SPRING 2023-2024 ISSUE 1

COGS & CAFFEINE

WE ARE BACK

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EXECUTIVE TEAM'S NOTE

Dear readers,

Welcome to the revamped edition of Cogs and Caffeine!

As the executive team behind this student-led magazine, we are thrilled to unveil a fresh look aimed at showcasing the vibrant world of Engineering at the American University of Beirut. Inspired by the ethos of continuous improvement and innovation championed by MSFEA and AUB, we have implemented changes to the magazine's content structure and delivery methods while remaining true to Cogs and Caffeine's core mission.

These changes include producing multiple physical and shorter issues throughout the academic year, departing from the tradition of a single comprehensive issue at year-end. Additionally, we have expanded our coverage to encompass a broader range of topics to not only include engineering-related articles, but also information on internal MSFEA initiatives, job opportunities, inspiring student stories, and practical advice from experienced students. Whether you are a curious student, a seasoned faculty member, or an involved alumnus, our goal is to ensure there is something for everyone in our articles to enrich the reader's experience and foster a deeper connection with you, our audience.

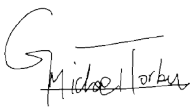
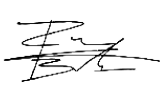
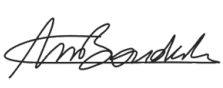
Since its inception, Cogs and Caffeine has aimed to bring MSFEA's countless success stories to light through interesting articles and inspiring stories. With recent changes, we seek to reaffirm Cogs and Caffeine as a valuable resource within the MSFEA community by acting more than just a magazine as a source of information. Our hopes is that Cogs and Caffeine will evolve into becoming a beacon of inspiration to current students reading the incredible success stories of talented MSFEA students, as well as providing opportunities to connect and grow with one another and gain priceless experiences at the faculty.

We would like to extend our heartfelt gratitude to all those that contributed to the revamp and assisted us in the process. We hope you will enjoy reading this magazine half as much as we enjoyed the journey of revamping and writing it.

To many more successful issues to come.

Sincerely,
The Cogs and Caffeine Executive Team

Michael Torbey | Roy El Badawi | Alex Boudakian | Joseph Choefati | Karen Tannous

CONTENTS

COMMONLY ASKED STUDENT QUESTIONS

1) HOW CAN I TRANSFER FROM MY MAJOR TO INDUSTRIAL ENGINEERING?

Industrial Engineering has been a very popular major amongst high-school seniors and current first year engineers. To transfer to Industrial Engineering, you should aim to maintain a high GPA (3.7 or higher) to enhance your chances of acceptance. For a tailored course plan and questions about the logistics of the transfer process, reach out to Nagham Kanj at nk156@mail.aub.edu or Alia Kazma at ak12@mail.aub.edu. They can provide you with individual guidance and support based on your current academic standing. You can also contact these two students who have transferred into INDE and would be more than happy to answer any questions you have!

Edmond Abi Abdallah (transferred from MECH to INDE): eia04@mail.aub.edu
Mohamad Ali Nachar (transferred from Business to INDE): mhn20@mail.aub.edu

2) HOW DO I REQUEST CAPACITY FOR MY MAJOR OR MAJOR-RELATED COURSES?

DO

keep an eye on emails from the departments you are interested in for information about the form you should fill for capacity

DO

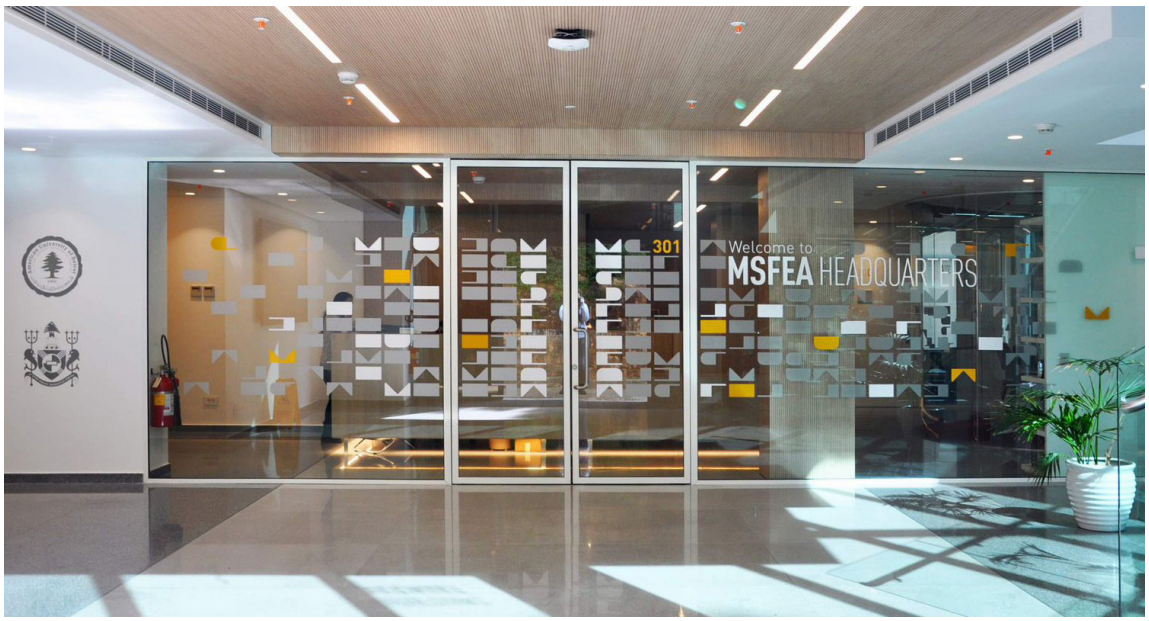
carefully review any restrictions that may prevent you from regist-ering for a course to ensure a seamless registration process

DON'T

request additional spots before the department has sent out an official email regarding capacity

DON'T

delay your request for extra capacity until the drop and add period; avoid visiting the department last minute for this purpose



TIPS AND TRICKS

TIP #1: BEAT THE MORNING RUSH!

To all students who park in the oxy parking lot, the space is usually full by 9:30 AM. If you have classes at 10 AM or 11 AM, aim to arrive earlier to secure your spot and avoid being late.

TIP #2: HATE LONG WALKS BACK?

Opening hours of lower campus gates:

- Hostel gate/Women's dorm gate: 7 days a week till 11 PM
- OSB Parking and CHSC (Charles Hostler) Gate both open Monday - Friday till 11 PM

However, all three of these options start closing at 10:45 PM, so in case you're studying late at MSFEA, either make sure to leave before these timings or you'll have to walk all the way to the Sea Gate or Main Gate, which both open 24/7.

MSFEA STANDOUTS

UNDERGRADUATE SPOTLIGHT

Beirut stands as a testament to resilience, where its people, including its engineers, are known for overcoming adversity through their character and experience. Embracing this, four Civil & Environmental Engineering students: Roy El Jabbour, Georges Rizkallah, Elie Faddoul, and Charles El Murr, decided to do their Final Year Project (FYP) under the guidance of Dr. Isam Kaysi, on sustainably rebuilding the port of Beirut that was ruined in the dreadful August 4 blast. The team partnered with Dar Al Handasah, a leading engineering firm in the Middle East, to consult them on the most effective way to do this. Their plan is to redesign three large steel warehouses that will store the right type of material which will be fully self-operational through the installation of solar panels. Knowing that sea levels are rising due to climate change, research shows that the port is prone to a water level rise of 60cm in the basin around the port. To tackle this, the team came up with a special design of raising the area of the port so the ships can continue operating safely, and increase efficiency within the port.

GRADUATE SPOTLIGHT

Meet Razan Al Kakoun, an AUB alumnus with a Master's in Computational Science with a specialization in Machine Learning and AI. She worked on a project during her AUB years to help ameliorate the farming sector in Lebanon. Farmers in Lebanon generally do not have access to advanced technologies, a problem that holds them back from progressing and developing their fields. Razan Al Kakoun therefore worked on a project to integrate AI into agriculture: "Advancing Agriculture Sustainability through Classification of Plant Pests and Diseases". One of the main issues in agriculture is that plant diseases, which are often contagious, are generally not detected early enough and end up infecting a whole crop, causing irreversible damage. As such, Razan's project was aimed at creating a website where farmers could input pictures of their infected plants. This website would function as a way to generate details about the disease in question using AI algorithms . From the algorithm, farmers would know the type of disease, its severity, its count, and whether it's contagious. The website was designed by training the algorithm on data sets that were already available in AUB greenhouses. With an algorithm accuracy of 90% Razan, her colleagues, and over 40 AUB volunteers were able to gather more than 50,000 pictures. The team then integrated generative adversarial networks (GANs) into their program to do the needed tweaking and normalization. As a result, Razan and the team reached an algorithm accuracy of 99%, and made the website publicly available in both English and Arabic to be used by farmers all over Lebanon.

ALUMNI SPOTLIGHT

Meet Nour Khairallah, an Industrial Engineering and Management Graduate, class of 2021.
Shortly after graduating from the American University of Beirut (AUB) in 2021 with a Bachelor's in Industrial Engineering, Nour embarked on her professional journey by joining Amazon as an Area Manager at one of the company's customer fulfillment warehouses in Fresno, California. The transition was significant; by January 2024, she had moved into a Business Analyst role still in Amazon, but now based in Austin, Texas.

"I AM EAGER AND EXCITED TO SEE WHERE THE FUTURE LEADS ME IN MY CAREER JOURNEY... BUT IF THERE IS ONE THING I AM SURE OF, IT'S THAT I AM GRATEFUL FOR THE KNOWLEDGE, FRIENDSHIP, AND VALUES THE AMERICAN UNIVERSITY OF BEIRUT HAS GRANTED ME".

The thought of leading a team of over 100 direct reports straight out of college,
especially during the night shifts for nearly two years, was something she probably wouldn't have believed if someone had suggested it earlier. Describing the initial two and a half years of her career as an Operations
Manager, she reflected on it as "Fulfilling. Challenging.
Eye-opening."—three words that resonated deeply with her experiences.

The fulfillment came from applying Lean Six Sigma principles and leading process
improvement projects, significantly reducing waste and enhancing team efficiency. These accomplishments were partly due to the knowledge gained from "Work Measurement and Methods Engineering", a course taught by Dr. Nadine Marie Moacdieh, whom Nour considers to be "one of my favorite professors back in Spring of my second year".
The challenge was in managing a diverse workforce of over 100 employees, each with unique personalities, skills, and motivations, often in high-pressure situations where time was crucial. This role as an Operations leader was both physically and emotionally demanding, more so because of the night shift schedule. This initial role offered a rewarding experience especially as she saw the tangible effects of her leadership on the business and the employees. Now, as Nour transitions to the role of a Business Analyst at Amazon, she recognizes the shift from being a people's leader to focusing on "honing technical and analytical skills". In this new area, she is developing cost-effective labor plans for Amazon's North America Customer Fulfillment network and working on advanced optimization tools.

INTERNSHIP & JOB OPENINGS

ARCHITECTURE:

- Architecture & Engineering Consultants - Al Ajmi Engineering Consultants
- Interior Fit Out Construction - IMAR Trading and Contracting Co. WLL
- Consulting - Salem Group

CIVIL AND ENVIRONMENTAL ENGINEERING:

- Engineering Consultancy and Design - Dar Al-Handasah (Shair & Partners)
- MEP Consultant Engineers - Kamal Sioufi & Associates
- Construction, Contracting, and Engineering - EBCO (BITAR)

ELECTRICAL AND COMPUTER ENGINEERING:

- Semiconductor for Machine Vision - Oculi
- Energy Consultancy - Ark Energy
- Software Development - CME Offshore

GRAPHIC DESIGN:

- Events and Publishing - Hospitality Services
- Branding, Design & Communication - Brandmint
- Integrated Communication Agency - Born Interactive S.A.L

CHEMICAL ENGINEERING:

- Au - ALLCHEM SAL
- Water Technologies - Veolia Water Technologies
- Investment/Manufacturing/Healthcare- Ittihad International Investment

COMPUTER AND COMMUNICATION ENGINEERING:

- Engineering Consultant - Khatib and Alami
- Fintech - Areeba sal
- CyberSecurity - Potech Consulting SARL

INDUSTRIAL ENGINEERING:

- Healthcare/Simulation /Process Mapping - AUBMC - Department of Ophthalmology
- Summer Internship - PwC Middle East
- Additive Manufacturing & Digital Inventory - Immensa Technology Labs

MECHANICAL ENGINEERING:

- Power Solutions - Jubaili Bros
- Engineering Consultants - Pierre Dammous & Partners
- Mechanical and Electrical Company - Mechanical Engineering; Electrical and Computer Engineering

Scan this QR code for more

MSFEA CAREER RELATED INITIATIVES

COGS&CAFFEINE

The MSFEA Cooperative Education (Co-op) Program is both an educational initiative and an opportunity to get hands-on, workplace experience. Instead of an E3 summer internship, Co-op students get the chance to work in a company of their own choice, pertaining to their own major and their own passions. During that time, students get to be part of a workplace community, grow their network, and learn how to apply classroom knowledge to real-life settings.

	DURATION	SALARY	CREDIT TRACKING	TIME OF PROGRAM
INTERNSHIP	2 to 3 months	Not always paid	Considered as "Approved Experience" (3-credit course)	Summer E3
CO-OP	Up to 5 months	Salary slightly lower than than of fresh entry-level employees	Not considered as an elective, but replaces the "Approved Experience" course	Summer E3 and Fall E4 or Spring E3 and Summer E4 *NB: Students can overload to ensure no graduation delays*

HOW DO YOU GO ABOUT APPLYING?

- Application and admission occurs during your E2 Spring semester.
- Once admitted, you will need to complete asynchronous Moodle courses to prepare for interviews, and boost your CV/CL writing skills, technical skills, and soft skills.
- When those modules are completed, you will have the chance to apply to companies of your choice (meeting a list of requirements from CDC) and start working upon acceptance.

*A more detailed timeline can be seen in the picture below

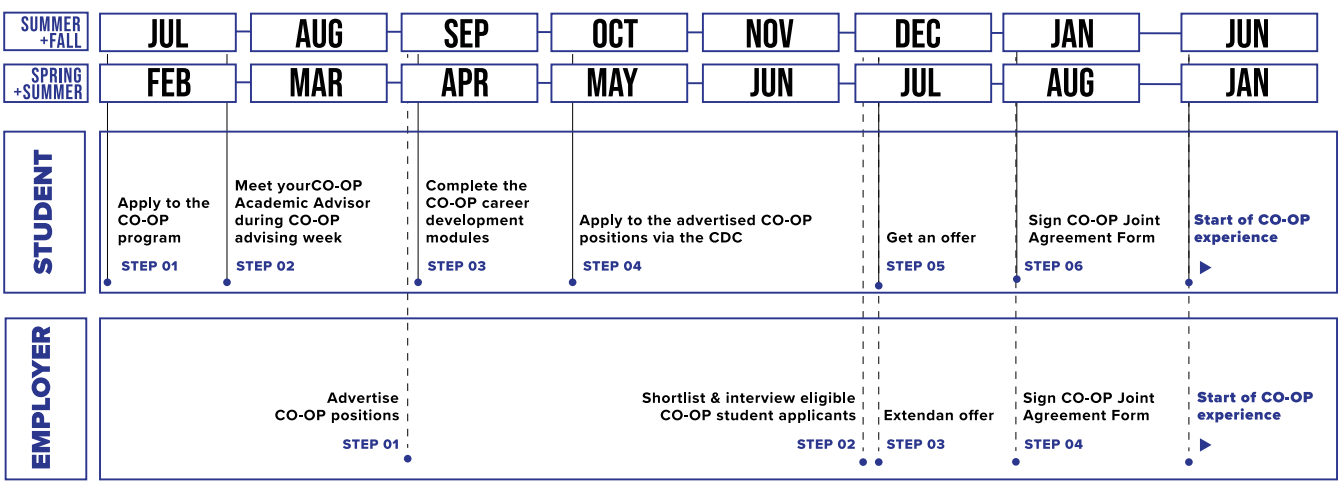
CURIOUS TO HEAR FROM SOMEONE WHO'S BEEN THERE, DONE THAT?

Some words from Andrew Bejjani, a 2023 participant in the Co-op program: "Co-op is a great initiative which granted me an invaluable experience. Other than the fact that I gained technical experience at BMW Group, I had the chance to meet diverse people from all over the world and explore Munich's unique culture and history. It was really a journey of self growth and improvement."
Have questions?
Contact Andrew at aab68@mail.aub.edu

MAKE SURE YOU WEIGH IN YOUR PROS AND CONS. IF YOU FIND YOURSELF UP TO THE TASK, DON'T LET THIS OPPORTUNITY PASS BY!

CAREER DEVELOPMENT CENTER

CO-OP APPLICATION WORKFLOW



ENTREPRENEURSHIP INITIATIVE WITH DR. AYMAN KAYSSI

BY JOSEPH CHOEFATI | TOPIC: ENTREPRENEURSHIP

Since the establishment of the Maroun Semaan Faculty of Engineering and Architecture (MSFEA) in 1951, entrepreneurship has always been at the core of MSFEA's values. **In fact, Maroun Semaan, AUB alumnus (Mechanical Engineering, Class of 1977), the co-founder of Petrofac and AlCazar Capital, was an influential entrepreneur himself**. There are numerous approaches to how MSFEA tries to fulfill the idea of producing competent engineers with entrepreneurial tendencies. The main approach being the MSFEA Entrepreneurship Initiative (EI). At the start of the Entrepreneurship Initiative, Lebanon's startup environment was thriving. MSFEA aimed to position itself at the forefront of this entrepreneurial pursuit by supporting a cohort of students that aimed to establish their own innovative startups. Dr. Ayman Kayssi, Professor of Electrical & Computer Engineering, and the former Associate Dean of MSFEA was responsible for starting and developing this initiative. According to him, a lot of funding was provided to the initiative by the Maroun Semaan Endowment.

THE FACULTY STARTED THIS INITIATIVE TO CONCRETIZE THEIR COMMITMENT TO SUPPORT ALL STUDENTS WITH THE MEANS NECESSARY TO ACT ON THEIR ENTREPRENEURIAL INCLINATIONS.MSFEA THROUGH THE DEVELOPMENT OF THIS INITIATIVE WANTED TO TRIGGER AND FOSTER THE ENTREPRENEURIAL SPIRIT IN ITS STUDENTS.

Over the years, technology from the different fields of engineering has driven innovation. The link between entrepreneurship and engineering is very natural since technology is needed to innovate and create new notions. Seeing how evident this link is, Dr. Kayssi believes that the faculty saw the need to reinforce to everyone that MSFEA has all the tools to help students transform ideas to products that can be commercialized. When asked about the projects and initiatives that were implemented during Dr. Kayssi's time as Associate Dean, he stated that "the main contribution was the Track, and the Track consisted of several steps that the students can follow." The EI Track, provided by the Entrepreneurship Initiative works in the following manner: First, engineering students in their third year started with hackathons that helped them get a feel of entrepreneurship to know whether they should continue with the Track or not. The hackathons stretched over 2 days, usually weekends where students were given a general problem and asked to solve it. An example of a hackathon problem could be: "Make the city of Beirut more livable." At the end of the hackathons, students presented their ideas in front of a jury and were awarded monetary prizes. For the students that enjoyed the hackathons and chose to continue the Track, they would then be required to take the Engineering Entrepreneurship course (INDE 412). **The students registered for the Track were supported by MSFEA to secure their summer internships with startups at the Beirut Digital District (BDD). This experience allowed students to experience first-hand**

the startup environment and ecosystem. After their third year internships, the students would return to the final stage of the Track which was the Final Year Project (FYP) Accelerator. The FYP Accelerator included two courses that are taken with the FYP to prepare the students for the business aspects of developing startups. These courses gave students the necessary background knowledge to turn their FYPs into up and running businesses. Dr. Kayssi made sure to clarify that this Track, although not advertised as before, still exists but not in such a structured manner. All the stages of the previously called Track, are still available for students through the Entrepreneurship Initiative.

Besides the Track, all engineering students were allowed to participate in a competition hosted by MSFEA where they would present ideas that they believed had commercial potential. The ideas that succeeded in these competitions were supported to further mature them into a tangible business model. Currently, all students can request help from the Entrepreneurship Initiative in case they have any startup ideas they would like to grow.Additionally, the Dean's office measured the impact that the Track had on the students through a survey, and found that the program has really helped them. With the frequent events organized by the faculty, the initiative didn't go unnoticed. More and more students learned about entrepreneurship and Dr. Kayssi even said that entrepreneurship has almost become "part of the MSFEA experience."

Previously, the faculty used to encourage students to grow their ideas in Beirut, Lebanon in order to contribute to the rapidly growing startup ecosystem. Convincing students to stay in Lebanon and build businesses here has become a challenge with the prevailing economic crisis. The goal for MSFEA remains the same to back up the students with everything necessary to kick off their startup ideas. Regardless of the situation in Lebanon, Dr. Kayssi still believes that MSFEA that have done this. Some of these stories should prepare its students for entrepreneurship. He explains how it is not necessary for students to start their startups in Beirut. Students can choose to grow their ideas abroad, and there have been numerous MSFEA success stories include Yamli founded by Habib Haddad (CCE, Class of 2002), and LittleBits founded by Ayah Bdeir (CCE, Class of 2004). **Some new ideas Dr. Kayssi has for the Entrepreneurship Initiative is to re-orient the program to the global market and opportunities rather than just focusing on Lebanon.** He also considers that since the graduate students at AUB do advanced research, the EI should restart their projects for these

students; allowing them to convert their cutting-edge ideas into startups. Entrepreneurship should also be integrated into the courses of first year students in order to catch the students that have business interest early on, to grow them in the first and second year, to finally reach the third year where they can start with the EI Track.

Dr. Kayssi's final advice towards students who aspire to build their own startups is to look for the resources offered by MSFEA because the resources are plenty. Labs, mentorship, incubation programs and much more are all there at students' disposal to help them pursue their entrepreneurial ventures. **Despite the deteriorating situation that Lebanon is facing, MSFEA remains a powerhouse for innovation and success. AUB students can always count on the faculty and its facilities to support them in any prominent ideas that they have. MSFEA has developed an elaborate program that guides students from start to finish in their entrepreneurial journeys. Thus, it is vital to make good use of these resources in order to continue generating engineering advancements in the form of successful businesses. Learn more by contacting: Dr. Imad Elhajj (ie05@aub.edu.lb), the current Director of the Entrepreneurship Initiative.**

HARDWARE FOR ML & EMBEDDED SYSTEMS

BY MAHMOUD YAMANI | TOPIC: RESEARCH & INNOVATION

In our times, with the surge in the utilization of Machine Learning (ML) in real-world applications, there is a need for specialized hardware that can handle the computational demands of these algorithms.

Dr. Mazen Saghir, Associate Professor in the Electrical and Computer Engineering Department at MSFEA, has been working on an ML accelerator for edge applications using vector processors. **Vector processors are a type of processor that can perform multiple calculations simultaneously, which makes them suitable for complex ML algorithms.**

Dr. Saghir's project, named Arrow (after the vector symbol), is based on a vector instruction set architecture from RISK-V, an open-source instruction set. One of the key challenges in developing an ML accelerator for edge applications is creating a device that is both powerful and energy-efficient: the accelerator needs to be powerful enough to handle complex algorithms, but also energy-efficient to avoid consuming too much power. **Vector processors are an architecture that can help meet these requirements: they are optimized to perform mathematical operations on large datasets in parallel, which is perfect for running sophisticated ML algorithms - this makes them ideal for use in edge computing applications where power is often a limiting factor.**

This project has been partially completed as an FYP a few years ago; this year, another student group is working to extend the work, with the goal of creating a hardware prototype on a Field Programmable Gate Array (FPGA) by the end of the year.

Another ongoing project Dr. Saghir's team is working on is TinyML, which aims to put ML algorithms on microcontrollers. The challenge with microcontrollers is that they have limited resources (processing power and memory), which requires data to be compressed. The project involves recognizing open digits or spoken Arabic in the context of operating an elevator; requiring speech processing in order to recognize floor numbers. The team, consisting of graduate students, is evaluating different algorithms to minimize the costs all while maintaining accuracy.

According to Dr. Saghir, one exciting trend in the field of hardware is the surge in **open-source technology**, which is allowing for more accessibility and innovation. One example of open-source hardware is RISK-V, as it is managed by a governing body: this allows individuals to build and modify their own hardware as long as they adhere to the specifications. Additionally, open-source design tools are becoming more prevalent, allowing individuals to design their own chips for free, rather than relying on expensive systems from closed systems such as Synopsys or Cadence. These tools are now being used to submit simple designs for fabrication through a shuttle service, which enables individuals to design and test real chips, rather than relying on simulations or FPGA prototypes.

THE PROCESS OF DESIGNING AND BUILDING DIGITAL INTEGRATED CIRCUITS MAY SEEM DAUNTING, HOWEVER THERE IS POTENTIAL FOR LEBANON TO DESIGN AND FABRICATE CHIPS LOCALLY

While the global semiconductor industry is currently facing geopolitical challenges, there is an opportunity for Lebanon to enter this market by producing engineers who are familiar with this technology. By investing in capacity building, Lebanon can become a key player in the global semiconductor industry, contributing to its own economic development and creating new opportunities for its citizens.

INTERVIEW WITH DR. MARIETTE AWAD

BY DANA SAAD | TOPIC: WOMEN IN ENGINEERING

Doctor Mariette Awad is an associate professor in the Electrical and Computer Engineering Department of the American University of Beirut. She graduated from AUB with a BE in Electrical and Electronics Engineering in 1997 and received her PhD in electrical engineering from the University of Vermont in 2007 Recognized as an expert in the field of Artificial Intelligence (AI) and Machine Learning (ML), Doctor Awad has made significant contributions to the field through her research centered on democratizing ML concepts and developing smart solutions to help overall human well-being.

Doctor Awad came back to MSFEA in 2008 where she remains today the only professor in the ECE department that teaches AI courses. Artificial Intelligence (AI) and Machine Learning (ML), Doctor Awad has made significant contributions to the field through her research centered on democratizing ML concepts and developing smart solutions to help overall human well-being. Doctor Awad came back to MSFEA in 2008 where she remains today the only professor in the ECE department that teaches AI courses.

Q: What influenced your decision to major in electrical engineering?

A: Growing up during Lebanon's civil war instilled in me a belief in technology as a force for good, similar to the hope found in science fiction. An avid reader, I sought comfort and inspiration in books, fueling my curiosity and understanding of technology. My parents' emphasis on education and my inherent curiosity played pivotal roles in my career choice. Engineering offered a clear path to making a positive societal impact.

Q: When did you first encounter AI, and what about it captured your attention?

A: My journey into AI began at AUB, where I pursued Electrical and Computer Engineering. The field's vast unanswered questions
fascinated me, especially during my third year when I delved into robotics. My PhD work in machine learning and AI further cemented my interest, despite AI's "winter" phase at the time. My return to AUB was driven by a desire to advance AI education in Lebanon.

Q: As a woman in engineering, have you faced discrimination, and how did you handle it?

A: Yes, the male-dominated field was initially intimidating, but I never let it deter me. **Discrimination exists, but I've focused on building resilience and choosing my battles.** Support from friends, family, and mentors has been crucial. Although progress has been made, there's still a long way to go toward gender equality in engineering.

Q: What role has AUB played in addressing gender disparities in engineering?

A: AUB has been instrumental in promoting equal opportunities, helping to shape a culture where gender doesn't dictate one's capabilities. Success stories of female engineers and faculty members inspire change, but societal and cultural perceptions still present challenges. Initiatives to attract girls to STEM are vital, but broader cultural shifts are necessary.

Q: What are your thoughts on AI's rapid advancement, exemplified by technologies like ChatGPT?

A: The speed of AI's progress is astonishing, but not unexpected. It underscores the need for tech literacy and adaptive strategies across industries. However, the lack of regulatory frameworks raises concerns about ethical and societal impacts.
The race between beneficial and malicious uses of AI necessitates urgent attention to governance and policy.

Q: Any advice for your younger self and students today?

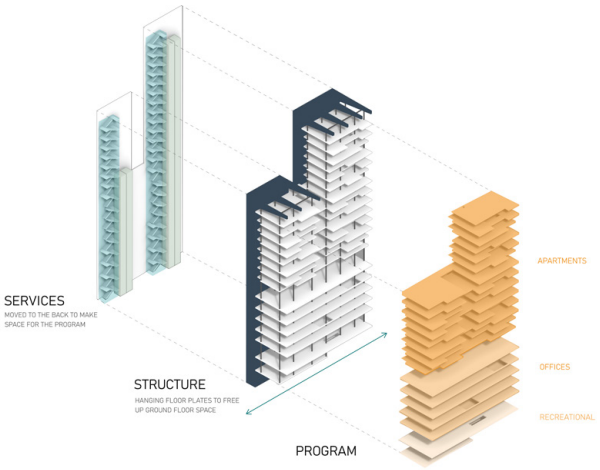
A: Follow your dreams and trust in your passions. Surround yourself with supportive peers and mentors. Despite challenges, pursuing what you love leads to fulfillment and success.
Stay curious, adaptable, and committed to your goals.

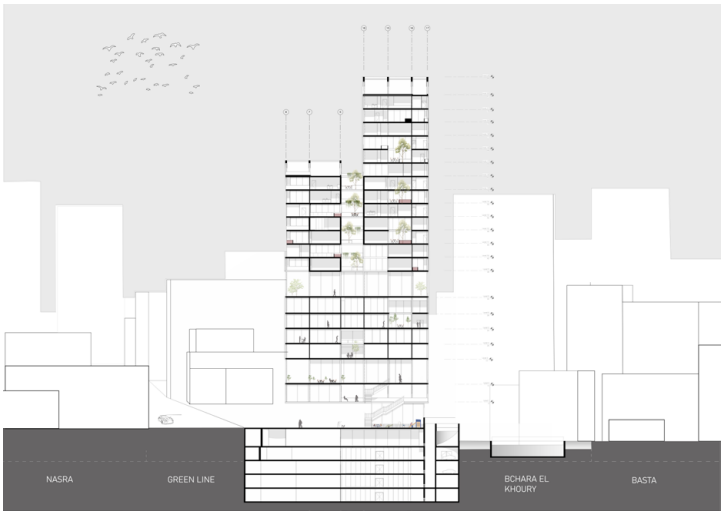
MSFEA STANDOUTS

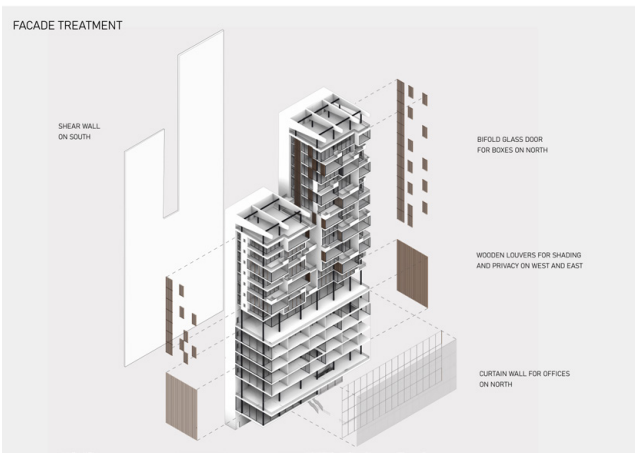
ARCHITECTURE

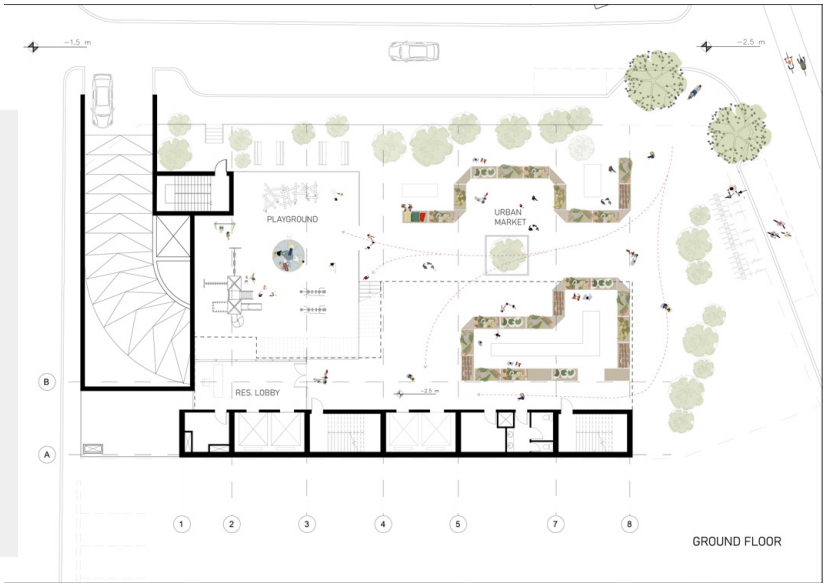
SUSPENDED NEXUS – 4TH YEAR ARCHITECTURE PROJECT BY NAJWA HASBINI

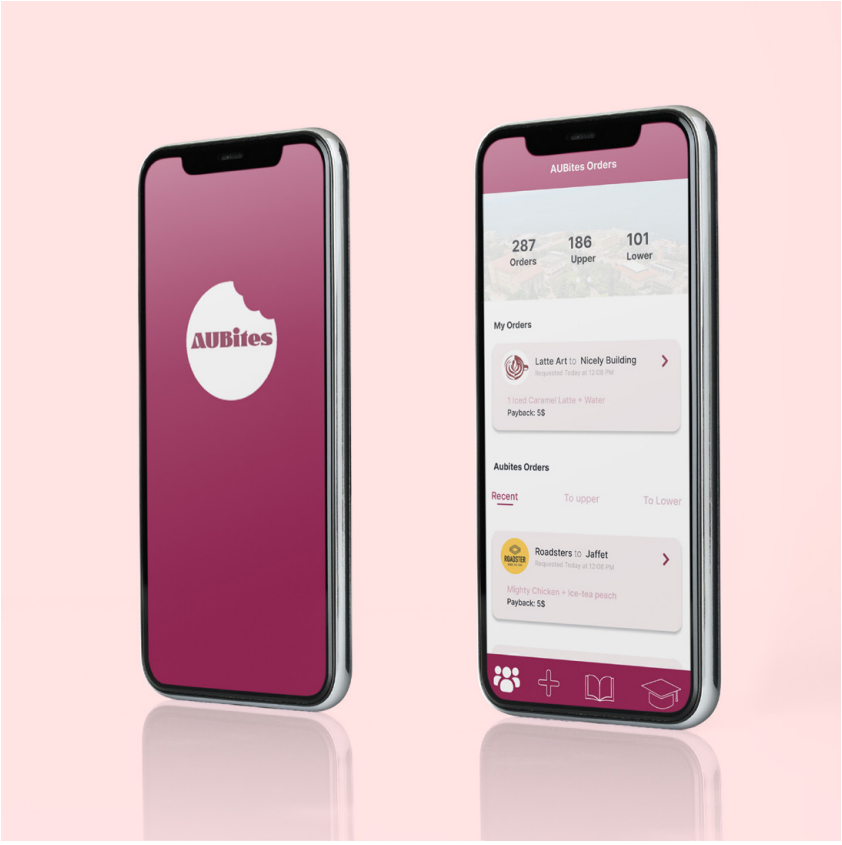
This architectural project merges two core concepts into strategic cuts shaping its form. Positioned near Beirut's civil war demarcation line, it aims to unite the Basta and Nasra neighborhoods. These areas differ in social composition, ethnicity, activities, green spaces, demographics, and architecture. Basta is residential, and Nasra hosts restaurants and cafes. By clearing the ground level of structural barriers and enhancing recreational spaces that connect with the Green line, the project promotes a pedestrian-friendly area, fostering social interaction and community spirit. The design optimizes space, considering its unique location bordered by three streets and an adjacent lot. It divides massing into service and program areas, with services placed towards the lot to prioritize program spaces. These include residential, office, and recreational zones, arranged from public to private upwards. Buffer zones with public functions invite community interaction and vertical movement. The building's distinct materials and suspended blocks craft a bold, yet light appearance, effortlessly blending with the city's fabric. This method transforms the urban environment, reimagining the potential of space as a medium for social cohesion and urban renewal.

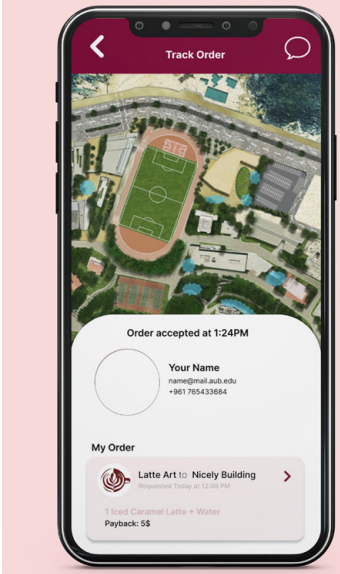








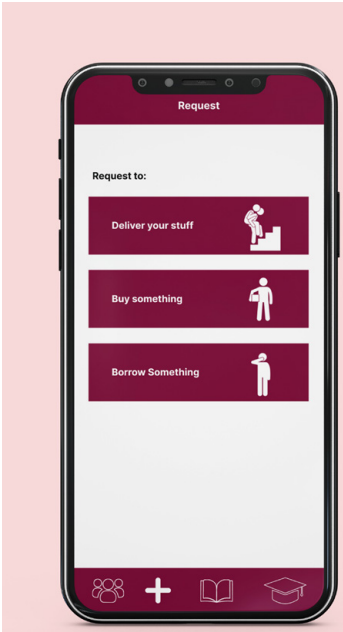


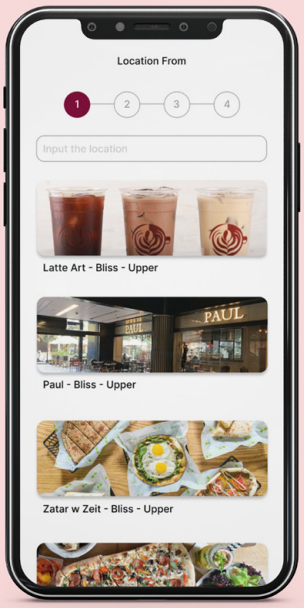


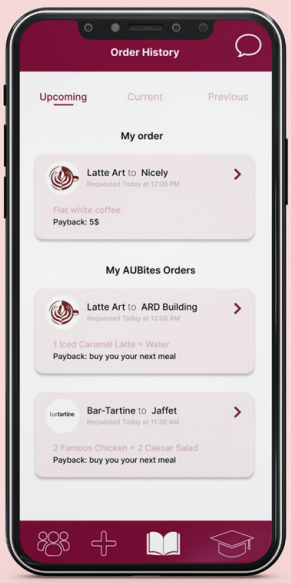
GRAPHIC DESIGN

UI/UX - 4TH YEAR GRAPHIC DESIGN PROJECT BY LOULIA DAKER

Ever wanted to order food on campus but the walk to the nearest gate was too far away? Or that you didn't want to waste time away from studying to go get the food and back? Inspired by laziness, AUBites is a concept that allows students to have their orders delivered, student-to-student, inside the campus. This UI/UX project embodied this vision, seamlessly integrating the convenience of modern technology with the vibrant community spirit of campus life. Through intuitive design and user-friendly interfaces, students can effortlessly navigate their daily routines by utilizing other student's routes to deliver snacks, study materials like books, or essentials like chargers and calculators on their way.







DID YOU KNOW

WHY IS BECHTEL ENGINEERING BUILDING NAMED BECHTEL?

In 1954, Mr. Stephen D. Bechtel and Associates of the Bechtel Corporation of San Francisco donated the building to the American University of Beirut.

WHAT IS RAYMOND GHOSN BUILDING (RGB)?

Raymond Ghosn was the Dean of Engineering and Architecture from 1965 - 1976. He, along with the Dean of Student Affairs Robert Najemy, were assassinated by a suspended AUB student in broad daylight in February 16th, 1976. This building was named after him as a tribute to his legacy.

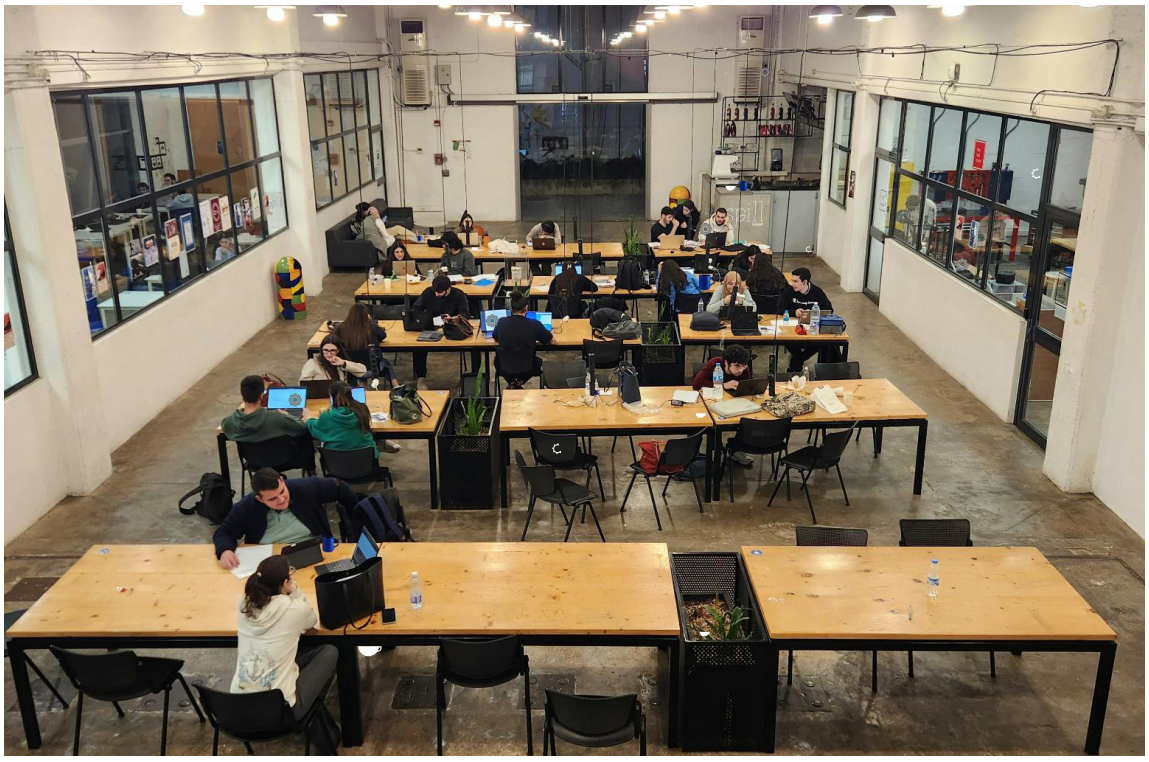
DO YOU KNOW HOW TO DIFFERENTIATE BETWEEN AUB CATS AND STREET CATS?

Check their ears! AUB cats always have a slight ear cut. They undergo regular checkups, vaccinations, microchipping, nutritional support, and all other kinds of care in order to foster a pleasant harmony between AUBites and cats on campus.

FIND WALLY

HOW MANY COFFEE MUGS AND COGS CAN YOU FIND IN THIS PICTURE?

5 | 5



WORD SEARCH

(LEVEL: MEDIUM)

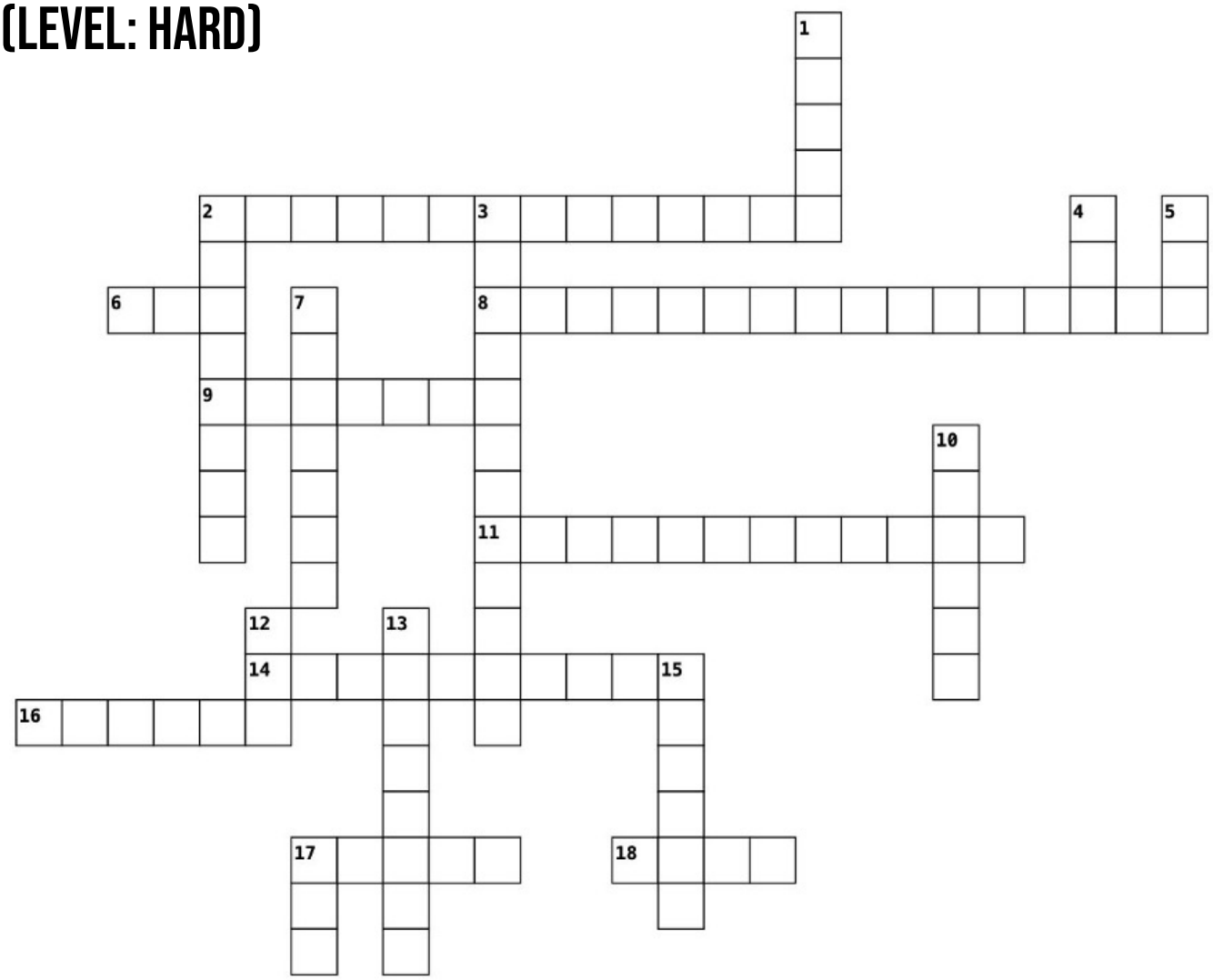
Find the 14 words in the puzzle

Words are hidden 

J M Z J T O U V E M O O D L E H I C
E N T R E P R E N E U R S H I P R Y
H L U U J C X A N Y C P Q W L C A S
O E N G I N E E R I N G A L B X N X
N D T H E R M O D Y N A M I C S Y D
T G R A P H I C D E S I G N W Y O M
L Y J H B G H D G B G H F Y P U X Z
T M A R B U T A F R Z M S F E A Y O
A B C N A N O T E C H N O L O G Y R
K B E C H T E L O S D E A P E I C I
Q O E C D R E D R O O M U M V U Z V
B D H O P T I M I Z A T I O N B B X

CROSSWORD

(LEVEL: HARD)



The following set of expressions are clues to fill the words above.
Words can go across or down | Letters are shared when the words intersect.

DOWN

1. End of Year MSFEA Event
2. Cafeteria
3. Data Analytics
4. Lecture Hall
5. Project
7. Class Session
10. Course Managment System
12. Interactive System
13. Homework Due Date
15. Friendly Programming Language
17. Research Building

ACROSS

2. Mechanical Engineering
6. Grade
8. Business Adventure
9. Engineering Building
11. Course Selection
14. Third Summer
16. All Nighter
17. Coffe Spot
18. Magazine Emblem

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