

NEWS FOR A BETTER WORLD

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These past few years, the College has continued to show impressive growth momentum - in infrastructures, research, and the launching of new academic study programs. Today, SCE is perceived as being a significant, leading institution in Israel that combines academic excellence with innovation, entrepreneurship and commitment to industry and society.

This year we reached a record number of graduates, with 1,152 engineers, men and women, leaving to join the labor market. This is an outstanding achievement - one that places SCE at the hub of training Israeli engineers. In fact, 15% percent of all the engineers in Israel are SCE graduates. Moreover, our growing number of graduates and our continuous investment in research and development strengthens the standing of the College, not only as a leading academic institution, but also as a research and innovation focal point.

Each and every one of you - our students and graduates - is an ambassador for excellence, creativity and innovation. You will have a positive impact on Israeli industries and spur the Israeli economy forward. Each graduate, each project and each technological solution that you develop will shape the future of the State of Israel and of the entire world.

I wish to thank you, our students, for your trust and hard work, commitment, investment and aspiration for excellence. You are the beating heart of the College, and we are proud to witness your growth and development, as you complete your studies here and transform into our ambassadors for the future.

I wish you all great success!

Sincerely,

Prof. Semyon Levitsky
SCE President

SCE WAS AWARDED THE 2026 "DEFENSE MINISTER'S SHIELD"



This prestigious military decoration, given to organizations and institutions that have demonstrated their outstanding commitment to those serving in Israel's Reserves, was awarded to SCE for the broad support system provided to its students and faculty members, called up for Reserves duty after the outbreak of the "Iron Swords" War.

The 2026 "Defense Minister's Shield" was awarded to SCE in recognition of its comprehensive support system for students and faculty members called up for Reserves duty after the outbreak of the "Iron Swords" War. This prestigious military decoration, given to organizations and institutions that demonstrate their outstanding commitment to those serving in the I.D.F. Reserves, was awarded at a festive ceremony with the participation of the Minister of Defense, the I.D.F. Chief of the General Staff and the Chief Reserve Officer.

Since October 7, 2023, over 2,000 SCE student-reservists have been summoned to serve; this is an unprecedented number in the Israeli higher education system. Many of these student-reservists served for

hundreds of days, some were drafted under "Order 8" (urgent, emergency). They had to cope with significant mental stress, physical burdens, and academic studies. It is important to note that almost half of SCE's outstanding students serve in the Reserves, doing their military duty.

Behind this data, there are people with personal stories and complex experiences from their service and warfare—that even affect them for a long time after they return from the battlefield. Bearing in mind that returning to routine academic studies is not easy, SCE has been pro-active throughout the entire period of the war, enveloping returning student-reservists with broad support, tailored to suit their academic, personal and emotional needs. The college considers their support a

valuable, national responsibility. Since the start of the war, SCE has provided these student-reservists with a comprehensive support system, including personal academic considerations, easements and extensions, personal mentors and remedial classes—towards maintaining a high academic level and continuity in their studies.

Besides the academic solutions, SCE provides emotional and economic support and a variety of activities that strengthen personal and community robustness, such as special lectures, workshops, and targeted activities for students back from the front. All this stems from awareness of responsibility - seeing, asking, listening, identifying distress, even after the return from Reserves duty.

Prof. Jehuda Haddad, SCE's founder: "Winning the 'Defense Minister's Shield' is a sign of great honor and recognition of our actions on behalf of those serving in the Reserves. We are very proud of our students, who have revealed their sense of responsibility, dedication and outstanding leadership throughout. Our academic, moral and national responsibility is to stand by them and to grant them all the support they need to go on and succeed, both during and after their military service."



I am pleased to announce that our College is launching a new Bachelors' degree program in Medical Imaging Sciences - the first of its kind in Israel's southern region. This program is meant to train professional leaders in the field of Medical Imaging for Israel's national health system.

The opening of this track expresses SCE's spurt in development and commitment to continued growth, innovation and academic leadership. This program combines academic studies in the Life Sciences, Physics and Imaging Technologies, alongside intensive, practical training at leading Israeli hospitals, among them the Soroka/ University and Barzilai Medical Centers.

An additional achievement is receiving the official approval of the Israeli Council for Higher Education for our School of Architecture, allowing us to grant academic degrees in the field of Architecture.

I'm proud of SCE's growth, development and ongoing aspiration for excellence. The launch of the Medical Imaging program and the certification of School of Architecture create new and inspiring opportunities, as well as strengthening our academic standing as a leader, with significant growth potential—that will benefit coming generations of students, researchers and lecturers.

I wish each student the best of luck in the exams and, to our precious graduates - I wish you success on your professional paths in industry, research and development.

Warm wishes,

Prof. Jehuda Haddad
SCE Founder

FOUR DAYS OF TECHNOLOGICAL AND ENGINEERING INNOVATION

“SCE Tech-Fest 26” connected students, researchers and industrialists from Israel and abroad, demonstrating how Engineering and Technology are designing the future

The annual technological festival, “Tech-Fest 26,” that was held on both the SCE campuses, in Be’er-Sheva and Ashdod, provided four fascinating days of innovation, research and creative engineering. Thousands of visitors, researchers, industrialists, students and experts, Israeli and foreign, attended lectures and participated in professional conferences, exhibits and events—presenting the College as an arena of innovation linking Academia, Industry and the international community.

One of the main conference topics was ‘the influence of AI on the world of Cyber’. Tal Avitan, Director of the National Security Operations

Center (SOC) of the Israel National Cyber Directorate, gave a lecture warning about dramatic changes in the arena of threats: “Today, the attackers are using AI tools to identify weaknesses and to write suitable code with unprecedented speed, which significantly narrows the window of time available for defense teams to respond. In a war conducted in milliseconds, a human team trying to stop an attack is like bringing a knife to a laser battle. The monitoring centers can no longer depend on human responses or static regulations. They must greatly accelerate their level of readiness, install automatic, algorithmic shields against the machine threat, by switching to AI-

agent-based management of events, capable of identifying and deterring real-time threats.”

According to SCE’s founder, Prof. Jehuda Haddad, this festival illustrates the connection between excellence in engineering and social responsibility: “SCE is educating and raising generations of engineers, who combine professional excellence with social and ethical responsibility. The projects on display demonstrate how technology and engineering can serve as real motivators that improve quality-of-life and design a better future. The SCE “Tech-Fest” has become an alluring focal point for leading researchers, experts



and industrialists [...] and we have had the great privilege of hosting renowned professionals, who have joined us to share their knowledge and experience.”

IDEAS THAT BECOME REALITY

At the final exhibit, students presented tens of innovative projects, among which was an AI-based system for the real-time identification of hovercraft using advanced video processing. This system distinguishes between drones and birds, thus reducing false alarms for security agencies, defense systems, and more sensitive infrastructures.

Other projects displayed were: “EveryDay”—an AI-based system that helps high-functioning autists improve their communication skills in daily situations by means of interactive simulations; “MOVA”—a virtual reality (VR) application that helps disabled people who have lost limbs do rehabilitative physiotherapy

by themselves at home; “Smart Vest”—provides safe navigation for the visually impaired; an architectural model for patients coping with PTSD that provides an environment suited to each patient’s emotional and spiritual needs; and an small autonomic boat that monitors water quality in marine agriculture—which will be presented at an international conference in Europe.

Some SCE faculty members also displayed their potentially applicable developments. For example, Dr. Ziv Berend, a senior lecturer in the Department of Mechanical Engineering, presented an active component that reduces real-time mechanical vibration during precision machining, thus making a better-quality product with reduced production time. This novel technology, which has already provided a 20% improvement in manufacturing performance, has recently matured, becoming “AVEX,” a commercial company of interest to the Israeli security industries. Dr.

Berend noted that the coming goal is to adjust his component to suit the world of drones, as well.

Dr. Isaac August, Head of SCE’s new Department of Medical Imaging, presented the rapid development in the field and described the growing demand for skilled medical professionals in the Israeli health system. He stated that the combination of academic training, professional certification and AI-based technologies are expected to change the world of Medical Imaging—to provide quicker and more precise diagnoses.

During this festival, many international conferences took place and the meetings between academicians, technology companies and students created a broad, professional staging ground for exposure to research and developments that will strengthen Academia–Industry ties and expand collaborative research projects in Israel and abroad.

WHEN THE SIGNATURE BECOMES A BRAND



Within the framework of a 'multidisciplinary' course taught by the Head of the Department of Visual Communication, Yosef Ohayon, fourth-year SCE students (seniors) were asked to give personal interpretations of the famous signature of U.S. President, Donald Trump.

The products of this task were displayed in an exhibit entitled "Trump's Signature," the closing event of this year's "Tech-Fest 26," held at the College. The exhibit examined the concept of his signature as a cultural, political and media symbol in the current media age - not merely as a graphic symbol, rather as a representation of power, authority, public identity and an alternative reality existing between politics, communications and consumer culture.

The students were asked to transform Trump's signature—which, over the years, had become one of the most identifiable marks in the world, often even an independent trademark—into a starting point for the development of worlds of content, products and visual narratives.

Their endproducts included an assortment of media: advertisement videoclips, posters, three-dimensional models, objects and digital media - displaying a wide variety of critical and speculative interpretations, among which are: food brands, consumer products, games, fashion, daily objects and speculative products, all bearing the mark of that public figure and his associated mythological media.

The combination of mediums emphasized that Visual

Communication is a multidisciplinary field that functions parallel to graphic, material, narrative and digital spaces.

Among the exhibited works:

"Trump burger" - A series of short videoclips created by Hadar Levy, Adi Levi, Olga Morozova, and Sharon Shemesh, presenting an imaginary food product and its surrounding consumer experience, using the ostentatious and shiny language identified with Trump.

"Time is money" - Orel Eretz-Kedosha and Valeria Politayev created an advertisement for Doanld Trump's prestigious watches, as objects symbolic of power, success and personal identity. Inspired by the aesthetics of the Renaissance period, in which clothing and accessories reflected social class and influence



SCE students of Visual Communication examined Donald Trump's signature as a sign of power, authority and public identity, and transformed it into a starting point for the creation of an ironic, critical attitude.

- an image of Trump is displayed repeatedly entering - each time with a different watch band and the attire, body language, and behavior attributed to that watch band. The main message of this videoclip is that a particular accessory can express identity and transform into a status

symbol, functioning as a tool for designing an image. The phrase "Time is money" connects time, wealth and prestige, and presents the watch not merely as a time piece, but as a statement of identity and success.

"Trump's barbershop" - Yuliya Chernyshov, Alice Sheiner, Yuli Levi

Doron, and Ilanit Cabernet created a fictitious barbershop inspired by Trump. This barbershop, dominated by the colors black, white, gold and yellow, presents merchandise and products in standard and premium styles.



“SHIFT”/IN MOTION: DESIGN DECIPHERING THE ISRAELI REALITY

After four years that shook reality, the final exhibit by SCE’s Department of Visual Communication’s graduates suggests a new look at commemoration, anxiety, periodicity, and hope—the components of life in Israel

This year, the final exhibit of SCE’s Department of Visual Communication presented the final projects of graduating students, who completed four very complicated years of study. For most of them, October 7, 2023, happened as they were entering their second (sophomore) year of study. Some were called up for extensive I.D.F. Reserves duty and many directly experienced the prolonged security situation from up close.

Especially due to this closeness, these final projects seem to show interesting movement—less direct involvement with trauma in personal and posttraumatic experience and broader observation, more distant and sober regarding the Israeli reality. These students do not merely tell their stories, rather they try to understand the patterns, the periodicity and the sociocultural and media mechanisms that fashion life in Israel.

Yossi Gavan, Final-Project Coordinator in SCE’s Department of Visual Communication notes: “This year’s students are not necessarily trying to describe trauma directly, some from the perspective of the Reserves and others from civil defense routines. Nevertheless, many of them have

chosen not only to respond to reality, but to analyze it. By means of design, interaction and animation, they ask: How does history repeat itself? How does the media design anxiety? How do personal and local memory transform into parts of the broad Israeli story?”

One of the works that demonstrate this observation is entitled “Flowers and a reed/gun barrel” [kaneh is a Hebrew homophone] by Shir Hajaj, mentored by Yossi Gavan. It is an interactive project that deals with the periodicity of the rounds of battle in Israel and with the manner in which the escalations,

wars, emergency routines, and cease fires repeat over the years, like a familiar format, almost permanent. By combining data, maps and images of local flowers, she creates a visual language that connects the harsh reality of the security situation and memory, scenery, routine and local beauty. Her choice of flowers creates tension between delicacy, growth and localness as opposed to violence, loss and periodicity—enabling the observer to experience the periodicity via the interactive interface that shifts between periods, regions and events.

Also, Eilon Aharoni’s “A letter to grandfather,” mentored by Yossi



Gavan, repeats the past to talk about the future. The minute-and-a-half-long film clip is based on a genuine letter that Aharoni’s grandmother had written to his grandfather when he was serving at the battlefield during the “Yom Kippur War” (1973). Using animation, archived family photos, documents and motion graphics, the film translates longing, fear, love and waiting into a delicate visual language. These days, the more this letter is reread, the more painful the sensation, because it could just as well have been written today—from a different battlefield, at a different time, yet still part of the same uncertain Israeli reality.

In the project, mentored by Noa Segal, entitled “Ofakim 1955,” Mili Aberjil goes back in history to the early days of Ofakim. Her project is the establishment of a documentary site that will preserve the life-stories of the town’s veterans by means of video-recorded interviews, personal photographs, and archival materials. The city’s story will be pieced together from the stories of the founders and new immigrants—emigration and assimilation stories, life in the shanty towns and tenements, building new

lives in the city. This work connects private memory with local memory and emphasizes the urgent need for documentation of those voices still capable of telling the story of Ofakim in the first-person voice.

A lighter, critical look at reality appears in Naama Raz’s project “Freak Control,” mentored by Sigal Perelman. Raz transforms the culture of news consumption in Israel into a series of interactive mini-games, in which the viewer ‘enters’ the screen and interferes with the broadcast. These games deal with the commentators’ workloads, the never-ending drama, the success of broadcasters and their conclusions, and interactions with marginal, on-screen characters. Using Israeli humor and cynicism, her project points towards the daily addiction to news, the blurring of the boundary between facts and entertainment, and the way in which the consumption of news becomes a loop of ongoing anxiety.

In Evelin Abramov’s project “OpenEye,” mentored by Sigal Perelman, she expands her observation from the Israeli space to the entire world. Abramov has created a critical navigation app meant to warn about

and map antisemitic incidents and hostile areas. This app functions as a location data-based interface, like a combination of “Waze” and “Moovit,” enabling navigation by foot, car or public transportation while indicating the locations of hubs of hatred, demonstrations, certain institutions and areas designated as prone to be troublesome. The project raises the difficult question about how secure Jews across the globe feel in 2026 and how to deal with discoveries of antisemitism in contemporary reality.

Alongside the critical perspective, the exhibit offers the opportunity for correction. In the project called “Rujum Farm,” designed by Sharon Shemesh and mentored by Inbal Gery, a multidimensional, therapeutic space is provided for fighters with PTSD. This innovative farm breaks away from the classic therapeutic model of time-limited therapy and offers a holistic process, ongoing and communal. This model is supported by five physical and emotional spaces: grounding, regulation, processing, expression and shared action. The members of the community are those who navigate the pace of the process, aspiring to regain their self-control, stability and belonging.

This final-projects exhibit was open throughout the month of July as a pop-up exhibit in SCE’s Department of Visual Communication.



DESIGNING TOMORROW: SCE'S FIRST GENERATION OF ARCHITECTS HAS SET OFF

Graduates of SCE's School of Architecture presented their creative final projects about the future of cities, community, sustainability, technology and open space in Israel

The first graduating class of SCE's School of Architecture displayed their final projects in a festive exhibit held on the Be'er-Sheva campus during the month of July. This exhibit, entitled "Designing tomorrow," presented various conceptions of planning, attempting to design Israeli space for the coming decades.

The projects displayed were the results of their 5-year academic journeys, during which the students examined the key issues regarding the future of cities, community, the environment and technology. Their works combined research, planning, design processes and the use of advanced tools and technologies and offer creative solutions for the future challenges that will face Israeli society.

This première exhibit by the School

of Architecture is a significant benchmark in SCE's development. Beyond academic achievement, it expresses a broad spectrum of architectural conceptions, reflecting the students' serious attempts to cope with social and environmental issues using the best modern planning techniques, advancing sustainability, strengthening communities and creating inclusive, high-quality built environments.

Alongside the graduates' families, this event was attended by professional architects and planners, representatives of the Association of Architects and Town Builders in Israel, representatives of the local authorities, industrialists, academicians and reporters.

SCE's founder, Prof. Jehuda Haddad said: "Designing tomorrow" is much

more than a final exhibit—it lets us glimpse the next generation of Israeli architects and futuristic ideas that may influence how we will live, design and build our shared space."

According to Prof. Haddad, it was a founding moment for the College: "The establishment of this department stemmed from the understanding that tomorrow's space requires the deep integration of Architecture and professional Engineering. The challenges facing Israeli society—from the achievable development of smart cities and homes to municipal renewal and sustainability—require close cooperation between several fields of knowledge. We are proud to train the new generation of professionals, who will lead Israel's future environmental planning and construction, especially in the Negev and southern region."

STUDENTS REDESIGNING THE NEGEV'S FUTURE

From an international airport in Nevatim to a new model for the restoration of the Gaza Envelope—final projects of SCE's School of Architecture suggest novel solutions to regional challenges

The NUR Laboratory that operates in the School of Architecture serves as a center for urban research and development. It combines architectural research with advanced technologies, among which are digital modeling, tools for data analysis and cooperative planning—towards the goals of examining the Negev region's challenges and developing innovative solutions for them.

By means of active collaboration with local and international bodies, the Negev is becoming a lively site for research, experimentation and the development of planning ideas. Within this framework, SCE students are formulating strategies that promote a future that is egalitarian, sustainable and suits the unique regional needs.

Among the final projects presented in the School of Architecture, two projects stood out, mentored by Architects Merav Battat and Jonathan Zisser. The first project presents a novel conception for Negev development by means of the establishment of a civilian international airport in Nevatim, while the second project deals with the restoration of the western Negev and Gaza Envelope in the wake of the events of October 7, 2023.

AN AIRPORT AS A REGIONAL GROWTH ENGINE

The goal of the "NEXUS Project," developed by SCE students Ofek Ivgi, Dor Edelstein and Nissim Peretz, is to change the way in which airports are viewed in Israel—not merely as a transportation infrastructure, rather as an engine for economic, social and regional development. These students

presented an outline plan for the development of the northern Negev, at the core of which stands the suggestion to convert the Nevatim military base into a civilian international airport.

Unlike the internationally accepted model, in which airports function as closed domains, intended solely for travelers, their project model is for an open, regional airport. According to their plan, commercial areas, duty free and the public spaces will serve the residents of the region as well as the visitors—transforming this airport into an active socioeconomic hub. As such, the airport undergoes a metamorphosis, from being merely an entry gate to the country into a regional growth engine. "In Israel, there has been talk over the years of an additional airport. We believe that its establishment in the Negev would not be just another transportation solution, rather a significant regional development—one that would strengthen local employment, encourage tourism, and create cooperation among the local authorities," said David Edelstein.

RESTORATION BEYOND THE STRUCTURAL

The second project, developed by SCE students Noam Elbaz and Yuval Perets, suggests an architectural conception for the restoration of the northern Negev in the wake of October 7, 2023. Their starting point is that for 'real' restoration it is not sufficient to merely reconstruct damaged buildings, rather it requires strengthening the community, restoring the sense of security and renewing the bonds between the people and their place.



Within the final project parameters, two main projects were planned. The first, in Kibbutz Alumim, dealing with the question—How may we commemorate the events that occurred here without turning the entire kibbutz into a commemoration site? This plan recommends incorporating some symbols of the attack left in public spaces into the language of the new architecture—allowing the memory to be present while life returns to its normal routines.

The second project would be located in the Shokeda Forest, one of the main tourist hubs in the Gaza Envelope, where severe damage was done both physically and to the tourist trade. The plan suggests a demarcated area with five buildings—inspired by the anemone flower, one of the quintessential symbols of the region—including spaces for resting, gathering, and work, all meant to return the human presence to the forest, thus strengthening the local community and encouraging visitors.

Architect Merav Battat summarizes: "At SCE, the Negev is seen as an observation point—research and action towards understanding broad global processes. Within the context of our learning, we touch life's challenges in the region directly and encourage the students to view architecture as an active tool for the creation of change."

BATTLE RATIONS: DESIGNER'S VERSION



Have you already heard about 'nuclear humus' and 'ballistic beans'? Yael Cibulski, a student of Visual Communication at SCE, has granted I.D.F.'s battle rations a new visual language, incorporating Israeli humor, military typography and collective identity.

Since October 7, 2023, Yael Cibulski has divided her time between her studies in SCE's Department of Visual Communication and her extended military service. While in the field, she was repeatedly exposed to one of the items most identified with military service - battle rations. Rather than seeing them merely as a source of sustenance - presently, not particularly appealing—she chose them to be the objects of her final project, to redesign them, transforming them into experiences meant to boost the soldiers' morale.

The project she conceived, "Operational," suggests novel branding for I.D.F. battle rations from a design perspective that may also have a daily effect on small moments - especially during the reality of extended service in the field - by strengthening the sense of belonging and connection between the soldiers. Yael gave the packaging she designed a new visual identity, based on military

jargon, humor and the culture shared by servicemen and reservists.

She created designs for: 'nuclear humus'; 'ballistic beans'; 'stealth cracker crisps'; 'goal-oriented black coffee'; and 'tuna that swims in all sectors'. Her project transforms all the canned goods, the snacks, the napkins, and other components of the battle-ration kits into design elements with character and a story. The use of military typography, minimalistic icons, and jargon familiar to all who wear military uniforms (for example, "Forward! Charge!"), both during battles and meals - creates a dialogue between the routine in the field and moments with smiles, humanity, and respite.

Yael describes that the period since October 7th had been emotionally complex. "I was part of the Reserves system; all the while, it was clear to me that biggest goal was to bring our prisoners-of-war home. Sigal Perelman, my Mentor, who had also experienced

significant military service, recognized my connection to the military world and suggested to me that I link my military experience to my final project. This gave birth to 'Operational'. Together, we were able to transform my personal experience into a project using I.D.F. jargon, with the addition of humor and a smile, thus giving the soldiers the sense that they are seen."

Sigal Perelman, Project Mentor: "This project deals with visual culture and collective identity. This design of battle rations relates to military jargon as a cultural asset. By using military jargon, unique typography and minimalistic icons, a novel visual language was created, supported by means of humor. The goal is not the humor - which is a well-known coping mechanism in Israeli society: a means of tension release; lifting the morale; creating a sense of belonging; and introducing small moments of humanity within the complex reality."

THE NEXT 'SPINNER'...? TRANSFORMING THE IDEA FOR AN ENGINEERED TOY INTO A REAL PRODUCT

In a unique course at SCE, students of Mechanical Engineering are planning, creating and testing toys intended for serial production

Can the next 'spinner' indeed begin as a project in an engineering course? Within the framework of the SCE course entitled "Production planning," a fourth-year (senior) course in the "Product planning and design" track of the Department of Mechanical Engineering, the students are dealing with an ambitious task—the development of a toy or a mechanical game made of plastic that will not only look good on a computer screen, but can become a real product, suitable for serial production.

This course teaches creative design based on engineering thought. The students are required to: develop an idea with gameplay value; plan an engineered mechanism; make the product's structure suitable for plastic injection molding; conduct engineering analyses; and plan the production mold.

As such, an idea that begins as a simple sketch undergoes a full development process: examining alternatives; computer-aided design; building models; checking the mechanism; analyzing the mechanical behavior; and adjusting the product to suit production limitations. At the end of this process, the students do not suffice with a model or a digital image—they also participate in the creation of the molds and the injection of plastic products.

The uniqueness of this course is that the students experience the entire production process, from product design and planning to mold design and the actual end product. They are exposed to the world of serial production and to the gap between creative conception and an actual product that may be mass-produced.

This is a double challenge. The end product must be interesting and enjoyable, yet also function in a dependable manner, comfortable for the user and suited to production limitations. Indeed, a toy that looks simple may, nonetheless, be the result of complex engineering challenges regarding movement, flexibility, energy

storage, strength and mass production.

The importance of such experience is especially blatant in an age of rapid production of sketches, imaging and impressive models. The real challenge begins once the idea meets the material, the mechanism, and the production process. This course combines the possibilities suggested by the world of digital planning with a practical understanding of the materials, mechanisms, molds, and serial production processes.

Another blatant characteristic of this course is the direct connection between Academia and Industry. The course team consists of SCE faculty members and experienced industrialists, engineers, designers and a representative of "Plasson Industries," experts in production molds and plastic injection. The combined use of all these fields enabled the students to examine the product from several perspectives: Is the idea interesting? Is the gameplay experience clear? Is the mechanism working well? Is it possible to transform the concept from an initial model into a product suited to mass production?

Among the outstanding projects:



The Jumping Motorcycle - a tabletop toy in the shape of a motorcycle, inspired by the 'bottle flip' challenge—a game in which plastic bottles are flipped in the air and the goal is for them land upright (vertically). The students who planned this game are: Omri Derzi, Yohai Raichler, Tal Shwarts, and Daniel Cohen.

The user presses on the rear seat of the motorcycle. With the release of pressure, the motorcycle jumps, flips, and the goal is for it to land upright (vertically). The idea is simple and funny but getting the mechanism to work had obliged the students to plan its movement, degree of flexibility, and the way in which the product stores and releases energy.



NERF FlyShot - a toy developed by the students: Rachel Zauda, Yuval Amram, Yarden Rahamim, and Adi Tzoran, that integrates a slingshot with a pistol. This plastic toy is designed like a bird and shoots sponge arrows by means of a flexible mechanism. During its development, the students examined the influence of the product's shape on the launch of the arrows, determined the range of the arrow's flight and suitable activation energy needed for activation, and learned how to plan the product's flexibility so that the game would be enjoyable, comfortable and safe.



A device for tossing dice - developed by the students: Lidor Sabag, Ido Rabia, Koren Peretz, and Ido Hakmon, designed in the form of hamsa (a hand lifted in blessing). It is a humoristic product, intended to "improve good luck in the game" that required the students to transform an amusing idea into a functioning, manufacturable product.

“WE’VE BROUGHT YOU SAFETY!”: THE SYSTEM THAT WILL HELP LIGHT AIRCRAFT LAND SAFELY

SCE students have developed an autonomous system that identifies gusts of wind and corrects the course of light aircraft in less than 20 milliseconds—ten times faster than the reaction of a human pilot!



The final project created by two graduates of SCE’s Department of Mechanical Engineering, Dan Benjamin and Dov Lyudomirsky, is likely to improve the security of light aircraft during landings. Mentored by Dr. Shayke Bilu and Dr. Dannel Stoller, this student duo has developed an autonomous stabilization system that helps light aircraft to cope with crosswinds—one of the most complex and dangerous challenges faced during landings. This innovation gained a great deal of attention and was presented at the “2026 International CoDIT Conference,” in Bari, Italy, July 13-16, 2026.

Sudden crosswinds during the landing may divert light craft from their runways, causing harm to surrounding structures or to the planes’ undercarriages or landing gears within mere milliseconds. The reaction time of human pilots is 300-500 milliseconds—too slow to cope with strong, sudden gusts of wind. This system, developed by SCE students, identifies the deviation and immediately initiates an automatic steering correction in less than 20 thousandths of a second—ten times faster than any human pilot, thus bridging the gap between the fast

wind dynamics and human reactivity.

During a real-time field test, five autonomous landings were performed under winds up to 35 km/h. The system identified and rectified 214 significant path deviations, totally preventing dangerous landings involving sideloading, landing-gear damage, and significantly reducing the pilot’s workload.

This solution is based on low-cost, accessible components, making it applicable to all light aircraft—even in small, unmanned drones, in which expensive, complex mechanical solutions are not viable.

According to Dan and Dov, their goal was to take a real problem from the world of Aeronautics and to solve it using simple, accessible components. “It’s a satisfying feeling to complete our studies, while seeing the system realigning itself when struck by strong winds during landing, and to even get recognition for this at an international conference.”

Project Mentor, Dr. Shayke Bilu: “This project demonstrates how proper engineering thinking makes it possible to inexpensively reach performances that, thus far, had been the sole purview of pricey systems.



RE-ENGINEERING INDEPENDENCE



Throughout the academic year, SCE students of Mechanical Engineering accompanied disabled veterans in rehabilitation at the Fighters' House in Be'er-Sheva and developed personally-tailored solutions for them that help them to cope independently with daily challenges

Daily activities, like spraying perfume, shampooing hair, or holding a knife—are taken for granted by most people; however, for people coping with injury or physical limitations they may present serious challenges. In response to such needs, 3rd-year (junior) SCE students in the Department of Mechanical Engineering developed some personally tailored solutions for wounded and rehabilitating I.D.F. veterans in Be'er-Sheva. These innovations were developed within the framework of a course in the "Product Planning and Design" track, led by lecturer Naama Agassi and designer Ilan Elkarat.

Throughout the duration of this course, each student team accompanied their friend at the Fighters' House, becoming familiar with that person's needs and daily challenges—to develop the best, targeted solution. This complex process included meetings with the veterans, research, construction of a prototype, and continuous improvement of the product, until reaching the goal of creating the most functional and beneficial solution—that would improve the users' quality-of-life.

At the conclusion of this process, a festive exhibit was displayed at the Fighters' House, in which the students presented their innovative solutions to the rehabilitating veterans, their family members and the professional

rehabilitation staff. Beyond the impressive, engineered innovations, most blatant were the human connections that developed during that year between the students and the users.

One of those thrilling projects was dedicated to Amit Gur, who had been wounded on October 7, 2023. After being wounded in her left shoulder and her right hand, she found it difficult to perform actions requiring strength in her forefinger (pointer); even a simple action, like spraying perfume, became a task requiring assistance. SCE students Noa Ziv and Guy Pariente developed a device for her that attaches to any perfume bottle, getting it to spray by means of a gentle push on a dedicated button. This simple solution enables Amit to get ready in the morning independently.

Another team, including David Zuzut, Ron Suissa and Harel Ben Shoshan chose to deal with another challenge in Amit's daily life—the development of a system making the independent shampooing her long hair possible for her—from wetting her hair and shampooing it to wringing it out; however, the development of this system is still in process and the students have declared their intentions to continue its preparation as their final project, to install it in Amit's home. They wish to turn their system into a practical product for additional people with similar disabilities, as well.

Amit was quite excited about the solutions

developed for her special needs, adding that besides appreciating the products themselves, she was truly moved by the students' desire to restore her independence and enable her to cope with her injuries in an easier and more respectable manner.

Even Kobi Segal, wounded during the First Intifada (1987-1993), who currently assists the veterans with their rehabilitation at the Fighters' House, was the muse for two other projects. Due to neural damage in his right hand, maintaining a grasp in that hand requires his sustained concentration; once his attention is diverted, he loses his grasp, and objects fall from his hand. SCE students David Barshishat and Yuval Ben-Hamo developed a glove for him that can mechanically lock his fingers; using this glove, Kobi can hold objects steadily and is able to perform daily actions without being concerned about inadvertently letting them go. Meanwhile, SCE students Itai Hakham and Gal Arush created a device that can hold a knife, enabling Kobi to prepare food, cook it and eat by himself, having previously required someone else's help. This device was perfected and installed in Kobi's home and will soon be gifted to him for his permanent use at home.

The common goal of all these projects is their focus on small daily actions that most people do without giving them a second thought, while, for those with physical

disabilities, these are the moments that define their degree of independence, sense of capability and self-confidence.

Naama Agassi, Coordinator of SCE's "Product Planning and Design" track in the Department of Mechanical Engineering, says: "It's important to me that, during their studies, our students should experience

a real process of product development for another person's benefit. The understanding that I'm trying to inculcate is that Engineering is always for people, and indeed, they [SCE students] really do have the power to produce a positive influence on the lives of others. Usually, during engineering studies, students make

plans for theoretical users. Here, they meet real people, with a real-life stories, and discover that a significant part of their work is not merely to solve technical problems, but rather to deeply understand human needs. It is by listening attentively that good solutions are found, which enhance the sense of independence, self-confidence and ability."

SOMETIMES, A GREAT CHANGE BEGINS WITH A SMALL ROLL OF PAPER

A development by SCE students of Mechanical Engineering, which improves the quality of life of disabled I.D.F. veterans, won the international TOM competition

For most of us, the use of toilet paper is automatic and only lasts for a few seconds; however, for people coping with upper-body physical disabilities, that simple action may become a complex task or require dependence on another person.

To resolve this daily problem, Bar Tsibutovski and Maxim Yudaev, third-year students of Mechanical Engineering at SCE, developed a system that enables the independent one-handed use of toilet paper. This development was made in conjunction with the international Tikun 'Olam Makers (TOM) movement. It is intended for use by those with limited use of an upper limb.

Throughout the entire development process—from the stage characterizing the need and to the testing of the prototype—these two students worked under the guidance of their lecturer, Naama Agassi and designer Ilan Elkarat, together with Kobi Segal, a disabled I.D.F. veteran. The direct contact with Kobi and familiarity with his daily challenges enabled them to create a precise solution, suited to his needs.

This "Smart Paper" system was chosen as one of the outstanding projects at the annual Global Innovation Challenge (GIC) competition—TOM's international innovation contest—in which hundreds of TOM community contestants from around the world compete. The "Smart Paper" project was recognized for its innovation, the quality of its engineering and the social value it creates.

The system is based on a movement sensor. When the user holds a hand underneath the device, toilet paper is automatically unwound, stopping at a predetermined point that enables the easy one-handed retrieval of the desired amount. At the Fighters' House in Be'er-Sheva, people were impressed by this novel development and are currently working on the installation of such devices in all the washrooms, making it much easier for those coming for rehabilitation.

Naama Agassi, Coordinator of SCE's "Product Planning and Design" track in the Department of Mechanical Engineering, says that SCE trains

Engineers who do not merely develop technologies, but also the future—they are creative professionals, leaders to a better world. In her words: "It's important to me that, during their studies, our students should experience a real process of product development for another person's benefit. The understanding that I'm trying to inculcate is that Engineering is always for people, and indeed, they [SCE students] really do have the power to produce a positive influence on the lives of others."

Dr. Nitzan Shauloff, Director of the TOM communities in the Negev region explains: "This project demonstrates the heart of TOM—the connection between people with real needs and the community of developers, engineers and students—who create influential solutions together. Seeing a solution that grew here in Israel and won international recognition is a great source of pride for us all."

TOM—Tikun 'Olam Makers is an NPO, an international organization for innovation, that connects people with disabilities and rehabilitation specialists with engineers, designers, students and volunteers, towards the goal of developing open-code technological solutions to real life challenges. By means of cooperative work with 'those with special needs', TOM enables the transformation of ideas into practical solutions that improve the quality-of-life of people around the world.



1,152 NEW ENGINEERS AND DESIGNERS ARE HEADING OUT



In the shadow of the war and prolonged Reserves duty, SCE's graduates celebrated the end of their studies at thrilling commencement ceremonies



1,152 SCE graduates received their B.Sc. and M.Sc. diplomas in Engineering, Computer Sciences and Visual Communication in festive ceremonies held on the Be'er-Sheva and Ashdod campuses.

Dressed in ceremonial caps and gowns, the graduates celebrated the completion of their studies after an especially challenging period—in the shadow of the war and prolonged Reserves duty. These ceremonies symbolized the students' robustness and the College's high esteem for the many students who managed, for two-and-a-half years, to balance their academic studies with active service in the I.D.F. and security forces and a variety of voluntary campaigns. As a symbol of hope and the aspiration for a better future, balloons were let fly in the Negev sky, bearing the SCE logo.

Prof. Jehuda Haddad, SCE's founder, congratulated the graduates and revealed several new strategic plans in the offing; the foremost being an outstanding plan with national and regional significance: "We are especially proud to have received official authorization to open academic studies of Medical Imaging—a unique program in Israel and certainly in the Negev—that combines technology, medicine and innovation. This will become an important base for the training of much needed professional personnel for the Israeli Medical System and will also serve as an anchor for the establishment of another hospital in the Negev." Furthermore, Prof. Haddad noted that soon a novel study program would also be opening in Food Technology, and he praised the recognition of the Masters' degree in Civic Engineering.

Prof. Semyon Levitsky, SCE's President, addressed those students who had successfully integrated



their academic commitments with their military and security duties all along: "The years of your studies were irregular, in the shadow of war. You were required to cope with uncertainty, emotional stress and prolonged Reserves duty—and you never gave up. This ceremony bears witness to your willpower, diligence and ability to grow even during the most challenging periods. Excellent engineers are not merely people who know how to solve problems, rather they are people who understand for whom and why they are solving them."

Later in the evening, certificates of excellence were granted to students from various departments, as well as M. Sc. degrees to SCE's postgraduates in Software Engineering, Mechanical Engineering, Electrical Engineering and Electronics, Green Engineering and Industrial Engineering and Management.

"The starting point of a journey meant to be influential"

As part of SCE's vision of academic excellence combined with community involvement, the annual mark of

social distinction was awarded on the Be'er-Sheva campus to Ziv Mahadani, a third-year (junior) student in the Department of Industrial Engineering and Management. Ziv, serves in the Homeland Security Reserves and leads social initiatives within the context of the "Benjamin de Rothschild Ambassadors" program. He received a mark of distinction for his indefatigable work for Israeli society, both in normal times and during emergencies.

On the Ashdod campus, Avigail Musai, a third-year (junior) student in the Department of Software Engineering, was awarded a similar mark of distinction. Avigail serves in the I.D.F. Reserves, is a "PERAH" [national program for social impact] mentor, and tutors four first-year students each semester.

On the Be'er-Sheva campus, the Student Body Spokesperson, Shahar Ogalbo, a Visual Communication graduate, spoke saying: "We've learned to observe the world and ask how we can make it a better place. The diploma is not just the end of a period, rather the starting point of a journey in which we'll apply the knowledge, the curiosity, and the courage we received here—to make things better."

On the Ashdod campus, Aviv Omer Filber, a graduate of the Department of Computer Sciences, spoke: "Between work, family and Reserves duty, we learned to manage our time, to make decisions under stress, and to carry on even when there is no immediate solution."

The artistic portion of the evening included an emotional performance by singer, Amit Tal, singing "Teyn" and an AI-based humoristic videoclip starring Elon Musk, who presented the final projects of the graduates.

BETWEEN AI AND THE ENVIRONMENT: SCE STUDENTS ON A JOURNEY TO THE ENGINEERING OF TOMORROW



Eight SCE students represented Israel at an international program held in Germany dealing with a great challenge facing the coming generation—the use of advanced technology to service both society and the environment

A delegation consisting of eight SCE students spent the summer in Germany to participate in the International Summer School at TH Lübeck University of Applied Sciences. This program dealt with "Engineering Sustainability in the AI World"—a meeting between Artificial Intelligence (AI) and sustainable Engineering and Technology.

The SCE delegates, chosen by a committee in the Dean of Students Office, were accompanied by Zohar Zalik-Kreitser, Career Development Center Coordinator. This delegation included students from the confrontation-line settlements (Gaza Envelope) and I.D.F. student reservists.

TH Lübeck is an Applied Sciences university with many characteristics like those of SCE, also emphasizing practical training and a close

connection with Industry. Over the course of ten days, the students participated in an intensive program that included workshops, lectures, and field trips to local industries. They were directly exposed to practical applications of technologies they had studied in the classroom, and they learned how advanced industries integrate technological innovations, AI and environmental thinking into their development and production processes.

Besides the academic learning, these students enjoyed a variety of social and cultural activities. They were given rich cultural and historical tours of the cities Lübeck and Hamburg and developed ties with students from other countries.

Two SCE lecturers were also officially included as lecturers in this program:

Prof. Ariela Burg, Head of the Department of Chemical Engineering (Be'er-Sheva campus) and Dr. Chen Giladi, from the Department of Mechanical Engineering (Ashdod campus).

For the students, this was a wonderful opportunity for learning in an international environment, to become familiar with new technological industries, and to build a personal, professional network with young engineers from across the globe. This program demonstrated that the future of Engineering does not rest solely on the development of the next technology, but rather on the question of how to use technology responsibly, efficiently, and sustainably. The combination of innovation and AI with a deep understanding of social and environmental needs is precisely the challenge standing before tomorrow's engineers.

WHEN THE MOUNTAIN BECOMES A STUDIO: ARCHITECTURE UNDER EXTREME CONDITIONS IN THE ITALIAN ALPS

Students from SCE's School of Architecture set out to learn and plan in the heart of the mountainous landscape of Northern Italy

Before the start of the academic school year, a delegation from SCE's School of Architecture traveled to the Monviso Institute in Northern Italy to attend a three-week "Summer Architectural Studio." This Studio was held with the support of the College's Division for International Academic Relations, for the expansion of such collaborations and to provide the students with learning opportunities and experiences in other academic and professional environments across the globe. This delegation, in which 17 students participated, was accompanied by Architects Alon Sarig and Lior Ramon.

During those three weeks, these students lived and did their research work amid the Alpine scenery. They examined various sites and did architectural planning while considering each specific community and its specific environment. Besides the work done at the Studio, they also went on professional tours in the Monviso area, in Po Valley (Val Padana) and in the city of Torino, which exposed them to a variety of professional architectural approaches to landscape planning, heritage preservation, local industry, and regarding the reciprocity between Humanity and Nature.

The Challenge: Temporary dwellings under extreme conditions

In the Studio, the main task required



complex planning - To suggest a demarcated area for the temporary residence of a future campus in the Monviso area. Moreover, this work focused on one of the main, contemporary architectural challenges - planning for extreme conditions.

The students had to deal with the mountainous surroundings, characterized by acute changes in the weather, complex topography and limited accessibility. The planning suggestions included partial solutions, such as: modular construction; use of local materials; passive mechanisms for natural energy use; functional flexibility across the seasons of the year; as well as the development of construction systems that may be easily built, deconstructed, and fortified even in distant sites.

The lengthy stay in the field and direct contact with the community and local experts provided the students with unmediated learning opportunities and personal experiences in research-based planning, ideational development and dialogue. The participants in this delegation

recounted that the experience enabled them to leave their comfort zones, to strengthen their professional self-confidence, and to expand their architectural perspectives, as well as acquiring new tools for teamwork in challenging surroundings.

According to the Studio's mentors, Architects Sarig and Ramon: "The Studio is a learning opportunity in another league. Rather than planning a site from afar, the students were living there and experiencing the climate, the topography and the local culture. The Monviso region is a unique laboratory for architectural thought, in which the climatic conditions and environmental sensitivity require creative, precise and responsible thinking. These are precisely the questions with which future Architecture will have to deal."

Summarizing, the students said: "This was a significant academic and personal experience—one that connected Architecture, location, community and environment—and substantiated the latent possibilities in learning outside the classroom walls."



OUTSTANDING STUDENTS FROM THE BATTLEFRONT

They fought in the Gaza Strip and in Lebanon, racked up hundreds of days of Reserves duty, one was even wounded during an encounter with terrorists - and despite all that, they gleaned the prestigious award of recognition as 'outstanding students'

The ceremony, held on the Be'er-Sheva campus, bestowing entrance scholarships and granting 'outstanding student' status was especially emotional this year. In addition to their impressive academic achievements, it became known that all four of the award recipients, who had begun their SCE studies in the spring semester of 5786 (2026), were active fighters and commanders in the I.D.F. Reserves, who had successfully matched their intensive military service with outstanding academic excellence.

As in previous years, the College offered entrance prizes of 5,000 NIS to new students who presented the highest submission data; however, this time, behind these data lay an inspiring story. Four outstanding students reached the gates of Academia after having served hundreds of days in the Reserves, after prolonged fighting and even being wounded.

Among the prize winners, there were two new students entering the Department of Civic Engineering. Lidor David fought in the elite Golani

Brigade's Reconnaissance Patrol, was wounded in October 2024 during an encounter with Lebanese terrorists and began his studies at SCE in parallel with his prolonged period of rehabilitation. Gil Kalfon, a fighter in the elite Golani Brigade's Maglan Unit, arrived at the awards ceremony directly from the fighting in Lebanon. Since October 7, 2023, he had served over 300 days of military duty and, in parallel, had completed SCE's semestrial Academic Prep-School with a grade of 99.

With them were two other outstanding students from the Department of Electrical Engineering and Electronics—both graduates of Ultra-Orthodox Jewish education. Yehuda Assulin, married and the father of seven children, who serves in I.D.F.'s Pitin Company in the 74th Armored Regiment and Moshe Yair Cohen, an officer in the 202nd Paratrooper Regiment, who commanded the company during the intense fighting in the Gaza Strip.

The students who received the scholarships thanked the College

Administration and the Faculty for their support, which gave them the opportunity to reach great achievements while doing their demanding military service. Lidor told us about the close, personal guidance he had received throughout his studies. Moshe specifically mentioned that the team of lecturers at the Prep-School had dedicated themselves to assisting him to close the significant learning gaps caused by his lengthy Reserves service.

Moshe Karuchi, Dean of Students: "While everyone's busy trying to define 'victory', our students demonstrate its real significance every day. Despite their intensive military service, demanding studies and personal lives rife with challenges—they do not merely cope, rather they excel. The Israeli economy needs these talented graduates. History teaches us that after wars comes a period of growth, and this generation will be among the powers that will lead the economy and society in Israel forward. We're talking about a generation that arouses the inspiration of valuable, determined and talented young people."

TOGETHER, WE WILL EMPOWER THE NEXT GENERATION OF CHEMICAL ENGINEERS

The long-standing cooperation between "Adama Makhteshim" and SCE's Department of Chemical Engineering continues to produce the next generation of engineers. One of the most blatant expressions of this collaboration is the granting of scholarships that promote academic excellence and social involvement.

This year, it was decided to devote the component of the 'contribution to society' to those students who had served in the I.D.F. Reserves since October 7, 2023—yet had succeeded, despite the challenges, in consistently maintaining an impressive level of academic achievement.

The ceremony awarding these scholarships was dedicated to the memory of the founders of "Adama."

- The outstanding students of 5785 (2025):**
- Yagel Kalimi**, a third-year (junior) student, served over 350 days in the I.D.F. Reserves from the start of the "Iron Swords War" as an "Iron Dome" missile interceptor in various sectors and, in parallel, he volunteers in the Security Alert Team of the settlement where he lives.
- Amit Gueta**, a third-year (junior) student, served about 650 days in the I.D.F. Reserves during his academic studies and, in parallel, he is volunteers in the "Academic Cadets" program.
- Tali Ohayon Lavi**, a Masters' degree student in Green Engineering, mother of four, serves in the I.D.F. Air Force Reserves in addition to her studies.
- An encouragement scholarship for his ongoing investment and diligence was awarded to Eliyahu Horowitz, a fourth-year (senior) student, father of three, who served over 550 days in the Reserves during the war.
- Gal Benizri**, Global Head of



Manufacturing Operations at Adama, congratulated all the winners, saying: "At 'Adama', we consider social responsibility the supreme value, exactly as in our business dealings. We believe in strengthening our ties with Academia and, within that collaboration, we will continue to raise Israel's generation of engineers and professionals. I appeal to you to become our ambassadors and to disseminate the importance and value of Chemistry studies and Chemical Engineering."

Benizri thanked the team from the Department of Chemical Engineering and its Chair Prof. Ariela Burg and expressed his special appreciation to the students who had managed to do prolonged service in the Reserves while maintaining excellence in their academic studies.

"Adama Makhteshim" Hackathon

While the awards ceremony was going on, the "Adama Makhteshim" Hackathon was also taking place. SCE students were competing to solve an engineering challenge from the world of formulations presented by Anna Panarin from "Adama Makhteshim."

The participants were asked to choose a pair of unmatched substances and to suggest a mechanism for their separation and plan an applicable solution—from the laboratory stage to the industrial manufacturing stage—while analyzing the risks, limitations and advantages.

Throughout the day, teams of mentors from "Adama Makhteshim" were accompanying the teams: Anna Panarim, Dr. Shani Tsirkin, Viacheslav Firer, Dr. Noy Saad, Alex Tolts, and Dr. Amer Alatawna. The ideas were judged by the company's engineers, most of them SCE graduates—Gal Benizri, Kfir Cohen, Yamit Moses, and Ilana Sisso—and at the end of the day, three winning teams were announced.

This collaboration also continued after the ceremony and the Hackathon were done. At the annual conferences, at which the final projects are displayed in the Department of Chemical Engineering, managers from "Adama" participate in the judging process; among them are: Gal Benizri, Vitaly Shrager, Yamit Moses, and Shlomi Biton.

Academic Faculty | Ilan Taieb, Director of Sce's Academic Preparatory School In Ashdod



Ilan Taieb (37), an Ashdod resident, married to Levana and father of four, has recently been appointed to the position of Director of SCE's Ashdod Academic Preparatory School. Ilan, who emigrated to Israel from France at age 17, is himself a college graduate, with a Bachelors' degree

(B.Sc.) in Mechanical Engineering, a Masters' degree in Teaching (MTeach), and certification as a Physics teacher from Beit Berl, plus a rich background in Education and Technological Innovation.

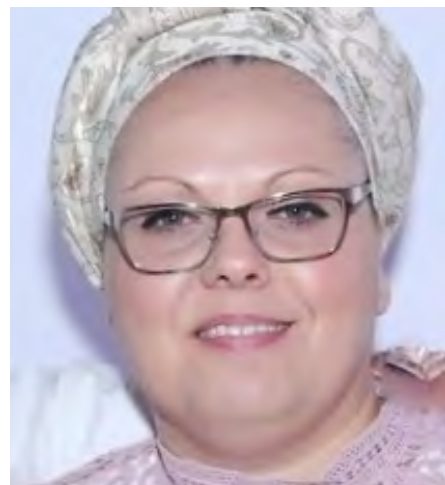
His work at SCE began when he was still a teenager in the SCE Prep-School and later as a Teaching Assistant in Physics. Over the past decade, he has also served as a Physics lecturer in the Prep-School.

Ilan considers his new job as personal closure: "Fifteen years ago, I myself studied in SCE's Prep-School, where I received the tools that would accompany me throughout my years of study," he shared. "I want to give the new students the same sense of capability that I got here.

My aspiration is to establish the Prep-School as a supportive environment that fully and personally envelopes all the students, while adjusting to the rapidly changing and developing world."

His vision does not end with mere book learning. "Our most significant learning occurs when we use physical simulations and visual demonstrations that connect theory to actual daily life," he explains. As an educator, Ilan constantly combines Artificial Intelligence (AI) tools in content development. He sees the great importance of preparing students for tomorrow's challenges and of giving them a modern, relevant toolbox—training the coming generation of Israel's engineers.

Administrative staff | Anat Twito Perez, Head of the Student Administration Department, Be'er-Sheva campus



Anat lives in Be'er-Sheva, is married to Haim (who works at Ben-Gurion University of the Negev), and is the mother of four: Nehoray (16), Eliya (15), and the twin girls Shoham and Hoshen (12).

She started to work at SCE in 2001 as

Assistant Director of SCE's Preparatory School. In 2009, she transferred to the Student Administration Department, serving as the Electrical Engineering and Electronics Student Coordinator. Today, she is proud to complete her significant, professional path with her appointment to the position of Head of the Student Administration Department on the Be'er-Sheva campus.

"Throughout my years here, I have been privileged to develop together with the College and to become an indivisible part of the action. I've accompanied many generations of students through challenging and emotional moments in their academic lives. In my present job, I see the supreme importance of giving personal attention—of listening, of

extending a warm hand to every student—and then finding solutions to every problem, from the minute they are accepted at the College and until the end of their graduation ceremony, when they receive their diplomas."

She goes on to say: "Working at SCE gives me great satisfaction and it's my daily mission. My greatest source of pride is seeing our students successfully concluding their long and challenging academic paths, proudly marching across the stage [in caps and gowns] as fully-fledged engineers."

In her spare time, Anat loves to treat her family to delicious culinary dishes and to read suspense novels. On her family vacations, she uses every free minute to take trips throughout our beautiful country.

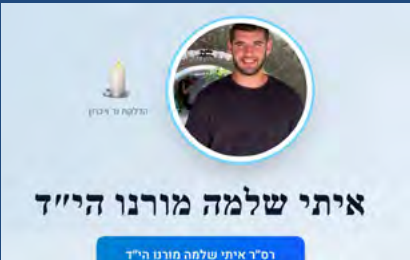
DIGITAL HOMES FOR FAMILIES OF FALLEN SOLDIERS

The "Eternal Memory" project, developed by two women students, Mali Dagan and Hadar Shimon, provides a unified and respectful commemorative platform, enabling grieving families to preserve the life stories of their loved ones, and to design and manage the manner of their commemorations

Since October 7, 2023, the State of Israel has been coping with an unprecedented amount of bereavement. While that pain is still accompanying Israeli society, current digital commemoration is fragmented, partial and sometimes even insecure. As such, Mali Dagan and Hadar Shimon, students in SCE's Department of Industrial Engineering and Management on the Ashdod campus, mentored by Dr. Adi Katz, decided, as their final project, to develop an interactive, digital commemorative website that will, for the first time, unify all the I.D.F. casualties of war and victims of terrorist action killed since October 7 and during the "Iron Swords" War in one dedicated website.

This idea was born following Mali's personal experience during the past Day of Atonement (Yom Kippur). "I wanted to upload a photo in memory of one of my women soldiers who was murdered at the "Nova" party," she recounted. "I searched for a site that centralizes all the details of the fallen—only to discover that there is no such site. The "Yizkor" memorial site meant only for I.D.F. casualties, and the other commemorative sites were very partial. I found myself scrolling through Instagram just to find a photo. Then, I realized that a decent digital site is lacking—one that unites all of them."

Later, Mali and Hadar heard Itay Shlomo Moreno's story—he had been killed during the "Iron Swords" War. Itay was about to begin his studies



in their department and had just attended the preparatory courses. Hadar said: "He was meant to be in our department, in our track, and maybe that was why we found his story so touching."

The interview they held with Itay's widow, Gal Moreno, deepened their understanding that a secure, monitored and accessible commemoration space is much needed: "One of the major problems in the digital age is the 'wild-West' social networks that publish hurtful reactions and imprecise data. Gal stressed the importance of the family being able to control how their loved one is memorialized."

In the "Eternal Memory" website, not even a single bit of data may be uploaded without permission. "We've built a system in which only the family may grant permission," they both explained. "Every memory, each photo, and all the responses must be authorized by the owners of the relevant page. This ensures that the site will remain sensitive, precise and respectful."

Unlike the other official commemorative websites that present basic data, the "Eternal Memory" website wishes to present



the person behind the name. It is an interactive domain where, in addition to the basic life story of the one who fell, visitors to the site may also find the hobbies, values, significant moments, favorite recipes, and information about other memorials for the deceased, such as: coffee carts, park benches, monuments, and various other commemorative enterprises, as well as receiving alerts regarding significant dates and the opportunity to light a digital memorial candle for the dear departed.

The prototype developed by Mali and Hadar is based on their academic research, user-focused analysis, system analyses using 'unified modeling language' (UML) diagrams, and already includes functions not found in the official commemorative websites to-date. These two women hope that the official bodies, like the Ministry of Defense and the local municipalities, will adopt this project and transform it into the digital home for every bereaved family in Israel.

"Our goal is that the memory will live on and that everyone who enters our website will encounter an entire world of dreams, love and life—not merely the name of the deceased on a digital memorial plaque."

INNOVATION IN HIS MEMORY: THE THIRD "ENGINEERING MATERIALS" HACKATHON

The Hackathon in memory of Liav Atiya combined industrial, creative engineering and commemorative values—offering students an opportunity to develop potentially applicable solutions



The SCE Hackathon “Engineering Materials,” in memory of Liav Atiya was held for the third year in the Department of Civil Engineering on the Be’er-Sheva campus, in conjunction with “Izotest Laboratories.” Liav fell in a battle in the Gaza Strip in December 2023.

From the beginning of the semester, the participants in this Hackathon, second-year (sophomore) SCE students in the course “Building Materials 2,” had been divided into 18 work teams. During the semester, they were presented with challenges with which commercial laboratories, such as “Izotest Laboratories,” must deal—involving advanced technologies for monitoring the elements in concrete. They researched these issues and formulated principled solutions, while considering the challenges and the limitations. Throughout this process,

they were accompanied by Dr. Tal Yadlin and a team of mentors from “Izotest Laboratories.”

On the day of the Hackathon, these teams presented their work before a Judges’ Panel composed of academicians and industrialists in three parallel sessions. Two outstanding teams from each session entered the final round, where they presented the leading solutions before all the Judges and an audience of students. During the final round, Rivka, Liav’s mother, spoke in his memory.

The winning team (in first place)—Efrat Azoulay, Shoval Hannah Basa, Tal Zilbershmidt, Leon Kleiman, and Ilana Shcherba—who developed a creative solution for measuring the concrete’s setting times, was awarded 3,000 NIS, a gift from the Atiya family and the privilege of presenting their

solution at the Annual Conference of the Israeli Association of Construction & Infrastructure Engineers (IACIE).

The second-place team—Osher Guetta, Matan Didi, Evyatar Deri, Mordechai Ariel Waldman and Yuval Ben Simon—also presented a solution to the same challenge.

The third-place team—Shani Ben Yosef, Aner Degani, Yoav Chen, Saar Shalish and Natali Shitrit—developed a solution for the measurement of the pH in concrete towards the potential monitoring of corrosion in reinforced concrete.

All three teams were granted access to the Center for Applied Innovation at “Isotest Laboratories,” where their projects will be professionally tested, towards the further development of their solutions under the company’s auspices.

CONTINUING IN THE SPIRIT OF AMIR NAIM: INNOVATIVE ENGINEERING FOR A GREEN FUTURE

SCE students in the Department of Chemical Engineering, in collaboration with “Intel” and the Naim family, have developed novel solutions for the recycling of energy from brown wastes during the annual Hackathon in memory of Major (Res.) Amir Naim

SCE’s Department of Chemical Engineering, in cooperation with the Naim family and “Intel,” held the Third Annual Hackathon in memory of Major (Res.) Amir Naim, who fell protecting his home and neighboring kibbutzniks on October 7, 2023, while fighting bravely in the Security Alert Team of Kibbutz Erez.

Amir had been an SCE 2nd-year (sophomore) student of Chemical Engineering—an outstanding student, full of curiosity, beloved by his classmates and lecturers. Parallel to his studies, he had begun working as a student-employee at “Intel” in the field of Environmental Quality. In his memory, each year a Hackathon is held, combining the values and subjects that had been closest to Amir’s heart—innovation, engineering and sustainability.

This year’s Hackathon focused on a significant industrial challenge—finding beneficial utilizations for brown waste produced by manufacturing processes. The participants were SCE juniors (3rd year) and seniors (4th year) in the Department of Chemical Engineering, as well as SCE Masters’ students of Green Engineering. They were asked to develop solutions for the reclamation of emitted gases, vapor from volatile organic compounds (VOC) and steam—to promote more efficient, economic, and eco-friendly production processes.

These student teams were accompanied by mentors from “Intel”



and members of the academic staff of SCE’s Chemical Engineering Dept. The participants developed and presented innovative technological strategies, and suggested improvements for the existing solutions, after examining their environmental, economic, managerial and infrastructural likelihoods. Emphasis was place on the possibility of recycling the brown waste energy for use in the plant’s own processes.

At the closing event, each team presented its proposed solution before SCE faculty members, the Chemical Engineering students, “Intel” engineers, and Amir’s parents—Orna and Asher Naim. Three outstanding teams were awarded monetary prizes totalling the sum of 24,000 NIS, contributed by “Intel.”

Prof. Ariela Burg, Head of the Department of Chemical Engineering and the Masters’ program in Green Engineering said: “Amir was part of

us and left his mark on his friends, the lecturers who taught him and everyone who was lucky to have known him. Here, today, we have seen something deep and emotional—young people who choose to remember and create. This is the most significant way to commemorate a man—not by merely talking about him, rather by carrying on, in his spirit, doing the significant thing he had wanted to get done.”

Dana Grooper, who had worked with Amir at “Intel” added: “Time doesn’t heal and the pain merely changes. Nevertheless, I think that Amir would be proud of this tradition we have established for ourselves and of the beautiful ideas raised here today. If there’s one thing I want to you to take with you from today, it’s the knowledge that each individual has the power to create change for oneself and for others—to dare, to think outside the box, to try, to err and to succeed—and to laugh, even when you carry great sadness inside.”

