



EFFECTIVE CYBERSECURITY: LEARNING FROM THE ISRAELI EXPERIENCE

A thought provoking, comprehensive program, designed to expose professionals to best practices in the cyber arena

Why Israel? Learning from Experience

Cybersecurity plays a global, multifaceted, complex and rapidly changing challenge. Managing it demands shared efforts by all stakeholders on the national and regional levels. Israel has proven outstanding cybersecurity abilities: from resilient critical infrastructure, groundbreaking technical innovation, to becoming the world's second largest exporter of cybersecurity, while attracting 20% of global private investment in cyber R&D.

Learn from the experts how this small country, with its harsh environment, became the "Start-up Nation" and a global cybersecurity leader.

Tel-Aviv University is a pivotal role within the Israeli cyber eco-system. TAU's Blavatnik Interdisciplinary Cyber Research Center (est. 2014) conducts over 60 cutting-edge research projects on diverse facets of cybersecurity, performed by 250 researchers, drawing on extensive intellectual networks within Israel and internationally. The center is headed by Prof. Major General Isaac Ben-Israel, one of the founding fathers of Israel's cybersecurity eco-system.

Program Objectives

This tailor-made program frames the central aspects of cybersecurity on the national level, providing insights and applicable tools. The development process offers a synthesis between state of the art academic studies and practical, hands-on experiences.

Key Program Objectives:

- Designing an effective cyber-security strategy
- Building a sustainable cyber eco-system
- Unified understanding of technical and non-technical foundations of cybersecurity, including threat-actors' motivations and standard operation procedures; risk management processes; common mitigation techniques
- Capability to gauge full consequences of cybersecurity threats
- Capability to evaluate responses to cybersecurity threats and events

Program Methodologies

In order to grant program participants with a holistic perspective of the opportunities and challenges, we have adopted a multi-faceted approach:

1. Academic lectures, class discussion and workshops in Tel-Aviv University's executive lounges and classrooms
2. Case Studies discussing breaches, consequences and mitigations
3. Visits to leading innovative companies and venues of interest where technology, business and culture are combined synergistically
4. Live hacking demonstrations
5. Scenario Gaming to hone crisis-management skills

A typical program consists of 5-9 days of studies and activities. The learning and development process includes both studies on TAU campus and off-campus activities. Sessions will be delivered by top Israeli academics, government officials, business leaders and cybersecurity experts. Over the weekend, the group can enjoy cultural exploration activities and sightseeing throughout Israel – Jerusalem, Dead Sea, Galilee, and other venues of interest (optional).



Program topics:

The program will be custom designed according to a specific group composition, requirements, fields of operation, and other professional as well as technical factors.

The following modules and topics are initial suggestions for integration within the program:

Cybersecurity: Strategy & Operations

- Interdisciplinary introduction to cybersecurity, including Artificial Intelligence, Internet-of-Everything, and Industry 4.0
- Complex amalgamations: information technology (IT), operation technology (OT), public policy, supply chains, service delivery
- Technical aspects: IT-security
- Cybersecurity in critical infrastructure
- Non-technical aspects: organization, human resources and insider threat, government relations, media relations, regulatory landscape, information sharing
- Economic and management aspects: cloud services, platform economy; new value production; digital transformation
- Information security operations – CERT / SOC establishing a robust infrastructure to deal with cybersecurity threats
- From the frontlines: learn from those who face real attacks, and manage effective defense, crisis management and mitigations
- From the frontlines: common impediments to effective cyber risk management
- Cooperation strategies to facilitate cybersecurity: learn to identify allies in government, sector and internally
- Analytical strategies to facilitate cybersecurity: improve awareness; detect hindrances; utilize case studies to alleviate internal opposition
- Effective cybersecurity strategies development: forging sophisticated governance mechanisms coupled with technology solutions.
- Legal aspects in cybersecurity

Introduction to Israel - Culture & Innovation:

- Israel and the Middle East at a Glance
- The Israeli Innovation Eco-system
- Strategic innovation models and corporate entrepreneurship (intrapreneurship)
- Defense – Abilities & Economics, The Israeli eco-system through the prism of security
- Revolutionizing Reality – spotlight on disruptive industries (IoT/ Healthcare/ Bio-Tech/ Agro-Tech/ Artificial Intelligence / Virtual Reality / Robotics)

Cybersecurity: Hands-on Experience

The program will include visits to top tier companies in different lifecycle stages, benchmarking and exposing the unique mindsets of various players in the cyber market. Visits will be adapted according to participant's requirements and objectives.

Certification

Participants will receive a certificate on behalf of Blavatnik Interdisciplinary Cyber Research Centre and Lahav Executive Education, Collier School of Management, Tel-Aviv University.

Program Budget

- **The price of a typical one-week program ranges from \$90,000 to \$120,000** for a group of up to 30 participants.

Program budget includes

- **Academic program** – with Tel Aviv University's finest lecturers, practitioners and experts from the business and government sectors. Coordination by TAU representative.
- **Hospitality** – daily lunch and dinner, including one official dinner with Israeli guests. Breakfast is provided at the hotel.
- **Company visits**
- **Cultural visits** with professional tour guide (optional and entailing additional fees).
- **Transportation** – High-class bus throughout the entire program, including transport from and to the hotel, company visits and cultural visits.
- **Invitation letters** – Lahav will issue program participants invitation letters for visa application purposes (if required).
- **Certificate** – on behalf of Blavatnik Interdisciplinary Cyber Research Centre & Lahav Executive Education, Collier School of Management, Tel-Aviv University.
- **Official group photo**

Additional Experience - 2 day Cultural tour

Cost - \$12,800

Includes:

- **Hospitality:** 2 lunches and 2 dinners (breakfast is provided at the hotel), entrance tickets to sites during the visits.
- **Tour guide** - professional tour guide for two days
- **Transportation:** high-class bus throughout the two days

Services not included:

- **Air fare**
- **Personal Insurance**
- **Accommodation** - Lahav can provide the group with hotel booking services for any standard of accommodation in Tel Aviv and throughout Israel. Prices will vary according to the actual period of program execution and the hotel's level.
- **Translation** - all program activities are conducted in English, translation services can be provided for any language for an extra cost. Simultaneous translation in class sessions, consecutive translation in the field, and translation of written materials.



Appendix A - Tel Aviv University's Collier School of Management











With its world-class teaching and research, its international reputation, connections and achievements, TAU's Collier School of Management is not only the largest and most prestigious business school in Israel, but also ranks amongst the top institutions globally.

With the wide range of programs and options that it has developed since its establishment in 1965, the school attracts over 3,000 students annually, taught by 58 tenure-track and over 200 adjunct faculty members, as well as many guest lecturers. Among the school's veteran alumni are leaders of Israel's business community and public sector, and its younger alumni are their first recruiting choice.

Tel Aviv University is the only non-US university in the top 10 for undergraduate programs and the only Israeli university on the companion list of top 25 MBA programs, ranked No. 13; 233 MBA graduates have started 221 companies that raised \$3.78. On the list of universities whose MBA graduates founded unicorn companies (valued at \$1 billion or more), Tel Aviv University tied for ninth place. A ranking of universities by number of exits accomplished by graduates put TAU in eighth place (118 graduates had 99 exits totaling \$7.28b) for undergraduate programs and 11th for MBA programs (39 graduates, 38 exits, \$2.88b).

TAU 8th Global Undergraduate program (Pitchbook 2018-2019)

Top 50 undergraduate programs

Rank	University	Entrepreneurs	Companies	Capital raised (\$B)	Vs. 2017 rank
1	 Stanford University	1,178	1,015	\$28.84	NC
2	 University of California, Berkeley	1,137	1,012	\$20.78	NC
3	 Massachusetts Institute of Technology (MIT)	941	819	\$21.24	NC
4	 Harvard University	900	799	\$25.35	NC
5	 University of Pennsylvania	838	757	\$15.82	NC
6	 Cornell University	750	693	\$20.10	NC
7	 University of Michigan	712	638	\$12.07	NC
8	 Tel Aviv University	640	531	\$7.91	+1 ▲
9	 University of Texas	636	582	\$7.70	-1 ▼
10	 University of Illinois	526	484	\$9.94	NC












Source: PitchBook
*As of June 30, 2018

Top 25 MBA programs

Rank		University	Entrepreneurs	Companies	Capital raised (\$B)	Vs. 2017 rank	Top five companies by VC raised
1		Harvard University	1,310	1,186	\$39.38	NC	Grab; GO-JEK; Grail (Biotechnology); Katerra; Zynga
2		Stanford University	861	775	\$22.66	NC	SoFi; Compass; Sea; DoorDash; Cabify
3		University of Pennsylvania	720	638	\$24.23	NC	Meituan-Dianping; Dianping.com; Deliveroo; Jet; Adaptive Biotechnologies
4		INSEAD	489	439	\$9.80	NC	Houzz; TransferWise; Zalora; Prodigy Finance; PolicyBazaar
5		Northwestern University	481	449	\$6.62	NC	Lazada Group; Nubank; Fastly; Westwing Home & Living; Kaminario
6		MIT	478	418	\$8.96	+1 ▲	Rocket Internet; Lazada Group; HelloFresh; Foodpanda; Desktop Metal
7		Columbia University	464	432	\$7.54	-1 ▼	Compass; Vroom; Betterment; Rubius Therapeutics; Grofers
8		University of Chicago	439	396	\$7.05	NC	Vir Biotechnology; Zalora; Sapphire Energy; Juno Therapeutics; EVA Automation
9		UC Berkeley	372	339	\$6.65	NC	51credit; Lime; Netskope; Niantic; RetailNext
10		New York University	270	263	\$4.16	+1 ▲	Lazada Group; Scopely; Violin Systems; Illumio; Sprinklr
11		UCLA	268	253	\$4.79	-1 ▼	Radiology Partners; The Honest Company; Future Finance; One Kings Lane; Fulcrum BioEnergy
12		London Business School	236	215	\$2.95	NC	Immunocore; LendingClub; iNDEXX Markets; WorldRemit; Nexeon
13		Tel Aviv University	233	221	\$3.78	NC	Houzz; BlueVine; IronSource; Stratoscale; Gigya
14		University of Texas	171	153	\$1.69	NC	Spredfast; AirStrip; Carrick Therapeutics; Xenex Disinfection Services; Datameer
15		University of Michigan	157	146	\$1.58	NC	Ayla Networks; Autekbio; TLV Partners; Craftsby; Wimdu

TOP 9th Global Unicorn (Pitchbook 2018-2019)

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Lahav Executive Education

Lahav, the leading center for executive education in the region has developed and delivered state of the art programs for foreign and Israeli corporations. Over almost 50 years of operation, thousands of executives have undergone development programs, hosting top of the line lecturers from Israel and abroad.

Lahav's primary programs are developed for executives, entrepreneurs and government officials.

For groups of executives and government officials Lahav developed special Innovation and Intrapreneurship programs. These programs span over 6-10 days during which participants go through intensive study models based on the Israeli experience as the Start-Up nation along companies' visits and networking with Israeli potential counter partners in order to create the basis background for future collaborations between the participants and Israeli companies and organizations.

Every year, in the past years hundreds of executives, officials and entrepreneurs from all around the world.

For groups of entrepreneurs and promising talents, Lahav has developed and successfully executed a unique accelerator model, during which participants go through an intense study, ideation, pitching, mentorship and start-up development process. Moreover, these programs serve as fertile ground for establishing relationships and collaboration between hosted companies and Israeli leading start-ups. In these past experiences, we have accumulated knowledge and tools to optimize the programs, and through them generate valuable knowledge, hands-on experiences and interpersonal relations, later serving as stepping stones for mutual cooperation and business excellence.

Appendix B - Tel Aviv University's Blavatnik Interdisciplinary Cyber Research Center

Tel Aviv University (TAU) is Israel's largest and most comprehensive institution of research and higher learning with over 30,000 students studying in nine faculties and over 125 schools and departments across the spectrum of sciences, humanities and the arts. Almost half of the cohort are graduate students. Situated in Israel's economic and technological capital, TAU shares Tel Aviv's unshakable spirit of innovation and openness. The Blavatnik ICRC builds on TAU's excellence (No. 1 in research output and citation impact among Israeli universities) and years of the active cybersecurity policy-oriented TAU hub: the Yuval Ne'eman Workshop for Science, Technology, and Security.

The Blavatnik Interdisciplinary Cyber Research Center (Blavatnik ICRC) was established in 2014 at TAU as a joint initiative with the National Cyber Bureau at Israel's Prime Minister's Office, with the following goals:

- Establish a leading global cyber research center
- Boost the volume and quality of scientific research for cybersecurity
- Attract researchers and advance academic training in cybersecurity
- Become a center of knowledge on cyber

The Blavatnik ICRC funding is devoted to competitive research grants carried out throughout Tel Aviv University. Bringing together 50 TAU faculty members and more than 200 cyber researchers from different disciplines through competitive award of over 70 research grants, the Blavatnik ICRC epitomizes interdisciplinary research by nurturing profound cooperation across TAU's faculties, departments and schools including Exact Sciences, Computer Sciences, Law, Engineering, Social Sciences, Management and Humanities.

Inaugurated in September 2014 by Prime Minister Benjamin Netanyahu at TAU's 4th Annual Cybersecurity Conference, the ICRC is the first institutionalized Israeli government-academia cooperation in cyber-related research. The Head of ICRC, Major Gen. (Ret.) Prof. Isaac Ben Israel, brings immense experience in large-scale R&D and national security.

Lahav
Executive Education




ICRC
Blavatnik Interdisciplinary
Cyber Research Center

This is
to Certify
That

Javier Garcia

Participated in

Designing National Cybersecurity Strategies
Advanced Training Program
for Government Officials

March 19th-29th, 2018

Udi Aharoni
General & Academic Director,
Lahav Executive Education
Coller School of Management
Tel-Aviv University

Prof. Isaac Ben Israel
Director
Blavatnik Interdisciplinary
Cyber Research Center
Tel-Aviv University