

ENGINEERING A BETTER WORLD

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SCE

המכללה האקדמית להנדסה ע"ש סמי שמעון

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The Corner stone for the College's New Campus in Ashdod has been laid

The New SCE Engineering Campus will be part of the future Academic Campus in the City of Ashdod, which will be built on a specially dedicated area of 37 acres



Dozens of representatives of the city of Ashdod and of the College took part in the ceremonial laying of the cornerstone for the College's new permanent engineering campus, which was held on June 7, 2018. The campus will be built on an area of 11 acres located in an area of 37 acres which will be dedicated to Ashdod's academic campus which will be built in the future. Prof. Yehuda

Hadad, the President of SCE, and Dr. Yechiel Lasri, the Mayor of Ashdod, spoke in the ceremony.

"We have come here today to lay a cornerstone, and with it the foundations for higher education in Ashdod", said Prof. Hadad in his speech. "Those engaged in the field of academics and education understand the



meaning of foundations for education. We too, when we arrived to Ashdod 18 years ago, understood their importance. For 18 years we have hoped and desired, and finally it has all come true. Even before a proper campus of engineering has been established in the city, we managed to achieve amazing results: more the 4,000 engineers graduated from our College are working all over the country. 2,500

active students and approx. 150 employees on campus. All that we do is not done for our own benefit but for society's benefit, for a better world. Standing here today, I promise you that in three years' time the first building of the SCE College of Engineering in Ashdod will be built.

Dr. Yechiel Lasri, the Mayor of Ashdod, congratulated all those present and thanked Prof. Hadad for joining him on his path: "We are making history today. We are laying the cornerstone for the first academic institution which will be part of the academic campus to be built in Ashdod. This is our vision. Like any other great vision, organizations, institutions and people join forces to bring it to life. Prof. Hadad, you are a friend and a partner in this path leading to the creation of higher education in Ashdod. The city of Ashdod and I thank you. I wish for all of us that in three years' time we will stand here again to inaugurate the city's new campus of engineering.

Thanking the Board of Trustees

The College's activities and achievements during the passing year were reviewed in the 26th assembly of the board of trustees, which convened on June 3, 2018

The 26th annual assembly of the board of trustees of SCE convened on Sunday, 20 of Sivan 5778, June 3, 2018.

The chairman of the board of trustees, Roni Milo, opened the assembly by expressing his appreciation of the great development the College has seen under Prof. Yehuda Hadad. He mentioned some of the passing year's achievements, including the Council of Higher Education's approval of opening a first architecture campus in the south, the approval of the M.Sc. program in Green

Engineering with a thesis and more.

Prof. Hadad, who spoke after, expressed his appreciation and gratitude towards the members of the board of trustees and specifically to its Chairman Roni Milo, for all they did to promote the College, and congratulated the newest additions to the board of trustees. Later Prof. Hadad reviewed the College's activities in the passing year in all its fields of activity – research, building and other activities. Together with its regular activities, the College also



engages in developing innovative curricula, establishing new applied science research hubs, developing international ties, joint activities with entities from the industry, developing advanced teaching methods and tools and expanding its activities to other fields.

Prof. Hadad noted that the College received approval for opening the first architecture campus in the south, which will be built in the Rose Complex in the old city and will include architecture, interior design, industrial

design and visual communication studies. He also announced that the Municipality of Ashdod has signed an agreement for delivery of an area for building the new College campus in Ashdod, which will be built as part of the academic campus to be built in the city in the future.

Later on the issues requiring the approval of the board of trustees were presented, as required by the Associations Law.

At the end of the assembly of the board of trustees, Dr. Michal Shelly presented a work plan focused on the personal and professional development of students, by providing them with learning skills, tools for dealing with pressure in exams and more.

From the President's desk



President of SCE – Professor
Jehuda Hadad

The start of the 5779 [2018-2019] academic year finds us in the midst of a wide variety of activities, intended to offer solutions to your needs, the students and faculty members, and to promote development, growth, renewal and building in all aspects and fields. We have grown to be one of the largest engineering higher education institutions in Israel: an institution creating a great and important social change – and this is the source of our pride.

As you will read in the first pages of this issue, we have laid the cornerstone for the College's new campus in Ashdod, which will be built in a specially dedicated area at the Ashdod academic campus. Another building, at the Be'er Sheva campus, was recently populated, in order to offer a solution to the growing number of students and the rich research activities conducted by the members of our academic staff.

All this, and more, imposes on us, as an academic institution, the obligation to invest even greater efforts in maintaining continued growth and the development of academic excellence; to lead you, our students, in your academic journey and in the industry and to turn you to industry leaders in the field of engineering – an endeavor we believe will lead to the creation of a better world for all of us.

I wish you all that you continue on this path of renewal, development and growth with us, and that together we will reach new heights.

May you have a successful academic year, full and rich with new idea!

With warm regards,

Prof. Jehuda Hadad

Designing a future

SCE is working hard on developing a curriculum for the Faculty of Design

The curriculum for a BA in Design will train graduates who will find their place in an age of cutting-edge technologies and who will offer a solution to the great thrust of development in the Negev

In preparation for the foundation of the College's Faculty of Design, which will offer study programs in architecture, industrial design and visual communication, SCE is already working hard on forming a curriculum which places technological innovation and creative thinking at its core.

The great positive migration of industrial plants, cyber industries, IDF units and research institutes to the Negev is bringing with it a great thrust of development, which required the training of graduates who will be able to successfully play their part in it.

The study program for a BA in Industrial

Design will train graduates who will find their place in an age of innovative technologies, fierce economic competition and a demand for product innovation and visibility. The graduates will benefit from extensive knowledge in the fields of arts and design, as well as in engineering and manufacturing technologies, and from a toolbox that will allow them to translate abstract ideas to objects and products.

The study program for a BA in Design and Visual Communication will train graduates who will take part in the digital revolution of the 21st century, and will provide a solution to



the designing needs in a world of accelerated technology, changing content and formats and a huge knowledge archive. The program will provide its graduates with an artistic and technological base, including motion design studies, animation and interactive design, and will focus on the design of various types of screens.

Moving Forward with Degrees

A collaboration with the University of Ariel for guidance provided to graduate students will allow SCE graduates to complete their second-degree studies by writing a thesis and continue to PhD studies in additional study programs



A collaboration agreement was successfully formed this academic year between SCE and the University of Ariel in The Shomron. This agreement allows College graduates to continue to PhD studies in a wide variety of fields and complete their Master's degree studies by writing a thesis in the Electrical

and Electronics Engineering, Chemical Engineering, Applied Mathematics and Computer Science study programs.

SCE graduates who are accepted to the program will register as students of the University of Ariel and will conduct their

research at the College, under the joint guidance of researchers from Ariel and from SCE.

They will be exempt from paying tuition at Ariel and will receive a fellowship from SCE.

This collaboration will not only enable the advancement of College graduates, but also of its faculty members, who will be able to guide not only students studying towards a Master's degree with a thesis but also towards a PhD. They will be able to benefit from research assistants who are also graduate students, from added experience in guiding thesis writing and from the promotion of a research environment at the College.



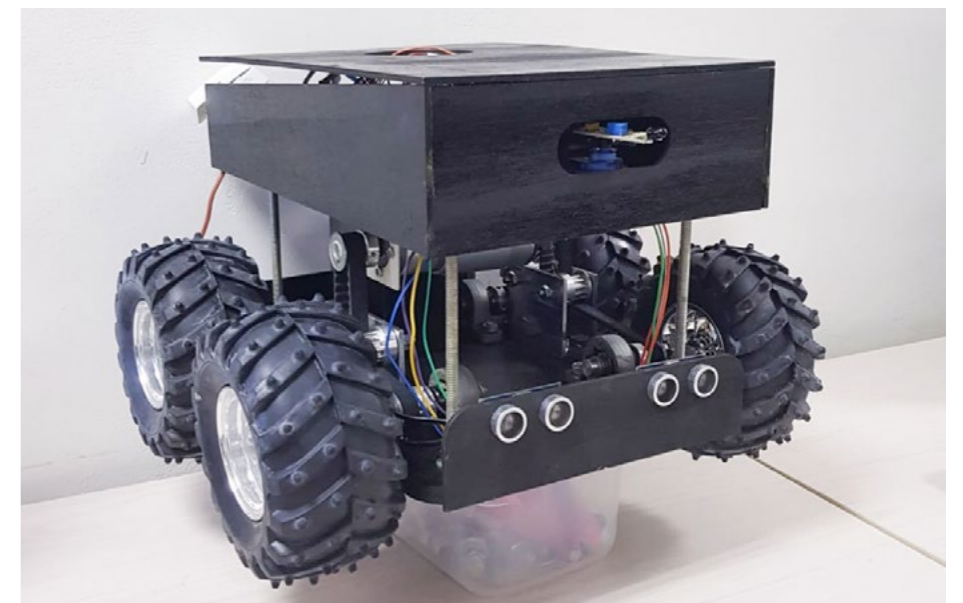
The Robot that may Save the Forests in the Area Surrounding Gaza

Students studying Mechanical Engineering at the Ashdod Campus have developed an autonomous robot for detecting forest fires*The robot identifies the outbreak of fire using smart sensors and immediately calls the firefighters to the precise location

For several months now, Molotov kites and balloons having setting flames to thousands of acres of forests in the areas surrounding Gaza. The damage caused to plants and wild life is huge.

Idan Beletz and Mor Cohen, two students studying Mechanical Engineering at the Ashdod Campus have developed for their final project an autonomous recon robot for detecting forest fires. The vehicle can move around the area at a predetermined route set using coded commands and detect forest fires using an advance flame sensor. "When the vehicle detects a fire, it sends the user a notice via text message or phone call", the students explain, "the user receives the exact coordinates of the fire, and so can direct the firefighters to the exact location even before the fire gets out of hand.

The vehicle can move independently in space. It uses proximity sensors installed on it to detect trees, holes in the ground, rocks and any other obstacle which may lie in its path. Despite the hazards on the ground, Beletz and Cohen claim that a ground moving vehicle is the optimal solution for detecting fires: "we thought at first to install the system on a drone, but



quickly understood that a drone flying time is much shorter than our robot's travel time. Also, a drone requires much more and more expensive sensors, which would make the entire project unfeasible. The research we conducted also revealed that aerial detection may at times take longer due to tree tops, which block the view of the ground and the smoke, since forest fires usually start at

ground level."

"We believe our robot can prevent many forest fires, since it detects the fire already at its point of outbreak and calls the firefighters directly to the correct location", the two say in summary/ "Early detection could prevent the destruction of trees, harm to animals and long-term environmental damage."

Changing Society Through Engineering

A bionic arm made with a 3D printer, an accessibility app for people with disabilities, and life-saving developments for children are just some of the engineering social projects presented at the “Engineering Society” conference held at the College

For the third year, the “Engineering Society Conference”, and SCE initiative dedicated to the presentation of engineering projects which have a social influence, was held at the College. The conference served as a stage for dozens of 4th year students presented their final projects, all of which offer life changing solutions to people with special needs in order to promote a process of social change. Roy Shtang, Director of Strategic Customers at Mobileye, and Neta Li-Meiri, Director of the Social Program at the veteran organization of the 8200 unit, were among the many entrepreneurs and members of the industry who attended the conference and spoke about technological revolutions, innovation and engineering social projects which function as role models and sources of inspiration.

One of the projects that stood out among the dozens that were presented was the bionic arm projects, prepared by two Mechanical Engineering Students: Boris Troin and Evgeni Shpolanski. The two presented a bionic arm printed in a 3D printer and controlled by brainwave and muscle sensors, and which can be attached and used without requiring a complex medical procedure. The two created the project with the help of Captain Ziv Shilon, and IDF officer who lost his arm in operational activities carried out in the southern area of the Gaza Strip.

The conference included a competition held between the three teams who made the finals at the “Life-Saving Engineering” Hackathon competition, which was held at the College’s campus in Ashdod.

The competition, organized in collaboration with the Beterem organization, was dedicated to the discovery of creative and innovative solutions to children and teenager safety issues. The team who won first place (and a NIS 10,000 prize) was the team of “Terem Engineers”, which included Sivan



Aftabi – who studies Mechanical Engineering at the Ashdod campus; Gal Dahan – who studies Civil Engineering at the Ashdod Campus (and who is Sivan’s husband); and Mor Dafna from the Mechanical Engineering Department at the Be’er Sheva Campus. The three developed the MAGEN system, which is based on proximity sensors and an electric control unit which can detect and alert against children entering dangerous areas, based on a defined height limit. The system sounds an alert using flashing lights and an alarm system and is designed for preventing children from going out to balconies at home, back yards with pools, a room containing

hazardous items and more.

Prof. Yehuda Hadad, the President of SCE, said in his speech at the conference: “The world’s population is ever growing, and this growth is accompanied by a growth in demands. We, As engineers, must adapt to an ever-changing world. As part of the values of this College, which aspires to train engineers to build a better world, we can see here today projects which may contribute to humanity and prepare the world for the future. This past week we examined at the College the link between technology, society and engineering. I would like to turn to our



young students and say: come and see the heights you can reach and the things you can create. I am sure that the most revolutionary project, which will contribute the most to society, will come from here, from SCE.

Moshe Karochi, the Dean of Students and the person behind this conference, addressed the abilities of engineering tools and technological innovations to improve daily lives and affect processes of social change. “The students are young, talented people who think outside the box. They are now in the midst of a very significant stage of learning and personal formation. As leading

research, teaching and entrepreneurial institution, we see great importance in forming our graduate as a person who knows how to combine engineering skills and capabilities with a social sensitivity. We believe that the engineer of the future is a social-technological entrepreneur, who knows how to combine the worlds of hi-tech and society. Through our graduates, who leave us and go out to the world of technological entrepreneurship, we will succeed in generating significant processes of social change.

“The world’s population is ever growing, and this growth is accompanied by a growth in demands. We, as engineers, must adapt to an ever-changing world as part of the values of this College, which aspires to train engineers to build a better world”



Students of Civil Engineering Presented their Research at an Important International Conference on Composite Materials

The presentation at the prestigious CICE2018 conference in Paris is an impressive academic achievement for 4th year students



Five 4th year students from the Department of Civil Engineering at the Be'er Sheva Campus, presented their research at the International CICE2018 conference held in Paris in July 2018.

The students – Reuven Gom'a, Eliav Yifrach, Avi Cohen, Netanel Levi and Avidor Zvi – conducted a series of experiments which studied methods of reducing the number of steel reinforcements in high-strength

concrete pillars.

These experiments were planned and conducted as part of the course "Special Issues in Structure Engineering" under the guidance of Dr. Rami Ir. They did not only plan the experiments and carry them out, but also continued their research activities further and co-authored an article with Dr. Ir.

The article was accepted to the prestigious conference, which deals with issues related

to the use of composite materials in Civil Engineering. The President of

the College, Prof. Yehuda Hadad, offered his assistance in securing financial aid for the students, which enabled them, to travel to Paris and present their research.

The students' success is a result of their high capabilities, together their full participation in the project oriented study environment practiced at the College.

The Software Engineering Testathon

A different kind of hackathon: The Department of Software Engineering held a 24-hour competition for software testing in real-life environment

As part of the "Testathon" – a 24-hour competition held at the end of the Quality and Testing course – students of the Software Engineering department were asked to split into groups and detect as many errors (bugs) and failures in an existing app of Proyoll Ltd. The app, Real Manager, allows users to form a team, buy players and act as managers of a fantasy football team.

After getting to know the app in laboratory conditions, they started working for 24

hours, during which they used the various techniques studied in the course and tested the app in various environments, such as Android, iPhone and Desktop. The students' work was evaluated based on several indices: the number of bugs and their quality, the contribution to the manufacturing company and the level of use of the theories and techniques studied in the course.

"For the purposes of this competition, Proyoll introduced between eight to ten bugs to

the system", said Dr. Haddas Hasidim, a lecturer in the Quality and Testing course. "And our students managed to detect dozens of additional bugs/ the Testathon is a final project that demonstrated the course's contribution to the industry in general and the software industry in particular. The students learned about teamwork and work under pressure, just like in the real world, while Proyoll benefited from an important service, which helped learn about and correct bugs in the system."

"There is no Doubt that these Projects will Help you Succeed in the Future, in the Professional World of Work"

Innovative software projects were presented in the projects conference organized by the Department of Software Engineering at the Be'er Sheva campus. * One of the projects: A computerized voting system focusing on the field of security.

Dozens of 4th year students in the Department of Software Engineering at the Be'er Sheva campus took part in the department's projects conference. The students were asked to split into groups and submit an innovative software product. The various projects included solutions for the automotive industry, safety control, Big Data and society, and even solutions at the municipal and country levels.

The students Yehuda Shamir, Dorin Halava and Aviv Lalush presented the Go Vote System – a computerized voting system intended for government or regional elections. "the project mainly deals with the field of security", they explain, "Our system is comprised of two sections: one at the ballot box, designed for the end users – in this case the voters – and the other at the central election system. The system allows ballots to be tallied in real-time and real-time monitoring and tracking which allows those monitoring to know who voted, but

naturally without knowing for whom they voted. We conducted various system tests and improved it to such a degree as to ensure it would not be hackable. However, and since one can "never say never", even in the unlikely case that someone manages to hack into the system, the information displayed to them would be encrypted and lacking, total digital gibberish".

The students said that they intended to contact the Municipality of Be'er Sheva, in order to see if the system could be used in the municipal elections scheduled to take place this fall.

The conference was opened by Avigdor Zmora, an entrepreneur and the CEO of Funzing, who spoke about entrepreneurship in the field of hi-tech. Zmora spoke of the process of establishing a start-up company and of the stages every entrepreneur must go through before realizing their dreams.

Later, before the final judgement stage, the students went out and stood beside the posters and projects they prepared. Lecturers and industry representatives walked between the various projects, asked questions and examined the systems built.

Dr. Natalia Wontik, Head of the Department of Software Engineering at the time of the conference, wished the students success and said: "About four years ago, when the previous FIFA World Cup Tournament was being held, you started studying engineering. You could not imagine how long and meaningful this process would be. I ask that when the next FIFA World Cup Tournament is held you will look back at the progress you've made from today, when you presented your work at the project's conference. I am certain that these projects, which you executed in accordance with the Project Oriented method practiced by the College, will help you in the future, in the professional world of work".

“An Impressive and High-Quality Demonstration of Student Work”

The final project conference for all the engineering departments at the Ashdod Campus offered a glimpse into the engineering of the future through approx. 200 innovative projects, some focusing on the social vision of offering accessibility to various groups



A bionic arm, A fire truck activated using a glove and an automated robot for detecting forest fires. These were just some of the interesting engineering projects presented at the final project conference held at the Ashdod campus. In the conference, 4th year students from all the engineering departments presented about 200 final projects touching on all aspects of life: security, health, construction and more. Some of the projects were executed with a social vision in mind, and were even presented in the “Engineering Society” conference held earlier at the College campus in Be’er Sheva.

One of these was the bionic arm project presented by Boris Troin and Evgeni Shpolanski from the Mechanical Engineering

“In our digital age, characterized by ‘digital disturbances’, the engineer of the future must be innovative, creative, flexible to changes, multi-disciplined and a fast learner who can stay up-to-date with current development”

Department. The two presented a smart bionic arm which is controlled by brainwaves and costs only approx. \$1,000. The hand is printed using 3D printing technology and receives commands from a head sensor which reads brainwaves, and transfers the commands to a computer which is located in the bionic arm and orders it what to do. The students created the project together with Captain Ziv Shilon, who lost his arm in military operations in the southern area of the Gaza Strip.

“In our digital age, characterized by ‘digital disturbances’, the engineer of the future must be innovative, creative, flexible to changes, multi-disciplined and a fast learner who can stay up-to-date with current development”



Boris and Evgeni: “Our bionic arm comes in different sizes. The use of 3D printing technology has enabled us to lower costs and even to adjust the arm to different types of amputations. The chip technology was developed using open source, which enables the attachment of different bionic arms and the lowering of costs. The prices of the bionic arms currently available on the market range between 20 to 60 thousand ILS. It was important for us to manufacture the arm at an affordable price, which would not exceed 1,000 dollars. Ziv, as someone who knows the difficulties amputees have to face, guided us and suggested important improvements. With his help, we managed

gain a better understanding of our mission”. Prof. Shlomo Mark, Dean of the Faculty of Engineering at the Ashdod campus, spoke at the conference and highlighted the difficulties students face today: “In our digital age, characterized by ‘digital disturbances’, the engineer of the future must be innovative, creative, flexible to changes, multi-disciplined

and a fast learner who can stay up-to-date with current development. The projects you are presenting today are a summary of everything you learned here. I know you will go on to work as curious and creative engineers, who constantly learn and can

identify trends and navigate in the ever-changing digital world.

I would like to thank Dr. Michal Goldberg, Dr. Irit Ubiler, Dr. Lior Aronshtam and Dr. Guy Ben Hemmo who have initiated and led the projects conference. This is an impressive high-quality demonstration of the student’s work”.

Running Towards the Degree: A Robot Contest at the Ashdod Campus

A robot running contest, held as part of the course “Introduction to Control”, offered a good demonstration of the importance of proper control and demonstrated unique and creative thinking



Second year students from the Electrical and Electronics Engineering Department in Ashdod were invited to participate in a robot contest held as part of the course “Introduction to Control”. The students were asked to build a robot able to follow a line drawn on the track – without deviating from it – at the fastest speed possible.

The robot race summarizes the material studies in the course during the entire year and combines theory and practice. The robots were required to follow a pre-determined track and to finish it in the shortest time. Each team was given three attempts, when between the attempts the teams worked on their code in order to improve the speed.

“More often than not, once the speed had been improved, the robot did not stay on track”, says Dr. Irit Ubiler, the Head of the Electrical and Electronics Engineering

The team that won first place did so by a considerable margin, since it demonstrated a unique thought process. This is also true in the professional world, where engineers are required to think creatively and in a unique manner

Department at the Ashdod campus. “This demonstrates the importance of control: on the one hand, the robot needs to perform several samples in order to stay on course; on the other hand, the teams wanted to increase

the speed. We saw how one thing comes at the expense of the other, and so the students got to experience how proper control should be conducted. The team that won first place did so by a considerable margin, since it demonstrated a unique though process. This is also true in the professional world, where engineers are required to think creatively and in a unique manner.

This competition joins a long series of SCE projects conducted in accordance with the “Project Oriented” study method. “The competition was held in Project Oriented study environment, in order to best prepare the students for joining the workforce”, explains Dr. Ubiler. “When they finish their studies and start working as development engineers, they will be asked to solve problems and to apply theory in practice.

Engineers on the Bar



On the link between medicine, engineering and good beer: Dr. Nir Trabelsi of the Department of Mechanical Engineering told the audience that gathered at the Bialik 26 pub in Be'er Sheva about the role of the engineer in the world of medicine.

What is the link between medicine, engineering and beer? Dr. Nir Trabelsi, a lecturer at the Department of Mechanical Engineering at SEC, came to the Bialik 26 pub in Be'er Sheva in order to explain the link between medical professions and engineering. Approx. 100 students, graduates, faculty members and guests came with him.

The lecture, which was suggested and organized by two students, Ahmad Diab and Bar Azulai, both members of the SEC Student Council, was the first in a series of lectures held in collaboration with ICL, as part of its community relations activities.

Dr. Trabelsi spoke about his research, which focuses on the link between medicine and engineering. He presented the work interfaces between doctors and engineers, and spoke about what motivates an engineer to step into the world of medicine, about current leading developments and about future medical achievements made possible thanks to engineering.



“This was the first time I ever lectured in a pub” says Dr. Nir Trabelsi with a smile. “We spoke about the engineer’s role in the medical world and the manner in which engineering could help doctors save lives. The goal was to spark the curiosity of the members of the audience, who are not exposed to such matters on a daily basis,

and to think together about developments that could help promote smart medicine. The lecture was attended by students from various fields, from all the academic institutions in Be'er Sheva, and also by curious residents. The lecture was very successful and I certainly had a good time”.

Bringing together industry and academics at the Ashdod Campus

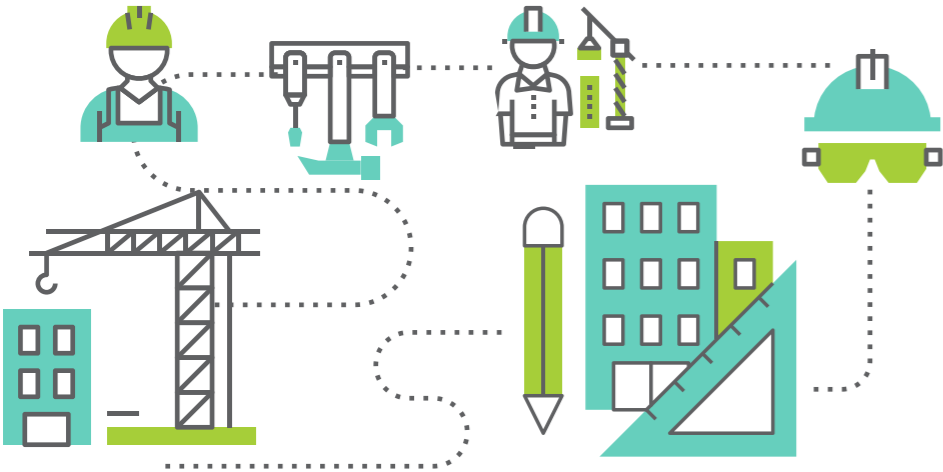
The Industry Relations Forum, organized on campus by the Department of Industry and Management , will strengthen the collaboration between College, industry and municipal elements and will assist in offering the human resource of future industries the best training possible



During June 2018, the SCE Ashdod Campus's Industry Relations Forum – organized by the Department of Engineering, Industry and Management – convened for the first time. As part of the forum, members of the Department's faculty met with representatives of the Municipality of Ashdod which are entrusted with leading all issues related to industry and employment in the city, and with top industry executives. Together,

they discussed ways to strengthen their collaboration for the benefit of all parties. The meeting was designed to foster a better understanding of the needs of the industry, in order to enable the Department to prepare the students in the best possible way for the professional world. In the future, the industry will obviously benefit from an advanced, high quality human resource more suitable

to its needs. This is the first forum of its kind in Ashdod. In the future, the Department plans to develop it further to include guest lectures, mutual tours and visits, joint studies, employment for students and graduates and the integration of elements from the industry in students' final projects. "The purpose of the forum is to enable a discussion between us, the members of the academy, to those people in the field – industrialists and CEOs", explains Dr. Offer Barkai, a senior lecturer at the College and the person behind the Forum. "This will enable us to improve the contents of our courses, advertise the unique aspects of our Department, expand the employment opportunities offered to our graduates, allow final projects to be seen in the industry, create different kinds of collaborations – including placement opportunities for Department students and graduates, and to bring business owners and executives on board to act as mentors for our graduates".



For the First Time at SCE: The ILAIS Conference

The central annual conference of Israeli information systems researchers (ILAIS) was held this year at the Ashdod Campus*The goal: to create an opportunity for young researchers to learn from each other, exchange ideas and knowledge and create new collaborations

More than 100 students, lecturers and members of the industry attended the 12th annual ILAIS (The Israel Association for Information Systems) conference, held this year, for the first time ever, at the SCE Ashdod campus. This was the first time that the College has hosted the Association's annual conference.

The conference was organized by Dr. Adi Katz and Dr. Ronit Shamlo of the Department of Industrial Engineering and Management at SCE, and Dr. Zippi Heart of the Faculty of Business Administration at the Ono Academic College. Students and faculty members from universities and colleges from all over the country, studying the fields of information systems, software engineering and computer sciences, attended the conference. The conference was also attended by information system development and management specialists from the academy and from the industry.

The ILAIS is the Israeli chapter of the global AIS association. The Association's annual event, the ILAIS Conference, is the main conference for Israeli researchers in the field of Information Systems. The conference is designed to create an opportunity for researchers to learn from each other, exchange ideas and knowledge and form new collaborations.

The conference was opened by Dr. Vered Penueli, the head of the Game Design and Digital Books programs at the Shenkar College. She presented the field, combining positive psychology and emotions and technological product design. Moshe Sadeh, the new Information Systems Director of Clalit Medical Services, shared his experience and recent developments in the field of digital health, as it is applied by Clalit Medical Services.

Five sessions were held as part of the



Conference, covering various topics including analytics and big data, interactive system design, teaching information systems, socio-technological issues, databases and more. In a special session dedicated to posters, engineering students from various academic institutions presented their final projects.

Dr. Adi Katz, a lecturer at the College and one of the people behind the Conference's organization at the College, noted: "This year, the ILAIS Conference included many

participants and covered a great variety of topics. The lectures, Sessions and meetings allowed everybody to exchange knowledge, to catch-up on everything new and create research collaborations. The lectures in the conference – and especially those bringing together the world of technology and the personal, social and organizational worlds of information systems users – went hand in hand with SCE's motto: 'Engineers for a Better World'"

Documenting Acts of Violence in Israel's Roads with Ease

Software Engineering students from the Be'er Sheva Campus developed a simple device and app that document traffic violence and acts of violence occurring on the roads ■ Among other things, the app can also alert parents to children forgotten in the vehicle



We have recently been hearing more and more about acts of violence occurring in our roads and of serious traffic violations. Many drivers purchase expensive car-cams, which attach to the vehicle's cigarette lighter socket. This solution is expensive and not optional, which many choose to avoid.

Aviran Cohen and Idan Bokovza, to software Engineering students from the Be'er Shave Campus, developed a device and app called BamCar. The device is attached to a mobile phone, and all the videos taken during the ride are stored on an external memory card. As a "bonus", the app will also alert parents to children forgotten in the vehicle. The two say that the app solves three problems: documenting the ride, forgetting children in vehicles and the problem of the memory

required to store the recorded information. "The external camera that are currently available are expensive and use the vehicles power source, thus preventing any other use of the cigarette lighter socket. The mobile apps that are currently available for recording and documenting rides take-up a huge amount of the device's memory, and therefore many users avoid them. This created the need for a simple mobile app that would be able to record the entire ride without taking-up space on the device's memory".

The simple solution includes a solar charger and a memory card connected to an external device: "The phone is linked to a solar charger which sits right against the

windscreen and receives sun light All the video clips are stores on an external mobile memory card, which is also linked to a solar charger. The app is user friendly and offers many options: recording a video with or without audio, camera inversion in order to record the driver's cabin and taking still images. It will also alert parents to children forgotten in the vehicle".

"Our vision", the two say, "is to be in every vehicle and offer a simple, easy and cheap solution for criminal activities occurring on the road. We chose to also include the matter of children forgotten in vehicles since it is a serious problem in the Israeli summer. If we manage to save the life of even one child, we have already achieved our goal".

When the Earth and the Academy Meet



Successful Harvest at the Ecological Garden

Last May, a vegetable garden was planted at the Be'er Sheva Campus. The garden was established by a group of students as part of a workshop guided by the "Earth's Oath" association. The community ecological garden included Ornamental plants, fruit and vegetables.

Two months later, it was time to bring in the harvest. Many students joined the activity and came one pleasant July evening to enjoy the harvest of vegetables and herbs: eggplants, green beans, basil, Rosemary, mint, aloysia and more.





A Wonderful Opportunity to Expose High-School Students to Academic Materials

Four faculty members from the Unit of Mathematics at the Ashdod Campus took part in the “Academy Week” events held in the city, and presented fascinating issues from the world of mathematics to high-school students.

As part of the Academy Week held in Ashdod, lecturers from various academic institutions came to high-schools in the city and presented various interesting topics to the students.

This year, four faculty members from the Unit of Mathematics at the Ashdod Campus took part in the event:

- **Dr. Meirav Topol And Sagi Levi** went to Makif Daled and lectured before a class of 9th graders on “New Ways for Solving Problems in Geometry”. They presented ways for using vectors and center of mass to solve geometry problems.
- **Dr. Arthur Mufftahov** came to Makif Vav and presented a group of 10th graders

studying biotechnology with a lecture in the field of dynamic planning on “How to Choose the Best Route?”. As part of the lecture, he presented a question that cannot be answered by brute force (it would take several thousands of years to solve it by a computer), but a person could solve it without a computer using dynamic planning.

- **Dr. Itamar Stein** came to Makif Yud Alef and presented a group of 10th graders studying computers with a lecture in the field of the theory of Automata Theory on “Synchronization in Machines with a Finite Number of Positions”. The lecture focused on Automata (a concept learned At the College as part of the course

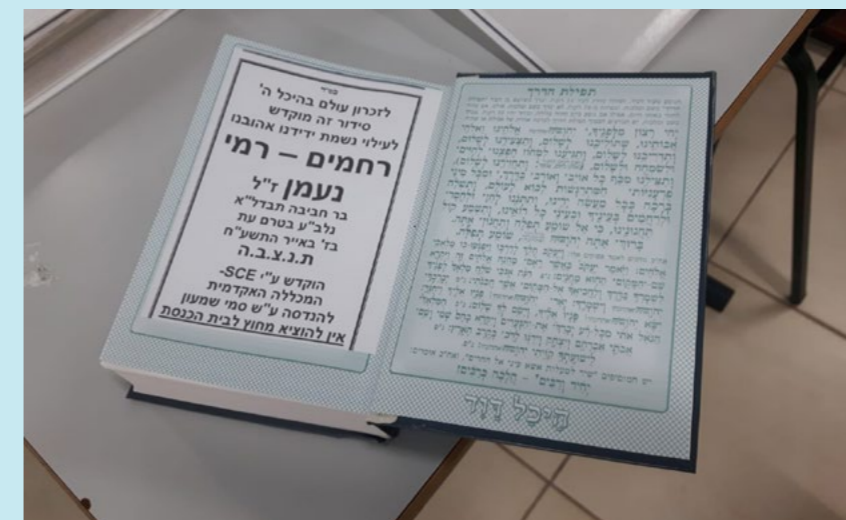
“Automata and formal Languages”) and illustrated their possible uses in various fields (compilers, artificial intelligence and so on). The topic was presented and demonstrated using an open logics puzzle, a mathematical problem that many researchers from around the world are trying to solve (the Černý Conjecture).

The lectures included the active participation of the students, who showed a great deal of interest and took an active part in solving the puzzles.

The Unit of Mathematics considers the Academics Week as a great opportunity for exposing high-school students to academic contents, and is happy for the opportunity it was given to take an active part in it.

In Memory of Rami Na’aman OBM

The Library at the Ashdod Campus synagogue received an upgrade in memory of Rami Na’aman OBM, who worked at the Information Systems Department



Several months ago, the College upgraded the library of religious books kept at the synagogue in Ashdod’s Jabotinski Campus.

This upgrade was done in memory of Rami Rahamim Na’aman OB, an employee of the Information systems Department who passed away earlier this year.

In a letter of thanks and gratitude submitted to the College’s management, the students and faculty members who pray in the synagogue expressed their satisfaction from the new prayer and religious books purchased.

