to an increase in the weight of overhead conductors due to higher current flow. This, in turn, results in an increase in sag, which is the vertical distance between the conductor and its lowest point of suspension. Increased sag ultimately affects the clearance between the conductors and the ground or other objects. To maintain safe clearance, more towers may be needed over a given distance. Additionally, thicker conductors may be required to reduce sag, which can increase material costs. Power Factor Improvement Approach-The installation of capacitors in parallel with inductive loads can compensate for reactive power, thus improving the power factor. These capacitors store and release electric energy as and when required, thus reducing the burden on the power supply.

Load Balancing: Ensuring that the load is evenly distributed across all phases of a three-phase system can help improve the power factor.

Synchronous Condensers: Synchronous condensers are rotating machines that can either supply or absorb reactive power, thereby improving the power factor. They are adjustable to provide the necessary amount of reactive power as needed

Static Var Compensators and Static Var Generators: They are advanced solid-state electronic devices capable of swiftly providing or absorbing reactive power. They are mainly employed in electronic systems to regulate voltage and improve power factor.

Upgrading Equipment: Using more efficient and power factor-friendly devices, such as high-efficiency motors and transformers, can help improve power factor.

Regular Maintenance: Ensuring that equipment is properly maintained and calibrated is crucial in maintaining a healthy power factor.

#### **FEATURED ARTICLES**



**Dr. Morteza Khashehchi**Associate Professor

Student engagement is the linchpin of effective teaching and learning, encompassing both intellectual and emotional involvement in the educational process. It's a multifaceted concept that involves students actively participating in class, both mentally and emotionally. Intellectual involvement sees engaged students as active learners, always eager to understand and connect new concepts with their existing knowledge. Emotional engagement reflects the positive feelings and attitudes students have towards learning, fostering a sense of belonging and support in the classroom. Additionally, behavioral engagement is observed through students' commitment to attending classes, completing assignments on time, and seeking further learning opportunities. Engaged students are characterized by their curiosity, ownership of learning, persistence, and collaboration with peers. They are not satisfied with surface-level understanding actively seek to delve deeper into their subjects. The benefits of student engagement are numerous, including improved learning outcomes, critical thinking skills, intrinsic motivation, higher retention rates, better classroom behavior, enhanced communication, and reduced dropout rates. Strong teacher-student relationships often arise from increased engagement, providing crucial support to students throughout their educational journeys.

However, student engagement faces significant challenges in today's educational landscape, such as distractions from technology, diverse learning

## Introduction to Student Engagement

styles and backgrounds, motivation gaps, large class sizes, socioeconomic disparities, and mental health issues. Addressing these challenges requires a holistic approach involving technology management, differentiated instruction, motivation-enhancing strategies, inclusive education practices, smaller class sizes where feasible, and robust support systems to nurture students' emotional and mental well-being.

Active learning techniques encourage students to participate actively through discussions, problem-solving, and hands-on projects, fostering critical thinking and collaboration. Thoughtful questioning stimulates deeper exploration and class discussions. Student-centered learning empowers students to take ownership of their education, aligning their interests and goals with their learning.

Building positive relationships is fundamental to effective teaching and student engagement. Trust, respect, empathy, active listening, and open communication form the basis of teacher-student relationships, creating a safe and inclusive environment. Peer relationships are fostered through collaborative activities, group projects, and classroom discussions, promoting a sense of belonging and mutual respect.

Inclusivity and diversity are crucial for enriching the educational environment and exposing students to different viewpoints and experiences. Inclusivity goes beyond tolerance, promoting genuine acceptance and appreciation of differences. Diversity challenges stereotypes, broadens horizons, and fosters empathy and cultural competence.

The physical classroom environment plays a pivotal role in shaping the learning experience and influencing student engagement, comfort, and productivity. Well-designed layouts, flexible seating, adequate lighting, comfort, accessibility, and adaptability enhance the learning process. Creating visually stimulating spaces with educational materials and elements of nature contributes to a calming and inviting atmosphere.

Effective teaching strategies, including active learning, thoughtful questioning, and student-centered learning, facilitate engagement and deep learning.

Questioning techniques are essential for stimulating critical thinking, fostering engagement, and guiding the learning process. Thought-provoking, open-ended questions encourage students to explore concepts deeply, connect ideas, and cultivate higher-order thinking skills. Well-crafted questions also facilitate meaningful class discussions and provide insight into students' comprehension levels.

Student-centered learning represents a transformative shift in education, emphasizing students' active participation in their learning journeys. Educators act as facilitators, guiding and supporting students in setting goals, exploring interests, and tailoring their learning to their unique needs. This approach fosters autonomy, critical thinking, problem-solving, and collaboration among peers, often facilitated by technology.

In conclusion, fostering student engagement in the classroom is a multifaceted endeavor that involves understanding the concept, creating a supportive environment, employing effective teaching strategies, and leveraging assessment and feedback. Embracing inclusivity, diversity, and a well-designed physical environment are also crucial elements. By adopting these principles and strategies, educators can create an environment where students become active, enthusiastic participants in their education, preparing them for success in a rapidly changing world.



**Dr. Milad Heidari**Associate Professor

Student engagement can have a substantial impact on the performance and success of the Academic Department of Mechanical Engineering (ME) at GCET. Encouraging students' engagement in the ME Department creates a positive cycle of improved learning, research, and industry collaboration, ultimately benefiting the department's reputation and the quality of education it provides. When students are actively engaged in their learning, they tend to understand and retain the subject matter better. This can lead to improved academic performance and higher pass rates in ME modules, which reflects positively on the department. Engaged students

## The impact of student engagement on Mechanical Engineering Department performance

are more likely to develop a genuine interest in the field of mechanical engineering. They may be more motivated to pursue advanced studies, research projects, or even careers in the industry. This can contribute to an increased enrollment in mechanical engineering programs.

The department is known for its engaged and enthusiastic students and tends to have a better reputation. This can attract more high-achieving students, faculty members, and research opportunities, ultimately enhancing the department's standing at GCET and in the broader academic community. Furthermore, engaged students with positive educational experiences are more likely to become active and supportive alumni. They may contribute financially, provide mentorship to current students, or assist in job placement, which can benefit both the ME department and its graduates. Student engagement often extends to involvement in extracurricular activities such as engineering clubs, competitions, and professional organizations. These activities can provide students with

valuable practical experience and networking opportunities, which can enhance their overall education.

Engaged students can be attractive to industry partners, leading to collaboration opportunities, internships, and recruitment pipelines. These partnerships can help students gain practical experience and ensure the curriculum remains relevant to industry needs. ME Department with engaged and motivated students may be more successful in securing grants, donations, and endowments. This additional funding can be used to improve facilities, expand research programs, and provide scholarships, further benefiting the department.

Student engagement can significantly impact the performance of the ME Department by improving academic outcomes, retention rates, and overall student satisfaction. It can also enhance the department's reputation, research activities, and industry partnerships, contributing to its success and sustainability.

#### Implementation of Gold Recovery from Electronic Waste Project

**Dr. Taleb Moazzeni** | Associate Professor

This summer, the gold recycling project from electronic waste was implemented by the Electrical and Electronics Department in the training and recycling laboratory in Esfahan, Iran. The project constitutes a significant component of the grant proposal that was funded by TRC and initially proposed by Saba Jayyusi, under the supervision of Taleb Moazzeni, nearly two years ago. Taleb, while participating in the training sessions, carried out the necessary operational process, which involved multiple stages such as chip removal from electronic boards, gold separation from metal residues, and purification using nitric acid and borax mineral.

Due to the cost-effectiveness of the implementation, encompassing the recycling equipment, solution preparation, gas furnace, gas cylinder, as well as nitric acid, copper, and Borax mineral, it is hoped that this project can be commercialized in Oman. It's worth noting that approximately one gram of gold can be extracted from every kilogram of electronic waste boards, with mobile phone boards containing the most significant amount.



#### **FEATURED ARTICLES**



**Dr. Muhammad Latif Khan** 

Associate Professor

#### Introduction

This study examined the relationship between employability and entrepreneurial intention among college students with protean career orientations, and whether or not a practical training experience influences this relationship.

According to Briscoe and Hall (2006), Proteus is a Latin word that is the source of the word protean, this denotes the exceptional ability of a human to change anything's form to deal with uncertainty. Value drive and self-direction are two characteristics that characterize protean career attitudes. When someone speaks of self-direction, it relates to how much they proactively take charge of their career. In contrast, a value-driven approach describes an individual's heightened consciousness of their unique priorities and serves as a benchmark for decision-making and evaluation.

Recent studies have highlighted flexibility as a critical quality that supports professional growth and achievement. Because career routes have become less structured, it is no longer popular to stick to one's learned skills. It is believed that career paths have grown more discontinuous and nonlinear and that people must now assume more responsibility for their career development because there are more demands on people to build their careers and find work. Globalization and technological innovation have a significant impact on the job market today. As a result, students who are almost done with their education must deal with the difficulties of lengthy and unpredictable college-to-work transitions. The competition for available jobs presents a hurdle

# Protean and GCET Graduates Entrepreneurship Abilities: The Critical Mediating Role of Academic Faculties. TRC PROJECT WINNING CONCEPT

for recently graduated individuals. Because of these constraints on the work choices that are open to recent graduates, a protean approach may help enable individuals to participate in mobility behaviors that will improve their professional development which leads to entrepreneurial abilities.

Protean career attitudes are important and play a favorable effect on the job success of young millennials, according to numerous researches. Students who are about to graduate typically have self-directed career attitudes; yet, universities and colleges still have a fundamental duty to steer these attitudes in the right path. The students would benefit from having greater employability in the future.

#### Conclusion and Recommendations

Protean attitudes are not inborn; universities can impart them. In this sense, the main duty of the GCET

faculty members is to help students acquire flexible career attitudes that include self-direction, integrity, compassion, communication, searching, creativity, technology drive, self-assurance, problem-solving, leadership, etc.

Hence, government organizations, higher education institutions, and departments of education can all play a significant role in supporting the formation of protean career attitudes, such as self-directed and value-driven attitudes toward career success. Apart from this research, a multitude of other studies have discovered that ambiguous professional perspectives are indicative of proactive and self-directed career pathways, as well as employability and ultimate career achievement.

Therefore, further study is needed to examine the entrepreneurial tendencies of Omani students, as well as the importance of their unstable career perspectives and their relationship to entrepreneurship abilities in Oman.

#### **Proposed Research Framework**





Mrs. Mohsina Mirza
Student Support / Assistant Lecturer

In the rapidly evolving landscape of modern education, educators play a pivotal role in guiding their students towards the responsible and effective utilization of cutting-edge technologies. Notably, a groundbreaking innovation known as ChatGPT has begun to take center stage in the

realm of education. As ChatGPT and similar Al-powered tools become increasingly integrated

into the pedagogical fabric, educators are taking proactive steps to ensure that students employ these resources with wisdom and ethical consideration. This article explores the multifaceted role of educators in shaping their students' responsible use of ChatGPT. At the core of this educational transformation lies the imperative of cultivating digital literacy. In this context, educators serve as the primary conduits for imparting essential digital literacy skills to their students. This encompasses a comprehensive instruction on navigating ChatGPT effectively, including the art of formulating precise queries and discerning the nuances of Al-generated responses. Crucially, educators underscore the notion that ChatGPT functions as a tool to augment, rather than replace, critical thinking. Furthermore, the classroom becomes a crucible for discourse on the ethical deployment of Al. Educators underscore the paramount importance of refraining from unethical practices, such as plagiarism, cheating, or the dissemination of false information through ChatGPT. Students are not only cautioned against these practices but also sensitized to the potential academic and ethical ramifications associated with their misuse. In addition to digital

# Empowering Students: Educators' Guide to Responsible ChatGPT Usage

literacy and ethical considerations, educators play a pivotal role in nurturing critical thinking skills. Students are encouraged to cross-verify information procured from ChatGPT against reliable sources. The classroom serves as a forum for discussions on how to critically assess the reliability and credibility of Al-generated information, equipping students with the capacity recognize inconsistencies and contextual incongruities. The ability to comprehend context and exercise discernment in Al responses is another facet of the educator's responsibility. Educators emphasize that Al responses may occasionally lack accuracy or relevance within specific contexts, equipping students with the critical capacity to detect and address such disparities. The spirit of maintaining academic integrity is fostered through the imperative of citing sources. Students are reminded to reference Al tools just as they would cite books. articles, and websites, thus upholding transparency in their academic work. Equally significant is the dialogue

Equally significant is the dialogue surrounding privacy and data security. Educators should

caution students against divulging personal or sensitive information when interacting with Al

tools, shed light on the risks associated with data breaches, and offer guidance on safeguarding online privacy. In striking a balance between independent research and in

collaborative learning, educators emphasize that while ChatGPT enhances

individual inquiry, itdoes not replace the benefits derived from group engagement with peers and teachers. Practical application of Al knowledge is fostered through real-world scenarios presented to students. They are encouraged to contemplate solutions and navigate situations where ChatGPT may not furnish straightforward answers, nurturing their ability to think critically and adapt to complex challenges.

The importance of an open channel of communication between students and educators cannot be overstated. This encourages students to seek guidance and pose questions when confronted with challenges. Teachers serve as exemplars of responsible ChatGPT usage, demonstrating ethical conduct during class activities and assignments. This tangible illustration encourages students to model responsible behavior. Assessments and discussions have been thoughtfully integrated into the learning process to evaluate students' proficiency in using ChatGPT judiciously. Regular feedback is provided to enable students to refine their skills over time. In a rapidly changing digital landscape, educators remain vigilant regarding Al technology updates and seamlessly incorporate these advancements into their teaching methodologies. In their role as Al guides, educators bear the responsibility of ensuring that technology enhances the learning experience while upholding academic integrity and ethical standards. Empowering their students to wield ChatGPT responsibly is essential for the next generation to navigate the digital age effectively.



## **Table Tennis Competition on College Campus**

By: Taimoor Al Nadabi | Head of Student Engagement and Employability Office (SEEO)

On December 4, 2023, the Global College of Engineering and Technology organized a Table Tennis Competition for staff and students, aiming to foster a collegial spirit. The competition was Knock out, best of 3,11 points per game and 2 serves for each player. More than 30 players showed their interest in joining the competition. Due to the resources and overall circumstances, 20 Players were finally approved to play keeping into account their nationalities, cultures, background, and educational level.

Alireza Davani received the 1st prize (Student) where as Alazhar Alshuaili, also a GCET student, managed to get the 2nd prize.

The table tennis competition highlighted the institutional commitment towards building a sense of community among students and staff.





## Dean's Cup – In-House series of football matches

By: Taimoor Al Nadabi | Head of Student Engagement and Employability Office (SEEO)

Global College of Engineering and Technology held the Dean's Cup Competition, featuring dynamic football matches from April 2nd to April 5th, 2023. The event included eight teams – seven student teams in each team with one staff member. It aimed to strengthen the bond between staff and students, fostering a comfortable and inclusive college environment.

The matches were filled with spirited competition, showcasing the athletic talents of participants. The event also emphasized the importance of unity and collaboration within the college community.

The Dean's Cup Competition concluded with presenting a prestigious trophy to the winning team, successfully promoting camaraderie and setting the stage for future collaborative initiatives at Global College. This event exemplifies the institution's commitment to a holistic educational experience that prioritizes academic excellence and a strong sense of community.





**Mr. Mario Anud Jr.**Examination and Invigilation officer

The GCET Staff Football Team is a dynamic initiative to foster health, teamwork, and social connections. Meeting once a week for practice sessions, this group of enthusiastic employees not only gears up for social matches but also prioritizes health and camaraderie. This initiative has gained significant momentum with the wholehearted encouragement of Prof. Geoffrey Elliott, the Dean of the College, and the active involvement of Mr. Waleed Al Mahrouqi, the Sports Manager and PRO.

The GCET Staff Football Team was formed with a collective desire of employees to create a space where they could come together beyond the boundaries of their workplace.

## GCET Staff Football Group: Kicking Goals for Health and Unity

Recognizing the importance of physical activity, the group decided to channel their energy into a weekly football practice, providing an opportunity to exercise and build stronger connections with their colleagues. With Prof. Geoffrey Elliott's leadership and Mr. Waleed Al Mahrouqi's guidance, the team is a testament to the College's commitment to a healthier, more connected workplace community. As the team continues to lace up their boots each week, they depict the principles of teamwork, health, and unity that make GCET a thriving and vibrant professional community.



