GLOBAL COLLEGE OF ENGINEERING AND TECHNOLOGY COLLEGE OF TECH

GLOBAL COLLEGE OF ENGINEERING AND TECHNOLOGY

3rd ISSUE AUGUST 2021



RESHAPING GCET TOWARDS SUPPORTING AND DELIVERING THE OMAN VISION 2040

Dean's Welcome

As Salam Alaikum!

Dear Treasured Colleagues, in this third edition of the GCET Newsletter, I wanted to begin by thanking everyone for your hard work and dedication in the last academic year. It has been invaluable to our development and progress. I really appreciate everyone's efforts and dedication to ensuring we support each other and our students to the best of our individual and collective abilities.

The Theme of this issue is 'Supporting and Developing the Oman Vision 2040'. This strategic document is the core roadmap for the progress and ambitions of the Sultanate of Oman. To this end, the College has mapped its new Institutional Strategic Plan 2021-2026 to the direction and themes of the Oman Vision 2040. I am also very grateful to all colleagues, within the College and outside the College, for their input into the new Institutional Strategic Plan 2021-2026. I am also very grateful to Dr. Sulaiman for leading the mapping analysis and exercising to demonstrate how the College is supporting and developing the Oman Vision 2040. TURN TO P3



Professor Geoffrey Elliott

Dean-President of College



GLOBAL COLLEGE OF ENGINEERING AND TECHNOLOGY NEWSLETTER 3rd ISSUE **AUGUST 2021 Publication Staff** Prof. Geoffrey Elliott Chair Mario Anud Jr. **Editorial staff** Tassawar Kamran Editor **Ronald Gomez** Designer Ms. Pooja Om Prakash Proofreader **Contributing Writers** Prof. Geoffrey Elliott Dr. Sulaiman Al Hasani Dr. Ahmad Al Hoseini Dr. Amjed Sid Ahmed Dr. Eman Al Naamani Dr. Javeed Hussain Dr. Pooyan Rahmanivahid Dr. Milad Heidari Dr. Sivasakthivel Thangavel Ms. Zahraa Al Kasbi Ms. Maryam Alamri Ms.Rahma Al Amri Ms. Pooja Om Prakash Ms. Hanna Al Alawi Mr. Usama Al Wahaibi Prof. Azhar Khan Contributing Photographer/Designer Ms. Amaal Khan **CONTACT US:** Get involve! Submit anything informative, relevant and Interesting to newletter@gcet.edu.om for our next publication.

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There is a very interesting article in this issue of the Newsletter by Dr. Sulaiman on how we have mapped with the Oman Vision 2040. I hope this Newsletter will provide further clarity and insight into the Oman Vision 2040 and show how the College is supporting the national strategic vision.

On the 2nd August 2021, I completed my first year at the College. I am so happy to have found friendship and support there in the College. I enjoy working with everyone in the College, and I cannot think of anywhere I would rather be than with you all at this time. I sincerely thank you for all your kindness, support and care shown to me over the last year. I look forward to our further collective progress and success in the future. We have made great progress over

the past year with a series of new initiatives and developments reported in the previous Newsletters. However, it is worth noting that we now have an updated academic infrastructure and policy framework to guide us into the new academic year 2021-2022; and we have departments' structures that fit well with any modern higher education college anywhere in the world.

Step 2 on the project will be:

- (1) ensuring we continue to achieve the targets of student recruitment.
- (2) completing the OAAA/QAE Working Group process for preparation for institutional review.
- (3) expanding our undergraduate, postgraduate, and professional devel opment portfolio.

Our ambition is to be able to ensure we benchmark to the best academic and administrative standards of higher education and demonstrate quality and excellence to support students, partners, and the Oman Vision 2040. Finally, I wanted to say how grateful I am to the Oman Government for offering our staff the opportunity of receiving 2 doses of the Pfizer Covid-19 vaccine. By the 1st September, we want to achieve 100% vaccination of all our staff. This will protect GCET staff and students from this terrible and destructive virus. I hope 2021-2022 will see us getting back to much higher levels of normality, Insh'Allah, which, as the Government says, can only be achieved through complete and effective vaccination. It is our duty to support each other and the Government authorities of Oman.

I wish you all peace, happiness, and a successful 2021-2022.

Kindest wishes, Geoff

SIGNING CEREMONY FOR THE 2+2 AGREEMENT WITH UWE



Professor Geoffrey Elliott Dean-President of College

As Dean of College, I was delighted to have the opportunity to travel to Bristol to formally sign the 2+2 Credit Recognition Agreement with the University of the West of England (UWE). It will enable our students to transfer after two years to the Bristol Campus in the United Kingdom, and allow UWE students in Bristol to transfer to our College in the Sultanate of Oman.

This initiative allows us to sign agreements with embassies and education departments in the MENA region to recruit further students deliberately onto a 2+2 progression path at the College. This initiative will open up new student recruitment markets to the College.

I visited the UWE campus on 29th July 2021 to sign the agreement. I was honored to meet the Registrar and Pro-Vice-Chancellor (Student Engagement), Jo Midgley, who signed the agreement on behalf of the University of the West of England (UWE). I also had productive meetings with several dignitaries- Dr. Tod Burton, the Dean of the Faculty of Engineering and Technology; Sophie Turnbull in the International Office at UWE, responsible for all international recruitment matters for UWE in the MENA region, and Dr. Alison Todman.

I was honoured to be treated with so much kindness, and I am thankful for the high levels of support shown to the College by the University of the West of England (Uwe), Bristol.



Dean of College, Prof. Geoffrey Elliott, signing the 2+2 Credit Recognition, with Jo Midgely, Registrar and Pro Vice-Chancellor (Student Experience) at the University of the West of England (UWE), Bristol.

In the background are Dr. Alison Todman and Dr. Tod Burton, Dean of FET and Mrs. Sophie Turnbull, UWE.





Aligning the strategic and operational plans of GCET with the higher education sector's strategy and Oman Vision 2040

Dr. Sulaiman Al HasaniDeputy Dean
(Administration & Resources)

To align its strategy with the higher education sector's strategy 2040, which emerged from the recommendations of the Oman Vision 2040 the National Education Strategy 2040, the Global College of **Engineering and Technology worked** consistently with all stakeholders to enhance its vision, mission, and strategic plan. The main goals of the higher education sector 2040 are to (1) Develop an educational system characterized by high quality and community partnership, (2) Develop an integrated, independent and effective system for the management and governance of the higher education sector, (3) Develop educational curricula that keep pace with the requirements of sustainable development and future skills, (4) Develop sustainable capabilities for research and innovation in the higher education sector to contribute to building a knowledge economy, (5) Find diverse and sustainable funding sources for higher education, scientific research and innovation and (6) Develop national competencies with dynamic capabilities and skills that compete locally and globally. Under each goal, there are a number of national programmes and initiatives designed to realize and achieve the goals of the higher education sector's strategy 2040.

The College has developed its strategic plan 2021-2026 to be aligned

with the above goals of the higher education sector's strategy 2040 with the following goals:(1) To provide high-quality education, teaching, research, innovation, community participation, and opportunities in line with the 2040 strategic vision of the Sultanate of Oman, (2) To produce graduates with the knowledge, critical thinking skills, and the graduate attributes that will enable them to obtain satisfactory jobs both locally and internationally, (3) To conduct research, knowledge transfer and consultancy that meet the needs and objectives of Oman 2040 vision and the MENA region, (4) To comply with national and international quality assurance standards; Continuous improvement and enhancement of college policies, procedures and practices, (5) To appoint highly qualified, knowledgeable, professional, academic and administrative staff from the Sultanate of Oman, and worldwide, to achieve excellence in attracting students and providing unique opportunities and experiences in teaching, learning, research and support for students, society and graduates, and (6) To develop into an institution with the title of "university" with its own degree-granting powers as well as to create partnerships with a wide range of universities and higher education institutions from all over the world. These goals will drive the operational plans for the coming five years and will direct all activities, programmes, initiatives, and practices of the College and its stakeholders.

GCET Appoint new Deputy Dean (Academic Affairs)



Dr.Sharifa Al Qasmi Deputy Dean (Academic Affairs)

The Global College of Engineering and Technology has appointed Dr. Sharifa Al Qasmi as the new Deputy Dean (Academic Affairs) after rigorous marketing, interview processes and formal approval procedures in July 2021. Dr. Sharifa will begin her contract on the 15th of August 2021. Dr. Sharifa has extensive experience in the Ministry of Higher Education, Research, and Innovation (MoHERI) where she served as Director of Academic Programmes and Director of Research. Formerly, Dr. Sharifa held the position of Deputy Dean at the College of Education (Al Rustag). Join us in welcoming Dr. Sharifa Al Qasmi to the GCET family. We look forward to having her help and support for our commitment to the MoHERI. Her addition as Deputy Dean will certainly help us prove our academic position as a college, and achieve successful accreditation in the future.

Journey of Department of EE matching to Oman vision 2040

The Department of Electrical and Electronics (EE) is committed to deploying its outcomes with an enhanced educational system and confidence in the Omani Learners to develop their identity and social values according to Oman vision 2040. To deploy an enhanced educational system, the institution and department employed international standards and accreditations from the University of West England (UWE), UK. The UWE has earned several recognitions for its exceptional contribution to the field of education. The Guardian University League Tables ranked the philosophy programme of the university on the #6th position, it is placed the university on #28th position among the top 121 institutions in the country and ranked #801-1000 in QS Global rankings 2021.

The Department is also dedicated to improving the educational outcomes among Omani learners according to Oman vision 2040. This is being accomplished by developing, delivering educational curricula with inputs from industry, scientific outcomes. The Staff and students are jointly publishing scientific papers in globally recognised journals and currently, there are 6 to 8 joint publications with students. The staff has equally contributed with their research finding being deployed in problem-based learning in curricula and assessments. The department has produced 35-40 scientific research publications and 2 patents. It is also planned to conduct at least one External Advisory meeting (EAB) to obtain inputs from the industry. According to vision 2040, we aim to build confidence, global recognition,

current trends in society, and employability skills. To address these, the departmenthas started a technical society called GEETECH in collaboration with the internationally recognized professional bodies IEEE and IET. In 2021, this established professional society conducted 5 technical webinars for students of our campus. Among them, one is the Globally recognized competition Present 10 organized in collaboration with GCET and IET and the other one is a 3-day workshop for learners of the community. The aim of the society is to become a supportive and collaborative community to arrange local and international engineering events for students. The technical societies are committed to arrange and organize multiple technical events to enhance services to the community.

Assimilation of the department with Quality and Quantity of the Qualified faculty is another motive we continuously work on. All the staff are distinguished researchers with Doctorate Degrees from renowned world-class universities and deliver their expertise and knowledge to build confident societies of the learned Omani community. The Staff of the department has completed a Postgraduate Certificate in Academic Practices (PCAP) offered by UWE.

The Quality in the Academic practices of the department is identified such as the "Flipped-classroom" approach managing the system with the advanced technology of Learning Management system MOODLE and BLACKBOARD. The staff has imparted the educational outcomes



Dr. Javeed HussainHoD Electrical and Electronics
Engineering (EEE)

by considering cohort model, retain focus on "Active" Learners, organizing the sessions and modules, clear assignments and deadlines, effective and efficient feedback, responding selectively and effectively, enhancing the connection with learners with multiple means of engagement, easy access and frequent contact with faculty members makes a big difference. These qualities of the department are reflected in the graduate students with employability skills to enter the global and international market.

The Department maintains and follows the Quality Assurance (QA) standards set by the UWE which is among the UK quality assured universities as commended by the UK QAA audit team. To achieve this, pre-and post-moderations of the assessments are carried out by the GCET and department. There are setting and maintenance of the academic standards of awards, to enhance the Quality of students' learning opportunities to meet the UK and Omani HE exceptions. The staff and the college are working together to attain the goal of accrediting the programs by professional bodies such as OAAA, IET, and ABET.

The Department of EE and GCET training unit have jointly organized the vocational training programs to enrich individuals' high-level skills to enter the labour market, raise their

productivity and improve the efficiency of the economy in general. The planned vocational training programs to be offered are Programmable Logic Controller (PLC), Machine Vision, Artificial Intelligence, Industrial Control Systems using MATLAB, Design and Develop robots for social needs, ASIC and FPGA level Chip Designing, 5G Technology, and Internet of Behaviours (IOB). There are many more training programs planned to be with the enhanced skill set of the Omani Workforce according to Oman vision 2040.

We, at the department of EE, are motivated to develop the skills of the Omani individuals to be innovative, creative, and potential entrepreneurs. There is an innovation and research lab space dedicated to working along with both staff and students on different projects. There are talks planned for students from the industry to understand the needs and to develop different projects to address them. The GCET students are working along with the staff of the department on scientific research and innovation projects. Both staff and students have applied for the funded projects provided by TRC to build a knowledge-based economy and society.

The Department and IET jointly organized a "Present around the world" international level competition for Omani nationals of all colleges. The Staff and the Students of the department have participated in GCC robotic competition in March 2018, 2019, held in Oman. We also participated in the "First OIC International Robotic Challenge, Uzbekistan" 2019. The Ministry of Transport and communications conducted "Sohar Hackathon 2019" in which our technical staff participated and won a prize in the competition. To demonstrate the

robotic designing skills of students, a national level Sumo robot competition was organized by the department. In March 2019, "Women's in Engineering Symposium" was also conducted to empower women in this field. These are the actions initiated to encourage the national talents with dynamic capabilities and skills that are competitive locally and internationally.

There is a leap between GCET and the Department of Electrical and Electronics, with areas of education, lifelong learning, and scientific research that will lead to a knowledge-based society and competitive national talents according to the strategic direction of Oman vision 2040.

Fig 1: Pictures of event
"Occupational Health and Safety
in Electrical Connections



Figure 3: Picture of team and attending awarding ceremony





Figure 4: Picture of Event with award ceremony



Figure 2: Pictures of event "GCET Engineering Awareness Program for School Career Advisors"





COLLEGE NEWS



CONTRIBUTION OF DEPARTMENT OF MECHANICAL ENGINEERING (ME) TO OMAN VISION 2040

By: Dr. Pooyan Rahmanivahid I Dr. Milad Heidari

Vision 2040 identifies national priorities covering the entire spectrum of Omani life. Six priority areas under the vision are Infrastructure (energy, transport, water, oil and gas, and ICT); Science, Technology, Engineering and Innovation; land use and management; urbanization; human resource; and peace, security, and defense.

The vision of the Mechanical Engineering Department is vital to be in line with the Country's vision to be recognized in providing high standard education, leading to well-qualified engineers who are innovative, immediate contributors to their professions and successful in advanced studies. This distinguished education will enable students to contribute in a socially responsible manner to the development of Oman. Focus on research areas that are linked to Oman's vision is the priority of the ME Department. The kind of project a student selects can influence the way in the future and the number of possible publications.

Renewable energies and Sustainable engineering, Motorsport and Vehicle technology, Computer-Aided Design (CAD) and Computer-Aided Engineering (CAE), Biomechanics, Energy Analysis and Management, Energy Policy and Economics, Hydrogen Energy and Industrial Safety Analysis, and Design and manufacturing are the most important fields that students can work on, and are in line with vision 2040.

The ME department is one of the core sections of the institute and reaches 330 UG and 22 PG students. There is a project database according to the country's vision in the department. The ME department plans to present the best project and achievements of the students annually. Student scholars work with the department mentors to share research results, original creative content, study abroad, internship experiences, and more. Not only are these presentations interesting and engaging, but they are also a great way for community members and prospective students to see what our students do so well. This event brings together the incredible scholarship and immersive experiences of our students in the future years. Furthermore, the Department plans to hold career fair seminars annually. These seminars will focus on job interview skills, industry trends, and opportunities. Attending such seminars can give students a chance to explore alternate employment avenues.

Establishing an Innovation center in the ME department is a new plan to approach and achieve Oman vision 2040. Innovation center secures tomorrow's revenue, lowers costs, and differentiates companies from the market. Fabrication of Formula one chassis, optimization of wind turbines according to location across Oman, and the design and fabrication of quadcopters are the main fields to work in this center. With the opportunities for both individual and group collaboration, it's a place that fosters a culture of

innovation through the creation, sharing, and testing of ideas. In addition, elite students from other universities can use the facilities of the innovation center and contribute to the proposed project. As a center of innovation, the staff and students who make up the department of mechanical engineering will improve the quality of life for the GCET community as well as for people across Oman. Developing the brand of the College and Department is another ambitious plan. Department is researching the market and competitors to identify the Message the department should communicate. Understanding what inspires our target students is the key to align the department's strengths to our students' and audience's preferences. For many students, an important factor in their decision of where to study will be the way a university contributes to its local

community and engages in philanthropic causes. Therefore, incorporating community into our brand story is essential. Finally, looking critically at our competitors' messaging can offer the department fresh insights into our own evolving brand identity. The popularity of the brand can help the country become more academically well-known.

Close collaboration among the departments, industry and start-ups is one of the biggest aims of the Mechanical Engineering department in the future. This interaction encourages knowledge and technology exchange. Many ideas from research in the department are put to use through collaboration with companies. Automatic Solar Tracker

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is one of the fields in which the college is interested in collaborating with companies. Oman is going to generate 30% of its electricity from renewables. So, solar energy is a vital and strategic solution for the provision of electric power in the Sultanate of Oman. Since the sun's position in the sky changes with the seasons and the time of day, trackers are used to align the collection system to maximize energy production. Collaborating with industries enables the department to include additional development and training for students in this field.

Department aims to offer three pathways of Mechanical Engineering to UG students including Mechatronics, Manufacturing, and Vehicle technology in October 2021. Incentives to attract and adopt advanced foreign technologies, such as 3D printing and robotics will be devised to increase the efficiency of the Omani productive structure. Department has started the fabrication of small projects through 3D printing. Using this technology can lower the cost of experimental tests. In addition, the department has the experience to design and develop its 3D printer. Being professional in this technology eliminates the need to import this device to the country.

Furthermore, automakers are trying to design and produce new vehicle technologies such as autonomous, hybrid vehicles, and green technologies.

Graduated mechatronics students will be involved in designing, testing, and manufacturing machines and systems using a combination of electrical and mechanical systems,



robotics, computer science, and product engineering. Modification and the designing of robots used in the oil and gas industry are the ambitious projects of the department. The ME department aims to align with the Oman vision 2040 through training and educating the students, implementing high-quality research.

and cooperating with the industry.

DEPARTMENT OF MECHANICAL ENGINEERING (ME) UPDATES

The Department of Mechanical Engineering has allocated the highest number of students in GCET and launched the MSc in Engineering Management in October 2020.

The MSc program was delivered by part-time lecturers initially, however, the ME department could manage all the modules to be taught internally by GCET academic staff.

The ME department could get the approval of three pathways of Manufacturing, Mechatronics, and Vehicle Technology for Oct 2021, and

as a result, the department name changed to Mechanical Engineering Department. The ME department couldpublishmorethan 12papers/articles in the 20-21 academic year and aim to improve the quality of the publications in the next academic year. The department received sponsorship for Student Formula vehicle from Majan Noor Electric Car Manufacturer.

The ME department is opening new positions/vacancies to develop the academic human resources to keep up with GCET's strategic policy and national vision of the Sultanate of Oman.



Dr. Mazhar Hussain MalikHoD Computing and IT (CIT)

The department of Computing and IT (CIT) at the Global College of Engineering and Technology (GCET) was established in 2016 with the partnership of the University of the West of England (UWE), Bristol, United Kingdom rank 21 in Guardian League Table and Gold status in Teaching Excellence and Student Outcomes Framework (TEF). The CIT grew from 20 students in 2016 to 350+ in 2021, and from 01 undergraduate programmes to 2 approved undergraduate programmes which are BSc (Hons) Computer Security and Forensics, and BSc (Hons) Business Computing along with Master of Data Science. It's also worth mentioning that CIT got the approval of BSc (Hons) in Computer Science pathways to Al and Smart Devices from the University of the West of England (UWE), Bristol, United Kingdom, and is waiting for approval from the Ministry of Higher Education Research and Innovation (MOHERI), which is aligned with Oman vision 2040 to increase country in the Artificial intelligence and ICT field. The Academic department of Computing and IT vision is aligned with the GCET vision which contributes to Oman Vision 2040. All programmes of the CIT reflect the contribution to Oman vision 2040 and each stage of developing a new programme has been consulted with the local industries, relevant ministries and carefully aligned the

ACADEMIC DEPARTMENT OF COMPUTING AND IT (CIT) AND OMAN VISION 2040

programmes to be offered with the skills that are needed to fulfil the Oman vision 2040. This is all to ensure that all graduates leave ready and able to contribute to Oman's future growth. In 2017, CIT started BSc (Hons) Computer Security and Forensics programme which became a success story. With the introduction of this programme, the department grew from less than 50 students to 200 plus students in one year due to the uniqueness of the programme in the Sultanate of Oman and is aligned with the country's needs. CIT is going to start the MSc Data Science programme in October 2021, which is not only unique in Oman but also in the GCC region and aligned with Oman Vision 2040 as well. Similarly, CIT is offering BSc (Hons) Business Computing programme and currently, students are studying at the foundation level to meet the requirements of the programme. BSc (Hons) Business Computing focuses on the mixture of computing and business studies so CIT can produce ready-to-work graduates in the computing and business sector. Like other GCET programmes, BSc (Hons) Business Computing study enables students to groom their entrepreneurial skills so they can start their own business after the completion of study which is aligned with Oman vision 2040 to produce entrepreneurs. In April 2010, Oman started Oman National CERT with the motto towards a safe cyber environment, as per the 2020 ranking of the International Telecommunication Union (ITU) Oman ranked 3rd best Arab country

in cybersecurity. The CIT is planning to conduct the study for the MSc Cyber Security programme, as per the Oman vision 2040, all the organisations in Oman should have a cyber security unit before 2030, and due to this reason, the country is paying more attention to cybersecurity.



GCET is following in the footsteps of Oman Vision 2040 by introducing programmes in cybersecurity and forensic. The CIT will continue to align with the GCET vision to contribute to Oman Vision 2040 and it reflects in the CIT 2021-2026 strategy. I look forward to fulfilling the ambitions of the college and doing its part to further the Oman Vision 2040.

Dr. Amjed Sid AhmedDirector of Research & Innovation

DigiConnect EDUCATION AND RESEARCH IMPACT IN DEVELOPING NATIONS 23rd June 2021 DOLL Technologies



DELL TECHNOLOGIES WITH INTEL CORPORATION HOSTING AN EXECUTIVE VIRTUAL BOARDROOM ON EDUCATION AND RESEARCH IMPACT IN DEVELOPING NATIONS

The Director of Research and Innovation, Dr. Amjed Sid Ahmed, attended an executive virtual boardroom on Education and Research Impact in Developing Nations organized by Dell Technologies along with Intel Corporation on 23 June 2021.

The boardroom discussed how Dell and Intel can jointly equip the minds of the future with the right technology, and foster students' creativity and innovation.

International and regional educational researchers and experts joined this virtual webinar hosted in partnership with Dell Technologies, Intel, NVIDIA & Cambridge University Research Computing Department. Strategic Visions (Oman vision 2040 and Bahrain vision 2030) have been

addressed and discussed to show how Education and Research Impact and influence the Developing Nations.

Dr. Farzana Al-Maraghi Director, Scientific Research, Higher Education Council, Kingdom of Bahrain highlighted the main pillars of the Kingdom of Bahrain vision related to Research and Education. The aims and progression of the Oman National Research Strategy have been discussed by Dr. Amjed Sid Ahmed.

GCET and Dell (Education Services) discussed the possibility of collaboration and further action plans to enrich the Research and Education at GCET.

GCET IS NOW AN EC-COUNCIL / ACADEMIA PARTNER AND EC-COUNCIL AUTHORIZED TRAINING CENTER By: Dr. Amjed Sid Ahmed

GCET and EC-Council went into partnership on the 10th of August 2021. International Council of E-Commerce Consultants, also known as EC-Council, is the world's largest cybersecurity technical certification body which operates in 145 countries, globally. EC-Council was formed as a result of very disappointing research after the 9/11 attack on the World Trade Center.

EC-Council certification programs are recognized worldwide and have received endorsements from various government agencies including the US Federal Government via the Montgomery GI Bill, and the US Government National Security Agency (NSA),

Committee on National Security Systems (CNSS), and most recently EC-Council has received accreditation from the American National Standards Institute (ANSI).

GCET - EC-Council partnership works in two parallel tracks; one is the EC-Council | Academia Partner program and the other is EC-Council Authorised Training Center (ATC). One of the aims of the Academia Partner program is that EC-Council works along with the GCET Cyber Research Group in Cybersecurity related activities. The GCET Cyber Taskforce, a helping hand to the GCET Cyber, along with EC-Council will act as an advisory body for both public and private sectors in Cybersecurity

EC-COUNCIL | ACADEMIA

- P A R T N E R —

related projects and activities. In addition to advisory works, GCET students will have the privilege to get access to the robust EC-Council Academia syllabi, discount rates, and exam eligibility. Cyber competition discounts and scholarships and so many other benefits.

As for ATC, GCET will deliver EC-Council certification courses and act as an authorized training and testing center for EC-Council.



Students Satisfaction with Online Learning at GCET

Dr. Eman Al Naamani HoD Quality Assurance and Compliance Office (QACO)

The new era of the virtual world has embroiled into our society through many aspects of life with no exception to teaching and learning. The current circumstance of the COVID-19 pandemic enforced the distant learning approaches and kept no option other than online education. Therefore, the shape of education is changing and the factors affecting teaching and learning might need to be reinvestigated (Li and Lalani, 2020).

Students' learning approaches are influenced by many factors including students' interaction, engagement (Nguyen, Cannata and Miller, 2016; Saeed and Zyngier, 2012), relation with peers, and relationships with the teachers (Cornelius-White, 2007; Gillespie, 2005; Sybing, 2019). Students' attendance is therefore considered essential for the teaching and learning to be effective (Moores, Birdi and Higson, 2019).

The transition of teaching and learning activities from traditional face-to-face classes to online classes can be very critical for both students and teachers. Finding and deploying appropriate methods for successful online classes became crucial and essential during the lockdown period. Luckily, technological development has attracted educators to practice different tools for educational

purposes. Wang et al. investigated the difference between attending face-to-faceclasses and online classes (Wang et al. 2019). The study was conducted for two groups of equal numbers of students. One group was offered face-to-face sessions including discussion and engagement. The other group was offered the same material in online sessions and a discussion board. Both groups then completed a test to evaluate their performance. The researchers found no significant difference between the two groups. The studied sample, in this case, was first-year students in the Engineering discipline in an Introduction to engineering design module.

The effectiveness of teaching approaches has always remained a concern whether the class is face-to-face or online. In each teaching method, the approaches are not necessarily the same and can differ from one case to another. Therefore, the session plan or the way the session plan is delivered is different than in traditional face-to-face classes. It is promising to find comparable and improved effectiveness of online education compared to the traditional face-to-face approach (Gegenfurtner and Ebner, 2019; Giannakos and Vlamos. 2013). However, this was observed for

straightforward classes (Giannakos and Vlamos, 2013). Implications on complicated classes are most likely to have different consequences. Technology integration at GCET began in 2016 through implementation of Blackboard at the undergraduate level. This has led to a smooth transition into online education in fall 2020 after the first lockdown started in Oman in March 2020. The College management kept monitoring student satisfaction on online learning in each semester to evaluate and improve the online teaching practices through students' voice and opinion. In 2021 semester II, February, GCET launched Moodle as the main Virtual Learning Environment (VLE) for students enrolled at all levels (Foundation, Undergraduate, and Postgraduate).

Moodle is utilized as a supporting VLE that can be used by students to obtain learning materials, watch live and recorded lectures, submit assessments, receive feedback from lecturers, and many other features. The results of student satisfaction from the latest survey on online learning are shown in Figure 1. More than 130 students from different disciplines have responded to the survey. The bar colors are classified according to the student satisfaction achieved. Green, yellow, and red

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bars indicate student satisfaction exceeding 80%, 70 - 80%, and below 70%, respectively. The illustrated results show that more than 80% of respondents are aware of GCET graduate attributes and programme learning outcomes. The majority of respondents(80% and above) demonstrate satisfaction on the level of skills required to effectively engage in the learning through Moodle platform. This includes submitting assessments, receiving supportive feedback, getting learning materials, and accessing recorded and live lectures. GCET also provides students with Virtual Labs for the

practical part of learning. Virtual labs allow students to join the practical classes online. Certain software is used for the virtual labs based on the module. At the start of the semester, the list of the required software is sent to the students by the module leaders. Students can contact the IT office at GCET to assist with downloading and installing necessary resources for the virtual labs. Students are provided with instructions on how to use the virtual lab resources. Conducting practical sessions through

VLEs is more complicated as it requires special tools and sometimes big sizes software.

Almost 70% of the respondents said that they can perform virtual practical sessions effectively. The IT office at GCET is working closely with the Academic Departments to investigate possibilities of improving students' experience with virtual labs.

Students' satisfaction with online education has resulted in a successful Exam Board conducted with the University of West of England involving a number of External Examiners to assure achieving academic standards and deploying the appropriate assessments strategies.

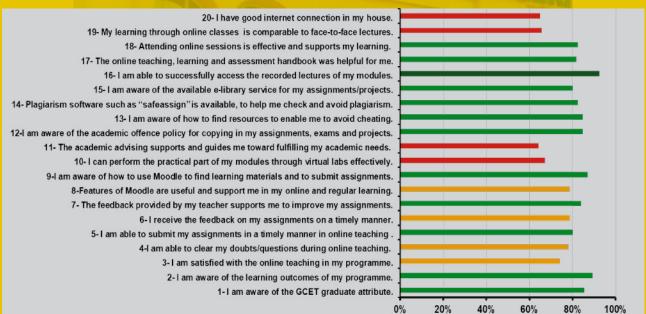


Figure SEQ Figure * ARABIC 1. Student Satisfaction on Online Learning at GCET (Satisfaction Percentage indicates responses of Strongly Agree and Agree for each criterion

References

- 1. Li, C., and Lalani, F. (2020) 'The COVID-19 pandemic has changes education forever. This is how', World Economic Forum, 29 April. Available at: https://www.weforum.org/agenda/2020/04/coronavirus-education-global-covid19-online-digital-learning/ (Accessed: 28 December 2020)
 2. Nguyen, T., Cannata, M., and Miller, J. (2016) 'Understanding students' behavioral engagement: Importance of student interaction with peers and teachers', The Journal of Educational Research, (Online)
- 3. Saeed, S., and Zyngier, D. (2012) 'How motivation influences student engagement: A qualitative case study', Journal of Education and Learning, 1(2), pp. 252-267.
- 4. Cornelius-White, J. (2007) 'Learner-centered teacher-student relationships are effective: a meta-analysis', Review of Educational Research, 77(1), pp. 113-143.
- 5. Gillespie, M. (2005) 'Student-teacher connection: a place of possibility' Journal of Advanced Nursing, 52(2), pp. 211-219.
- 6. Sybing, R. (2019) 'Making connections: student-teacher rapport in higher education classrooms', Journal of the Scholarship of Teaching and Learning, 19(5), pp. 18-35.
- 7. Moores, E., Birdi, G. K., and Higson, H. (2019) 'Determinants of university students' attendance', Educational Research, 61 (4), pp. 371-387
- 8. Wang, Y., et al. (2019) 'An Investigation of Effectiveness Differences Between In-class and Online Learning: An Engineering Drawing Case Study', International Journal on Interactive Design and Manufacturing, 13, pp. 89-98.
- 9. Gegenfurtner, A. and Ebner, C., (2019) 'Webinars in higher education and professional training: A meta-analysis and systematic review of randomized controlled trials', Educational Research Review, 28, pp. 100293-100312.
- 10. Giannakos, M. N., and Vlamos, P. (2013) 'Using webcasts in education: Evaluation of its effectiveness', British Journal of Educational Technology, 44 (3), pp. 432-441.

Teamwork: A Must for all Organizations



Dr Ahmad HosseiniHoD Foundation Studies (FS)

Being part of a good team is a prosperous experience whereas you would feel doomed if you belong to abad team. Our best teamwork experiences come from the fact the team has been energized and committed to a common purpose. Some of the typical features of efficient teams are fair participation from all members, healthy and productive debates, and openness to taking risks and sharing ideas and perspectives without fear of judgment.

Shared norms and set goals are essential for good teams to operate and make decisions as well as to share information. We cannot throw a problem at a team and expect them to react impulsively, just hoping that they come up with a solution out of nowhere. In fact, teams work better than individuals under these circumstances:

- 1. When there is a complex task that requires more than one person to take it and no one person has the expertise or time to solve the issue and handle the task;
- 2. When the views are diverse and having substantial knowledge and functional experience is necessary for completing the task;
- 3. When there is a need to incorporate multiple constituencies.

Major Problems in Teams:

We usually know the teams by their leaders. However, the role of every single member of the team is as important as that of the leader.

There are some team members with dominating personalities who monopolize the conversation, and there are sometimes divergent and competing agendas, and also there can be unclear or inconsistent adherence to norms or other operating procedures in the team. All these negative features affect the teams' achievement.

Team success does not come without tremendous effort and rigid adherence to the core principles of the team. There are two sides in any team cooperation: on the one hand, and from the leaders' point of view, team members should work closely together on a common goal and they are collectively responsible for the result; however, from the team members' point of view, everyone should be cooperative and caring to accomplish the given duty.

collaborative collaboration diverse diverse diverse goal-oriented teamwork committed engaged accountable engaged accountable funsting empathy epen-communicative engaged accountable communicative fun focused enouraging effectives frong purpose longest enthusiant impared goals skilled results content on positive communicative enthusians carnel bardworking efficiently leadership knowledgeable trust passionate communication supportive

In order to achieve success, the leader needs to deliberately use several choices in designing the team for an actual task, and the team members need to tune up with the theme of the team. Just like the musicians in a symphonic orchestra, team members should become one to create a magnificent piece of music and impress the audience. Indeed, the leader also needs to be intentional in how to run the team and the team members need to bear with the situation and also stay creative and effective.



My Experience with Foundation Team

To share with you the story of the Department of Foundation Studies at GCET, I should start with the process of revising the General Foundation Programme (GFP). We started reviewing the programme in May 2020 and it took us over a year to work on, discuss and come to various ideas. In the meantime, the Foundation staff teamed up and created smaller working groups that concluded more than 100 hours of meetings, wrote 250 pages of reports, and provided more than 400 pages of supporting documents.

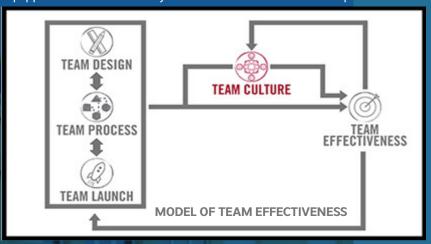
The initial challenge was to specify the needs and to evaluate the current practice. As the head of an Academic Department, I had to assign everyone some tasks based on their performance and expertise. With a well-experienced team, that is not an issue but managing the requirements and defining the strategies, requires the whole team to be on the same

page. Friendly gatherings and official meetings helped us synchronise and the results were satisfying for the teams and management.

The revised GFP includes English language, Mathematics, Computer and Study Skills. We are more confident about what we teach to our students and how we fulfil the mission of our department. The teamwork paid off and every single member of the team now feels the ownership of the revised GFP. Thanks to their spirit and hard work. It would be a devastating experience if the team members did not feel the spirit of the team and could not share the same team culture and aims. I can say leading a synched orchestra is a blessing.

Tip: Team Effectiveness

- 1. **Performance or results:** The team successfully delivers in a manner that satisfies relevant audiences (such as bosses, customers, and/or investors).
- 2. **Team strength and flexibility:** The team gets better and better at what it already does together (strength) and the team builds capacity to take on new work and respond to unexpected challenges (flexibility, sometimes referred to as adaptability).
- 3. **Individual learning:** Individual team members learn and grow, so they are equipped to work in new ways and take on new tasks and responsibilities.





GCET IS NOW A PMI AUTHORIZED TRAINING PARTNER

By: Dr. Sulaiman Al Hasani

- PMI (Project Management Institute) has granted the status of ATP (Authorized Training Partner) to the Global College of Engineering and Technology (GCET). The Project Management Institute (PMI) is a U.S.based not-for-profit professional organization for the advancement of the project management professions all over the globe. This partnership will help GCET deliver PMP exam prep courses with the licensed PMP exam course materials, developed by PMI. As an Authorized Training Partner, GCET would support the professional development needs of the Project Management practitioners and educate them to attain the PMI Credentials. GCET has fulfilled the following earning criteria for ATP status:
- The Organization must be a legal business entity for 3 years andpass a background and credit check.
- Must have documented customer resolution issue process.
- Must use PMI-provided course content for PMP® exam prep courses.
- Instructors must complete
 Authorized Training Partner Train
 the trainer PMP® Exam Prep to
 teach PMP® exam prep courses.
- Instructors must be certified PMP credential holders and well acquained with PMI, and possess agile project experience to teach PMP® exam prep courses.

- As PMI Authorized Training Partner, GCET can run courses and training sessions in the following areas:
- 1. Introduction to Project Managment
- 2. Advance Project Management
- Project Finance, Financial analysis and CBA (Cost-benefit Analysis of Projects)
- 4. Project Schedule, Risk, Quality, and Procurement Management
- 5. Social Sector (NGO-Sector) Project Management
- 6. Monitoring and Control of Projects
- 7. Agile Project Management



Ms. Pooja Om Prakash English Tutor, FS

The English Club at Global College of Engineering and Technology aims at boosting the confidence and communication of students throughout the tenure of their course. The club strives to improve the English language proficiency of students and to provide a learning platform to everyone enrolled in GFP. The English Club also promotes local initiatives and motivates students to actively participate in community outreach initiatives.

The club organized an online slogan writing competition titled "18th November 2020-The Golden Jubilee of Oman " for the foundation students. The objective of the event was to enhance students' critical thinking, writing, and creative skills. In addition to that, it was an initiative to enhance students' self-confidence to participate in social activities. All the participants were given a certificate of appreciation, and the 3 winners were awarded mementos for their excellent entries. Overall, this event successfully provided a platform for the Foundation students to exhibit their creativity and thinking skills. In February 2021, another competition was organized by the English that aimed at improving both writing and listening skills by giving them a task to write a movie review on 'The Big Chop'. It was also meant

Achievements of The English Club

to enhance critical thinking, providing them a platform to express their opinion and understanding by exploring a range of vocabulary in English. All GFP students were a part of this competition. The best review from each group of all three stages was awarded a memento and a certificate of excellence.

Mother's Day on March 21, 2021, was celebrated by the English Club in collaboration with the Student Services Unit. An oratory competition was organised for the students for the same. They were given a couple of topics to choose from and then give a speech. The topics ranged from the role of a mother in a family to the struggles of a mother.

The 6th Intercollegiate Spell Bee was held at The Scientific College of Design in April. Three students from the General Foundation Program of GCET participated in the competition. The competition aimed at providing a platform to the foundation students of the Sultanate of Oman to enhance their vocabulary in the English Language. Ms. Pooja from the FSD was one of the panel judges. Two of our students won in the competition and earned the first two positions.

The English Club organized an online Inter College Debate Competition titled "MONEY BUYS HAPPINESS" for the General Foundation students on 22nd of June 2021. Twenty students competed in the debate from 10 different colleges and institutions of the Sultanate of Oman. The purpose of this was to improve the communication and debating skills among the GFP students in Oman.





Awards and winning works of participants of the Slogan Competition



An award winner of Slogan Competition

| COLLEGE PAST ACTIVITIES AND EVENTS





Congratulations!

Spell Bee 6 Winners

Free Beers Congratulations

Free Beers Congratu

Certificates of Winners of the Film Review Writing Competition and students collecting mementos









The English Club at

Global College of Engineering and Technology is pleased to invite you to the virtual celebration on the occasion of

Mother's Day

To participate in the cratory competition, send an ental to project edu on There will be prizes for the virtual certificates for all the participants.

Morns will also receives surprise gifts.





The oratory competition on Mother's Day and the certificate of its winner



FSD faculty handing memento and certificate to a winner of the Intercollege Online Debate Competition

COLLEGE PAST ACTIVITIES AND EVENTS



ster through the link https://bit.ly/3v4EH34







The Academic department of Computing and IT (CIT) planned a series of webinars for the academic 2020-2021. **Professionals** year from the industry and academia are invited every year to deliver the webinar series starting from April 2021 till August 2021. The presenters include Dr. Mazhar Hussain Mali, Head of CIT, Dr. Amjed Sid Ahmed, Director Research and Innovation and a Senior Lecturer at CIT GCET, Ms. SITI Baizura Mohammed Yousof, Assistant Superintendent (ASP), Cyber Crimes and Multimedia Division, Royal Malaysia Police, Dr. Ali Shahidinnejad, Assistant Professor, Islamic Azad University Qom, Iran and Dr. Shahnawaz Khan Assistant Professor and Secretary-General Research Council of Scientific Department of Information Technology University College of Bahrain, Bahrain.

Webinar Series

This series of webinars attracted more than 1000+ participants and were conducted as per the following schedule.



S.No	Webinar Topic	Presenter	Scheduled
1	Data Science and Business Intelligence	Mr. Saqib Hussain, Lecturer of Academic Department of Computing and IT	19 th April 2021
2	Integrating Data Science and Deception Techniques for Active Defense	Dr. Amjed Sid Ahmed, Director Research and Innovation and Senior Lecturer of Academic Department of Computing and IT	20 th April 2021
3	An introduction to Blockchain and its applications in network security	Dr. Ali Shahidinnejad, Assistant Professor, Islamic Azad University Qom, Iran	21st April 2021
4	Digital Crimes Investigation Challenges	Ms. SITI Baizura Mohammed Yousof, Assistant Superintendent (ASP), Cyber Crimes and Multimedia Division, Royal Malaysia Police	24 th April 2021
5	Next Big Thing: Al driving force for Data Science	Dr.Mazhar Hussain Malik, Head of Academic Department of Computing and IT	5 th May 2021
6	Datawarehouse and Intelligent Systems	Mr. Muhammad Noman Farooq, Datawarehouse specialist	29 th July 2021
7	Artificial Intelligence for Smarter CyberSecurity	Dr. Shahnawaz Khan Assistant Professor and Secretary General of Scientific Research Council Dept. of Information Technology University College of Bahrain, Bahrain	5 th August 2021
8	Design and Verification of Authentication Protocols	Dr. Ali Shahidinnejad, Assistant Professor, Islamic Azad University Qom, Iran	12 th August 2021









Librarian on the GO

By: Ms. Zahraa Al Kasbi

The Head of GCET Library and Learning Resources, Ms. Zahraa Al Kasbi, was one of the resource speakers during the UWE Partnership Conference, held on July 8, 2021, for the libraries working in partnership with the University of the West of England (UWE Bristol) and University of Greenwich Conference.

The event focused on the collaboration to deliver library support for programmes taught at the partner institutions. It was also about collaborating within the institutions, moving library services online in 2020, and what comes next. The event served as an opportunity for the partner libraries to create a dialogue to

assist and learn from each other as well as complementing each other to support students in the best way possible.

Overall, the event was very successful and was attended by several UWE International Partners from the UK and other countries. It also covered many common issues and experiences.







More International Students at GCET: Live Presentation to "Lecogulf Student Network"

By: Dr Ahmad Hosseini

Every year many international students join GCET. This proves the premium quality of our College and the international recognition of our partnerships with UWE and other renowned entities.

In a live presentation to the popular student network "Lecogulf", the Head of the Department of Foundation Studies, Dr. Ahmad Hosseini, introduced the opportunities for studying at GCET. He explained GCET undergraduate and postgraduate programmes to the audience of more than 150,000 students and 500 Lecogulf representatives in Iran, Oman, Qatar, Iraq, UAE, Turkey, Azerbaijan, Russia, and Georgia.

"Lecogulf" is a student network in partnership with Sharif University, the most famous Engineering and Technology University, in Iran. The network has introduced thousands of distinguished students to European and American universities and is well-known for its patented mind-games and international student Olympiads. The cooperation of GCET and Lecogulf can diversify the college intakes and prepare GCET for a more regional presence. In another visit, the management, staff, and students of the Iranian School Complex in Muscat welcomed the Head of Foundation Studies and GCET Marketing team. The objective of the meeting was to explain how GCET can be the next stop on the students' road to success.









Ms. Maryam Alamri HoD SSSO

The Student Services and Support Department, in cooperation with Professor Muhammad bin Abdullah Al Qasimi, a renowned Pressional Trainer, conducted a 03-day workshop from 11 July 2021 to 13 July 2021 for the graduate students on developing the capabilities of job seekers.

The workshop aimed at helping the job seekers or those who are about to graduate from universities and colleges, where the focus, through the workshop's axes, was on the practical side, especially with regard to preparing for a job interview as well as preparing a CV.

This workshop also focused on self-discovery, developing strengths, and employing them in achieving goals. The workshop methods varied in accordance with the recognized international training standards to achieve the desired goal of implementing the workshop.

Participants also practised the needed skills to achieve a level of self-confidence to market themselves to get a job.





The Academic Department of Computing and IT gladly presented the awards and certificates to the winner of the Programming Competition held online on 27th June 2021. Ms. Aysha Khalfan Khamis Al Hadi from Global College of Engineering and Technology secured the first position. Around 133 students competed from twelve different colleges and institutions of the Sultanate of Oman. The winners of the competition were as follows:

S.No	Student Name and Affiliation	Position
1	Aysha Khalfan Khamis Said Al Hadi,	1 st
	Global College of Engineering and Technology	
2	Qusai Asim Alsaidi,	2 nd
	Modern College of Business and Science	
3	Sultan Saif Al Sibani,	3 rd
	German University of Technology	

GCET is making continuous efforts to develop the interactive education system through virtual educational platforms and in cooperation with the community institutions.

GCET Staff are now Fully Vaccinated

By: Professor Geoffrey Elliott

The majority of our treasured colleagues (and their families) signed up to the Covid-19 Private Vaccination Scheme offered by the Oman Government to private companies. We are very grateful to His Majesty Sultan Haitham Bin Tariq, and the Ministry of Health, for offering the College this opportunity to protect our staff.

We are also very grateful to our dear College Clinic Nurse, Mrs. Rinet Menezes, for all her hard work and dedication in ensuring that the staff receives the first and second vaccination doses of Pfizer BioNTech in an efficient, timely, and effective manner. It is highly appreciated. Thank you Mrs. Rinet.

The first dose of the Covid-19 vaccine was administered from 19 June to 22 June 2021 and the second dose was from 10 July to 13 July 2021.

The College is immensely pleased to receive a letter from the Ministry of Health formally thanking the College management for its positive contribution in supporting the Covid-19 Vaccine Fund. The Ministry quoted "On this occasion, we are pleased to inform you that the required doses of the vaccine have been reserved for all employees working in your esteemed organization". We are honoured and proud that the Ministry of Health commended our contribution towards the immunization campaign.

It is now important that the staff members who couldn't receive the vaccine doses because of some reasons, must receive them before the start of the new Academic Year 2021–2022. We expect students back on campus and this will require us to prove our staff is fully vaccinated.

Stay safe! Follow all the guidelines and instructions of the Supreme Committee on preventing the spread of the Covid-19 virus and we, hopefully, will see the end of this terrible pandemic, soon.



Mrs. Rinet Menezes College Clinic Nurse

The College are very grateful for all her hard work and dedication in ensuring that the staff receives the first and second vaccination doses of Pfizer BioNTech in an efficient, timely, and effective manner.









New Research and Conference Publication

Department of Electrical and Electronics Engineering (EEE)

Dr. Javeed Hussain from the Department of Electrical and Electronics Engineering (EEE) published a research paper on Nano-carbon Fiber Composite Materials.

- 1. Farooq, U., Ali, U., Hussain, J.S., Ahmed, S., Zafar, A., Ghafoor, U and Tayyab. S. (2021) Improved Ablative properties of Nano Diamond-Reinforced carbon fibre-Epoxy matrix composites, Polymers.
- Dr. Irfan Memon and Dr. Javeed Hussain from the Department of Electrical and Electronics Engineering (EEE) published a research paper on Solar and Wind Power Energy.
- 1. Riaz, M., Hanif, A., Hussain, S.J., Memon, M.I., Ali, U., and Zafar, A. (2021) An Optimization-Based Strategy with Stochastic Solar and Wind Power Energy. Journal of Physics, Applied and Engineering, Multidisciplinary.
- Dr. Mohammad Mohatram from the Department of Electrical and Electronics Engineering (EEE) published five research papers in the field of Signal Processing, Communication and Solar Energy.
- 1. Lavanya, P., Satyanarayana, P., and Mohatram, M. (2021) Peak to average power ratio reduction of ZT DFT-S-OFDM signals using hybrid improved monarch butterfly optimization-PTS scheme with TR-clipping scheme. International Journal of Communication Systems.

- 2. Lavanya, P., Satyanarayana, P., and Mohatram, M. (2020) Testing of a Novel Tone Reservation technique for reduced PAPR of Zero Tail DFT-s-OFDM Signals Using TR Clipping. International Journal of Engineering Trends and Technology. 68(11), pp. 1–8.
- 3. Lavanya, P., Satyanarayana, P., and Mohatram, M. (2020) Evaluation of PAPR Reduction Ability Of 5G Inspired Waveform Candidates. International Journal of Advanced Research in Engineering and Technology (IJARET), 11(11).
- 4. Lavanya, P., Satyanarayana, P., and Mohatram, M. (2020) Peak to average power ratio reduction of ZT DFT-s-OFDM signals using improved monarch butterfly optimization-PTS scheme. Journal of Ambient Intelligence and Humanized Computing, Springer Nature.
- 5. Al Busaidi, M., and Mohatram, M. (2020) Designing an Automatic Awning System Powered by Solar Energy. International Journal of Electrical and Electronics Research. 8(2), pp. 29-37.

Department of Computing and IT (CIT)

Dr. Mazhar from the Department of Computing and IT (CIT) published a research paper on Mobile Edge Computing. 1. Shahidinejad, A., Farahbakhsh, F., Ghobaei-Arani, M., Malik, M.H. and Anwar, T., (2021) Context-Aware Multi-User Offloading in Mobile Edge Computing: a Federated Learning-Based Approach. Journal of Grid Computing. 19(2), pp.1-23.

Department of Mechanical Engineering (ME)

- Dr. Siva from the Mechanical Engineering Department published three research articles and received the best paper award for "A study on optimization of horizontal ground heat exchanger parameters for space heating application".
- 1. Thangavel, S., Verma, V., Tarodiya, R. and Kaliyaperumal, P. (2021) A study on optimization of horizontal ground heat exchanger parameters for space heating application. Materials Today: Proceedings.
- 2. Thangavel, S., Verma, V., Tarodiya, R. and Kaliyaperumal, P. (2021) Comparative analysis and evaluation of different working fluids for the organic Rankine cycle performance. Materials Today: Proceedings.
- 3. Parameswari, K., Al Aamri, A.M., Gopalakrishnan K., Arunachalam, S., Al Alawi, A.S. and Thangavel, S., (2021) Sustainable landfill design for effective municipal solid waste management for resource and energy recovery. Materials Today:

Best Moodle Site Awards

2021

GCET awarded Certificates of Commendation for 'Best Moodle Site 2021'
Delivering Excellence in Learning, Teaching and Student Support.
Congratulations to all the award winners!

The winners were:



Best Moodle Site 2021 First Prize: Ms. Zamzam Al Rawahi

Best Moodle Site 2021 Second Prize: Mrs. Rahma Al Amri





Best Moodle Site 2021:
Certificate of Commendation
Dr. Javeed Hussain - 'Certificate
of Commendation for
Comprehensive Moodle Content
and use of Formative Quizzes'



Best Moodle Site 2021: Certificate of Commendation Mr. Mario Anud Jr. & The Library Team - 'Certificate of Commendation for Integrating and Publicizing Library Support in Moodle to Encourage Students' Learning'.





Best Moodle Site 2021: Certificate of
Commendation
Mr. Saqib Hussain & Mr.
Nadeem Akhtar - 'Certificate
of Commendation for Evidence
of Outstanding Students'
Engagement'.

PROUD MOMENTS

Best Conference Paper Award



Dr. Sivasakthivel Thangavel, our Senior Lecturer from the Department of Mechanical Engineering (ME) received the Best Paper Award amongst presented papers in the International Conference on Materials and System Engineering ICMSE-2021 organized by the Department of Mechanical Engineering, SJB Institute of Technology, Bengaluru, India in association with Technical Institute for Engineers (T.I.E), Bengaluru on the 8th of May 2021. We're thankful to Dr. Sivasakthivel Thangavel for bringing this pride to GCET.



GCET Staff Joined the elite rank of IEEE Senior Members



Dr. Javeed Hussain Shaik has been elevated to the rank of Senior Member of IEEE this year. Senior Member is the highest professional grade of IEEE for which a member may apply. It requires extensive experience; and reflects professional accomplishment and maturity. Only 10% of more than 400,000 IEEE members have achieved this level so far.

We are very pleased to have Dr. Javeed joined the elite rank of IEEE Senior Members. We are proud of his professional achievements that led to this recognition. We look forward to additional contributions and successful projects from Dr. Javeed.



Outreach Event: Virtual Extemporaneous Speaking Contest

On June 17th, 2021, Mrs. Rahma Al Aamri, our senior lecturer at the FS Department, was invited as a guest judge at the First Virtual Extemporaneous Speaking Contest, organized by the Center for ESL and Academic Preparations at the Modern College of Business & Science. It was open for the students of all stages of MCBS and was attended by a large number of students and teachers. The contest focused on students' speaking and communication skills, organization of thoughts, and expression. It was an opportunity for the students to express themselves and practice English outside the class room setting.

Participation in similar events organized by the different educational institutions in the Sultanate of Oman promotes community engagement and serves as a platform to share the best practices.



GCET Staff Patented an Invention



(19) INDIA

(22) Date of filing of Application: 03/05/2021

(43) Publication Date: 07/05/2021

(54) Title of the invention: AN EFFICIENT TECHNIQUE FOR CLASSIFYING NORMAL AND PATHOLOGICAL TISSUES SEGMENTATION IN MRI BRAIN IMAGES USING DUAL CLASSIFIER WITH DYNAMIC STATISTICAL AND 2D WAVELET FEATURES

(51) International classification G06T0007110000 A61B0005055000 (31) Priority Document No (32) Priority Date (33) Name of priority country (86) International Application No Filing Date (87) Internationa Filing Date (87) International Publication No (61) Patent of Addition to Application Filing Date
(62) Divisional to Application Number
Filing Date

71)Name of Applicant: 1)Dr. Shaik Javeed Hussain Address of Applicant: 8/205, Ravindra Nagar, Kadapa-16003, Andhra Pradesh, India. Andhra Pradesh India

16003, Andhra Pradesh, India. A 2)Dr. Mohammed Mohatram 3)Dr. Shaik Asif Hussain 4)Shaik Zahid Hussain 72)Name of Inventor: 1)Dr. Shaik Javeed Hussain 2)Dr. Mohammed Mohatram 3)Dr. Shaik Asif Hussain 4)Shaik Zahid Hussain

(57) Abstract:
ABSTRACT Title: An Efficient Technique For Classifying Normal And Pathological Tissues Segmentation In MRI Brain Imag Dual Classifier With Dynamic Statistical And 2d Wavelet Features In the present invention, an efficient technique is use in the Company of the Using Dual Classifier With Dynamic Statistical And 2d Wevelet Features in the present invention, an efficient technique is used for process eigenmentation of normal and pathological tissues in the MRI brain images. The proposed segmentation technique initially performs classification process by utilizing Fuzzy Inference System (FIS) and FFBNN. Both classifiers are utilizing the extracted image features as an input for the classification process. The features that are extracted in two ways from the MRI brain images. FIS are used to make the classification process by generating the fuzzy rules using extracted features. Five features are extracted from the MRI minages: they are two dynamic statistical features and three 2D wavelet decomposition features. In Segmentation, the normal tissues such as WMI (White Matter) and CSF (Cerebrospinal Fluid) are segmented from the hormal mages are promoved by the perpotencessing stage. The implementation result shows the efficiency of proposed tissue segmentation technique in segmenting the tissues accurately from the MRI images. The performance of the segmentation technique is evaluated by performance measures such as accuracy, specificity and sensitivity. The performance of segmentation process is analyzed using a defined set of MRI brain image and compared against K-means clustering and Fuzzy ANN based segmentation methods.

No. of Pages: 37 No. of Claims: 3

Two Senior Lecturers from the Department of Electrical and Electronics Engineering (EEE), Dr. Javeed Hussain Shaik and Dr. Mohammed Mohatram patented an invention 'the second time around' on an efficient technique for classifying normal and pathological tissue segmentation in MRI Brain images using dual classifiers with dynamic statistical and 2D wavelet features on May 7, 2021 issued by the publication of the patent office in India. The College is very pleased and proud of their achievements.

IET membership grade elevation

Dr. Javeed Hussain and Dr. Amjed have been awarded Member of Institution of Engineering and Technology (IET) with designatory letters MIET. It requires extensive experience and reflects professional accomplishment and maturity. Its worldwide membership is currently more than 158,000 in 153 countries. The IET is registered as a charity in England, Wales, and Scotland.

The Institution of Engineering and Technology is a multidisciplinary professional engineering institution. In the United Kingdom, the IET has the authority to establish professional registrations for the titles of Chartered Engineer, Incorporated Engineers,

Engineering Technicians, licensed member institution of the **Engineering Council.**

We are pleased to have Dr. Javeed Hussain and Dr. Amjed joined the elite rank of Member IET. We are proud of their professional achievements that led to their recognition.







Ms. Pooja Om Prakash English Tutor, FS

MAKING OF A WINNER

"Winning isn't everything, it's the only thing."
- Vince Lombardi, A famous American football coach.

Generally, people consider it mere luck when they see a successful person. Is it true? Does success come easy?

Don't you think that we all have the potential to trace our higher capabilities? We all are born to win, but what we often lack is the right attitude and the thirst to achieve.

So, let's find out what makes a WINNER!!

Let's peep into the lives of some extraordinary people to learn some of the traits to be a winner, a leader, and a champion.



Nick Vujicic, born without any limbs, has become a source of inspiration for many around the world. In his words, to live without limits, all a

person needs is -

A powerful sense of purpose
Hope so strong that it
cannot be diminished
Faith in God and the infinite

possibilities

Love and self-acceptance
Attitude with altitude

A courageous spirit

Willingness to change

A trusting heart

Hunger for opportunities

The ability to access risk and

to laugh at life

A mission to serve others first!!



Nelson Mandela's autobiography "LONG WALK TO FREEDOM" reveals the life of a man who has been a political activist for fifty years, and still retains the ability to reflect on himself

as a mere mortal. (Baverley Naidoo, The Times Educational Supplement)
He is one of Humanity's most outstanding examples of Resolve and Graciousness. He never allowed his circumstances to diminish who he chose to be. In the words of an unknown poet from India -

Man 'O' Man

He refused to surrender

The human in him even to the most inhuman No matter what you take from him

You could not make him a lesser Man

Bond of bondage and suppression Of the worst kind.

Unrelenting in his longing for Dignity and Freedom

Lived to see demonic rule end
Unfettered by bitterness or hate
Celebrating freedom with laughter
and joy.

Not many a man were born
Like him till our times
Hope he spawns many
Who will live like him?
The future needs many like him.
Man 'O' Man

| FEATURED ARTICLES

Last, but not the least, Dr. APJ Abdul Kalam, son of an uneducated boat owner in Tamil Nadu, India, had an unparalleled career as a defense scientist, the Missile Man of India, culminating in the highest civilian award of the country, the Bharat Ratna. He was also sworn in as the eleventh President of India. In his autobiography, he wrote:

"Beautiful hands are those that do

Work that is earnest and brave and true

Moment by moment

The long day through."

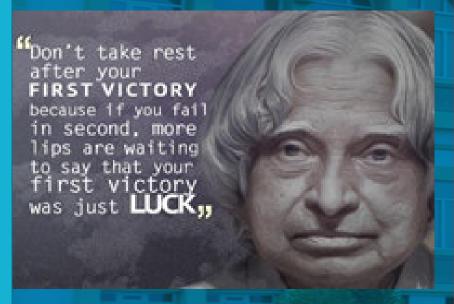
At another place in the same book, he penned down:

"If you want to leave your footprints

On the sands of time

Do not drag your feet."

So, why wait! Let's be one of them. Let's strive, thrive, and make a legacy in the field we are in. Become the winners of time unparalleled.



References:

Maraniss, David - When Pride Still Mattered: A Life Of Vince Lombardi. Simon & Schuster, 2000. (Chapter 21, "Winning Isn't Everything" and Chapter 22, "It's the Only Thing.")

Khera, Shiv - You Can Achieve More: Live by Design, Not by Default. Bloomsbury, 2018. (Chapter 7, Making of a Winner)

Vujicic, Nick - Life without Limits. WaterBrook Press, 2010.

Mandela, Nelson - Long Walk to Freedom: The Autobiography of Nelson Mandela. Little, Brown and Company, 1994.

Abdul, K. A. P. J., & Tiwari, A. (1999). Wings of fire: An autobiography.



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INVISIBLE THREAT

By: Hana Ali Salim Al-Alawi

An enemy conquered our lives, It seems that it's from Ebola's tribe. No celebrity can match its fame Coronavirus is its name. It is making us slow down by entering our towns. It's spreading negative vibes by taking people's lives. It breaks unbreakable. Every day the number of cases is unquantifiable. It proves that social distancing is the new game, If being safe is your only aim. Whoever becomes its victim gets quarantined because it spreads and makes a sorrowful scene. The victims are trying their best to survive, by staying safe and getting sanitized. The savior has arrived called vaccine. you might survive if you take it twice. To get it please be very keen, it's our last hope and god

bless us say Amen.

