COLLEGE OF ENGINEERING AND TECHNOLOGY

CET NEWSLETTER

1st Issue   **JUNE**   **2025**

NOTHING IS IMPOSSIBLE
IS THE PATHWAY TO SUCCESS

PIONEERING THE FUTURE:
CET Introduces New Degree Programs inCybersecurity, Mechatronics, and AI

The President of the American University in the Emirates, Prof. Muthanna Abdul Razzaq, highlighted a significant academic milestone recently achieved by the College of Engineering and Technology. The Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) has approved three new programs launching this fall: the Bachelor of Science in Cybersecurity Engineering, Bachelor of Science in Mechatronics Engineering, and Master of Science in Artificial Intelligence and Data Science.

These programs, already provisionally accredited by the UAE's Commission for Academic Accreditation (CAA), reflect AUE's strong commitment to leading in emerging fields aligned with national goals and global innovation. The President emphasized that these offerings showcase AUE's growing strengths and support its mission to deliver forward-thinking education and research in vital engineering and technology areas.

Prof. Abdul Razzaq praised the dedicated efforts of the College of Engineering and Technology, the Vice Presidents for Academic Affairs and Research, the Institutional Effectiveness Department, and other key university units whose collaboration made this possible. He also thanked the Board of Trustees for their vision and continued support.

With enrollment now open, the President called on all departments to actively support recruitment and ensure the successful launch and sustainability of these programs. He affirmed that this milestone marks a new phase in AUE's journey toward academic excellence and national impact.

The future of tech education starts here—join us as we pioneer the next generation of innovation!

CET ON THE RISE:
A New Era Begins A Message from the Dean

Dear Students, Faculty, and Partners,
It is with great pride and enthusiasm that I welcome you to the inaugural issue of the CET Newsletter. This marks not only the launch of a new communication platform for our college but also a celebration of a transformative year for the College of Engineering and Technology at AUE.

We are thrilled to share that the college has recently achieved several key milestones that reflect our unwavering commitment to excellence and innovation. Most notably, we have completed a successful ABET accreditation review visit. While the final reaccreditation decision is expected in October 2025, the preliminary feedback from the visiting team was very positive, affirming our continued commitment to academic excellence and continuous improvement.

Equally exciting is the approval of three new academic programs—the Bachelor of Science in Cybersecurity Engineering, the Bachelor of Science in Mechatronics Engineering, and the Master of Science in Artificial Intelligence and Data Science. These programs have received official recognition from both the Commission for Academic Accreditation (CAA) and the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC), positioning AUE at the forefront of technological education in the region and enabling us to expand our academic offerings in alignment with national priorities and global trends.

As we move forward, these achievements represent more than milestones—they reflect the dedication, collaboration, and vision that define CET. I invite all members of the CET community to stay engaged, share your achievements, and continue to embody the spirit of innovation that defines our college.

BACHELOR OF SCIENCE IN CYBERSECURITY ENGINEERING

BACHELOR OF SCIENCE IN MECHATRONICS ENGINEERING

MASTER OF SCIENCE IN AI AND DATA SCIENCE

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A MILESTONE FOR EXCELLENCE

ABET
Engineering Accreditation Commission

The Bachelor of Science in Computer Science (BSCS) program was launched in 2008 under the former College of Computer and Information Technology (CCIT) with a clear mission: to provide a high-quality, student-centered education

Since its inception, the university has prioritized a healthy and sustainable learning environment that empowers students to achieve academic excellence in alignment with the institution's mission, goals, and objectives.

With a long-term vision to produce competent and future-ready computing professionals, the BSCS program has consistently evolved to reflect global educational trends and industry expectations. It is nationally accredited by the Commission for Academic Accreditation (CAA) in the United Arab Emirates and internationally recognized by the Computing Accreditation Commission of ABET, a leading accreditor of programs in computing, engineering, and applied sciences. The program was initially accredited by ABET in the 2018–2019 cycle, a milestone that validated its adherence to internationally benchmarked standards.

As part of its ongoing pursuit of academic excellence and continuous improvement, the Computer Science Department, now part of the College of Engineering and Technology, hosted a distinguished ABET delegation in December 2024 for the program's reaccreditation review.

This rigorous evaluation assessed the department's alignment with ABET's evolving criteria, including curriculum quality, faculty qualifications, student outcomes, assessment methods, and the implementation of systematic improvement processes.

ABET accreditation plays a critical role in affirming that academic programs meet the highest standards of quality, relevance, and continuous enhancement. It ensures that essential components—such as course design, teaching effectiveness, and student achievement—are aligned with global best practices in technical education. This external validation not only boosts the university's academic credibility but also elevates the value of its degrees in both local and international contexts.

For graduates, the benefits of ABET accreditation are substantial:

- **Improved employability in competitive job markets**
- **Greater access to professional licensure and global certifications**
- **International recognition of qualifications**
- **Increased employer confidence in the quality and relevance of the education received**
- **Real-world, industry-aligned preparation**
- **Ongoing curriculum enhancement rooted in measurable learning outcomes**

This reaccreditation effort marks a significant achievement for the college and the broader university community. It reflects AUE's enduring commitment to delivering world-class computing education and preparing computer scientists, engineers, and IT professionals capable of solving complex, real-world problems. As AUE awaits the final reaccreditation outcome, the university proudly celebrates this milestone, confident that it further strengthens its standing as a leading academic institution in the region and beyond.

CET IS DEDICATED
to inspiring the next generation of innovators.

Exploring the frontiers of immersive technology

Dr. Alya Amer, a distinguished professor from our college, visited Al Shola Private School in Ajman to introduce students to the world of immersive technologies.

Her engaging presentation covered Virtual Reality (VR), Augmented Reality (AR), Mixed Reality (MR), Extended Reality (XR), and the Metaverse, showcasing their applications across industries like healthcare, education, and gaming.

Dr. Alya also highlighted the role of Artificial Intelligence (AI) in gaming, from enhancing Non-Player Characters (NPCs) to improving graphics and cybersecurity. These technologies are reshaping how we interact with digital and physical worlds, offering endless possibilities for innovation.

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CET Hosts AI Workshop for Al Maaref School Students

As part of its ongoing outreach and commitment to STEM education, the College of Engineering and Technology (CET) recently welcomed students from Al Maaref Private School for an engaging and interactive workshop on Artificial Intelligence (AI), led by Dr. Alyaa Amer.

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Dr. Alyaa Amer delivered a dynamic session aimed at simplifying the fundamentals of AI for high school students, using real-life examples and interactive discussions to spark curiosity. She emphasized the importance of preparing for a future shaped by technology and encouraged students to consider Computer Engineering and AI as impactful career paths.

These workshops reflect CET's mission to lead in technological education and outreach, building bridges between academia and the community while fostering the next generation of tech innovators.

The visit also included a guided tour of CET's state-of-the-art labs and facilities, giving students a firsthand look at university life and the exciting possibilities of engineering and technology disciplines. The event left a lasting impression, with students expressing enthusiasm and newfound interest in pursuing further studies in AI and related fields.

BRINGING AI TO THE NEXT GENERATION:
Workshop for School Students

Dr. Rami, one of our esteemed professors, recently conducted an engaging workshop aimed at introducing school students to the exciting world of AI applications. The session provided young minds with a hands-on experience in understanding how artificial intelligence is shaping industries, from healthcare to entertainment. Through interactive demonstrations and real-world examples, Dr. Rami simplified complex AI concepts, making them accessible to students with little to no prior knowledge.

The workshop emphasized the ethical use of AI, encouraging students to think critically about its impact on society. Dr. Rami also introduced them to basic machine learning models, showcasing how AI can recognize patterns, assist in decision-making, and even enhance creativity.

This initiative is part of the university's broader efforts to promote STEM education and community engagement. By connecting academic expertise with early learners, the university aims to ignite curiosity, build foundational skills, and nurture a new generation of innovators ready to shape tomorrow's digital landscape.

GITEX DUBAI 2024:
A Global Showcase of Innovation and Collaboration

From October 14 to 18, GITEX Dubai 2024, held at the Dubai World Trade Centre and Dubai Harbour, reaffirmed its status as the world's largest tech event. With over 6,500 exhibitors, 1,800 startups, and 1,200 investors from more than 180 countries, the event broke participation records and showcased groundbreaking innovations. Highlights included Tech Investment Day, Super AI Tuesday, Cybersecurity Day, Data Centers Universe, and Futuristic Friday, each focusing on transformative technologies like AI, quantum computing, cybersecurity, and advanced robotics

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Those workshops reflects CET's mission to lead in technological education and outreach, building bridges between academia and the community while fostering the next generation of tech innovators.

Dr. Mohammed Al Nasar on "Excel and ChatGPT: Data Analysis Power Tips." The lecture, aimed at educating faculty and staff, focused on how AI tools, particularly ChatGPT, can enhance data analysis and workflow efficiency.

The session covered key concepts such as prompt engineering, guiding participants on crafting effective prompts to maximize AI-driven insights. Additionally, practical use cases demonstrated how ChatGPT can assist with Excel troubleshooting, formula generation, PivotTable creation, and even VBA automation, making it an invaluable assistant for data analysts.

Dr. Al Nasar emphasized the transformative role of AI in modern data processing, illustrating how tools like ChatGPT and Google Bard can significantly reduce the time required for tasks, ultimately boosting productivity. He reassured attendees that while AI will not replace human talent, the skillset required for data professionals is evolving rapidly, making AI literacy essential for staying competitive.

With AI evolving rapidly, Dr. Al Nasar's session highlighted the importance of leveraging these tools to boost performance and innovation in academia and beyond. CET looks forward to hosting more workshops to keep faculty and staff at the forefront of technology.

AUE SECURES PRESTIGIOUS DUBAI RDI GRANT
Prof. Al Nasar Among Grant Recipients

In a remarkable achievement, the American University in the Emirates (AUE) was selected as one of only 13 universities to receive funding in the first round of the Dubai esearch and Development (RDI) Program. Out of 374 proposals submitted across the UAE

By advancing natural language processing (NLP) and regionalizing AI tools, the project seeks to make artificial intelligence more inclusive and accessible to Arabic-speaking communities.

This grant win not only reinforces AUE's strategic focus on cutting-edge research and innovation but also highlights CET's commitment to interdisciplinary collaboration and regional impact in emerging technologies.

DEAN OF CET CHAIRS LANDMARK GLOBAL EVENT

First international conference on
Artificial Intelligence Research

The American University in the Emirates (AUE) proudly hosted its first International Conference on Artificial Intelligence Research, marking a significant milestone in the university's commitment to technological leadership and global academic collaboration.

This groundbreaking event brought together a distinguished lineup of researchers, scholars, and industry leaders from around the world to explore the rapidly evolving field of artificial intelligence and its transformative impact across disciplines and industries. From ethical implications to real-world applications in healthcare, security, and education, the conference served as a vibrant platform for interdisciplinary dialogue and innovation.

AUE SECURES PRESTIGIOUS DUBAI RDI GRANT
Prof. Al Nasar Among Grant Recipients

Dr. Ibrahim Al Najjar, a distinguished faculty member of CET, was honored to participate as a speaker at the prestigious Governance of Emerging Technologies Summit (GETS 2025), held under the patronage of His Highness Sheikh Mansour bin Zayed Al Nahyan. The summit, organized by the Advanced Technology Research Council (ATRC) in strategic partnership with the UAE Public Prosecution, gathered international experts to address policy and legal challenges in rapidly evolving technologies.

In a compelling session titled "Protecting the Truth in an Age Shaped by AI," Dr. Najjar highlighted the legal and ethical complexities of AI in cybercrime investigations. He focused on AI misuse, evidence attribution, and the regulation of AI-powered forensic tools, stressing the need for policies that ensure transparency, accountability, and integrity in legal proceedings.

Dr. Najjar emphasized the critical role of digital forensics in identifying deepfakes, verifying AI-generated content, and upholding evidence credibility in court. His insights underscored CET's growing contribution to global discussions on responsible AI governance and emerging tech policy.

CET TEAM SHINES AT GITEX GLOBAL
CYBERSECURITY CHALLENGE

Under the leadership of Dr. Ibrahim Al Najjar, a team of CET students proudly represented the American University in the Emirates at the GITEX GLOBAL Capture the Flag (CTF) competition. Organized by CTF.ae in collaboration with the UAE Cyber Security Council, this highly competitive 2-day event brought together top talent from across the region to tackle real-world cybersecurity challenges.

The team registered using their university credentials and gained access to both GITEX GLOBAL and the competition. They engaged in intensive preparation, developing their expertise in diverse cybersecurity areas. Throughout the event, they demonstrated remarkable problem-solving skills and resilience, ultimately securing 7th place among the elite participants.

This achievement reflects the growing strength of CET's cybersecurity education and hands-on training approach. The experience provided valuable exposure to real-time threat analysis, ethical hacking, and secure coding. CET remains committed to fostering talent and will continue to support student participation in national and international tech competitions.

This year, exceptional students were honored in two esteemed categories: the President's List, reserved for students with the highest academic performance, and the Dean's List, recognizing those who have shown exemplary commitment to their studies and a consistent drive to excel. These honorees are a source of inspiration to their peers and a reflection of the university's high academic standards.

HONOR CEREMONY
"Congratulations, graduates! "
"May your future be filled with continued success and fulfillment."

At the American University in the Emirates (AUE), we take immense pride in acknowledging the dedication, perseverance, and academic excellence of our students. In keeping with this spirit, the university hosted its much-anticipated Annual Honours Ceremony, a distinguished event dedicated to recognizing those who have consistently demonstrated outstanding academic performance.
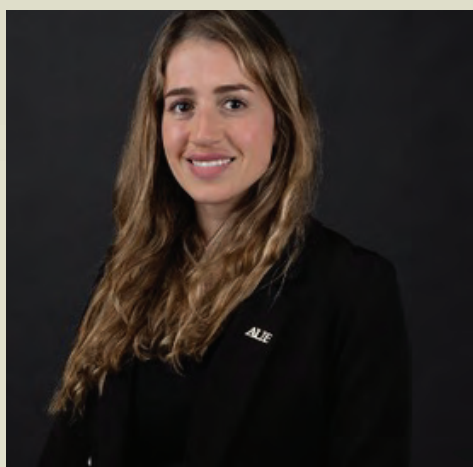
Held in an atmosphere of pride and celebration, the ceremony brought together students, faculty, families, and university leadership to applaud the efforts of high achievers who embody the values of hard work and excellence. The event is more than just a tradition—it is a powerful testament to AUE's unwavering commitment to fostering a culture of achievement, motivation, and continuous improvement.

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WELCOME ON BOARD

We are thrilled to announce the addition of three distinguished faculty members to the College of Engineering and Technology at AUE, each bringing a wealth of expertise and innovation to our academic community. Please join us in welcoming Dr. Alyaa Amer, Dr. Rania Abdallah, and Dr. Soliman Abdul Karim to the CET family. Their expertise and dedication will undoubtedly inspire our students and contribute to the continued growth and innovation of our college.

Welcome aboard!

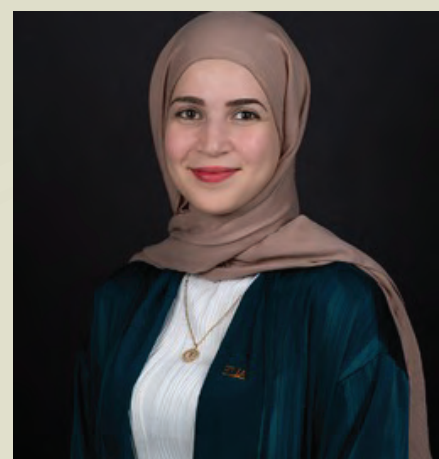### Dr. Alyaa Amer

Dr. Alyaa Amer joins us as an Assistant Professor with over 14 years of teaching and research experience in computer science and engineering. Holding a PhD from the University of Lincoln, U.K., Dr. Alyaa specializes in developing deep-learning models for medical image segmentation, classification, and detection, aiding physicians in diagnosis and decision-making. Her research has been published in reputable journals, and she is passionate about fostering innovative thinking among students. In addition to her academic contributions, Dr. Alyaa has held key administrative roles, including head of the control committee and student advising committee, showcasing her leadership and commitment to excellence.

Dr. Soliman Alkhatib

Dr. Soliman Abdul Karim, an Assistant Professor of Applied Mathematics, joins us with a strong background in applied mathematics and statistics. Holding MSc and PhD degrees from the University of Nice Sophia Antipolis, France, Dr. Soliman has extensive teaching experience in mathematics courses such as Calculus, Linear Algebra, and Differential Equations. His research, published in peer-reviewed journals, spans fractional differential equations, partial differential equations, and integral equations. Dr. Soliman's interdisciplinary approach and collaboration with engineering and IT disciplines will further strengthen our academic and research initiatives.

Dr. Rani Alabdallah

Dr. Rania Abdallah, a distinguished theoretical physicist, brings her expertise in molecular physics and spectroscopy to AUE. With a PhD in Physics from Khalifa University, UAE, Dr. Rania's research focuses on quantum mechanics, diatomic molecules, and UV spectroscopy. Her work on electronic structure calculations and synthetic spectra has been recognized at prestigious international conferences, including EGU and AGU. Dr. Rania's dedication to advancing the field of physics and her experience in teaching and lab instruction will undoubtedly enrich our academic programs.

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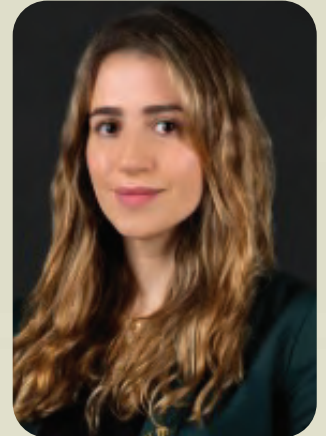
MEET THE EDITORIAL TEAM

This newsletter was prepared and finalized through the collaborative efforts of Dr. Alyaa Amer and Dr. Mohamed Al-Nassar,. Their combined expertise and commitment ensured that this edition reflects the spirit, achievements, and aspirations of the College of Engineering and Technology.

We also extend our sincere thanks to Hutoon Mumdoh Salih Mohammed, a proactive and committed student who played a vital role in gathering key information, tracing events, and supporting the content writing process. Her involvement reflects the growing engagement of our student body in shaping the college's academic and community voice. We commend her dedication and encourage other students to take part in such collaborative initiatives that foster growth beyond the classroom.
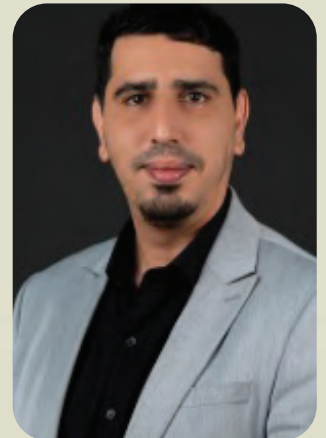
Working on this issue has been a rewarding journey of teamwork and creativity. Each page reflects hours of thoughtful planning, cross-checking, and collaboration to ensure an informative and inspiring read. It is our hope that this newsletter not only highlights recent accomplishments but also strengthens the connection between faculty, students, and the broader academic community.
We hope you enjoy reading this issue as much as we enjoyed creating it.

Your feedback and suggestions are always welcome as we strive to make each edition more reflective, engaging, and meaningful. Let this be an invitation for more voices to join us in future publications.

Dr. Alyaa Amer

Dr. Mohamed Al-Nassar

Hutoon Mumdoh