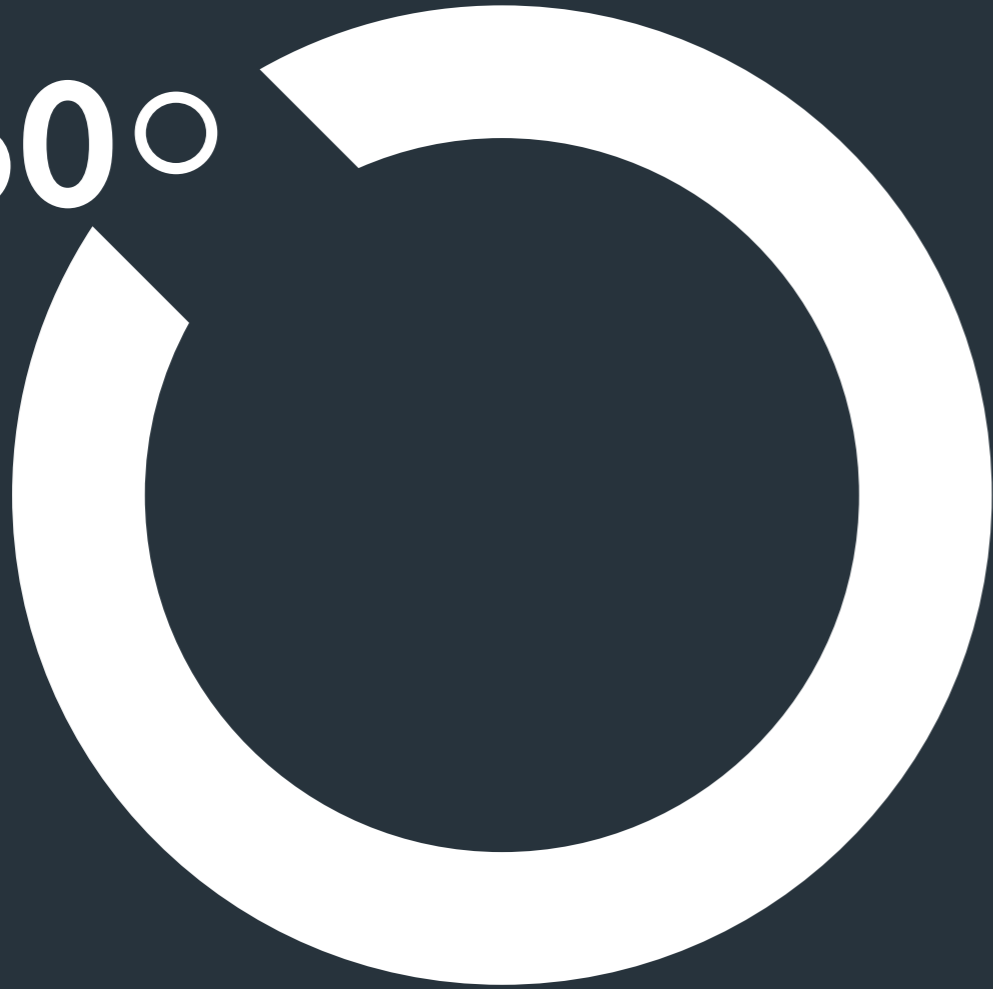


BGU 360°
Making It
Happen

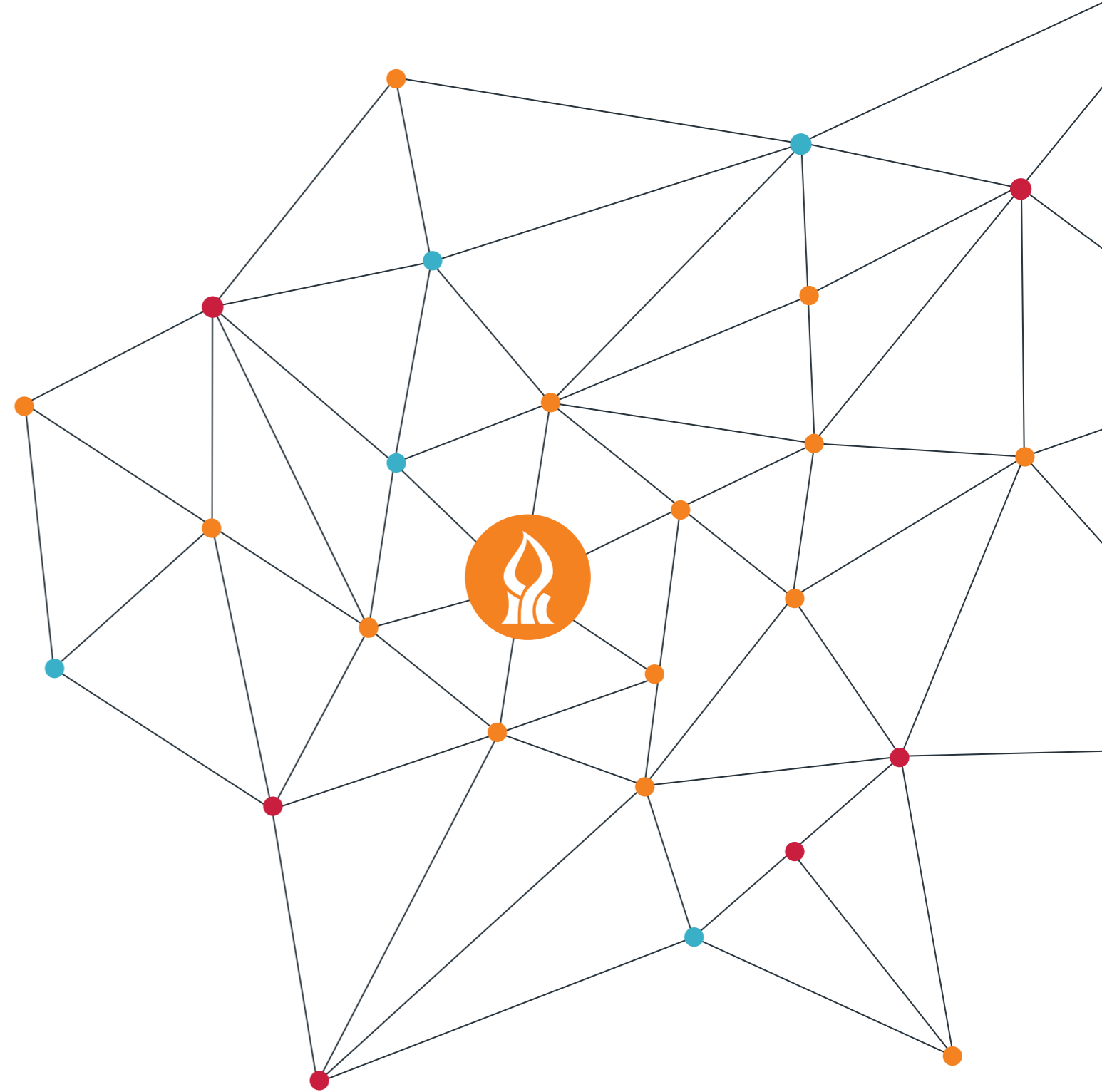
BGU

360°



“BGU actively strives to transcend the boundaries of academia and develop new models for research and education. We are deeply committed to helping transform the community and the world around us for the better.”

Prof. Rivka Carmi, President of Ben-Gurion University of the Negev



Imagine a unique synergy that brings together innovation factors to generate ideas; imagine collaborating with multi-national corporations at the Advanced Technologies Park, with elite IDF technology units, and world-class researchers and clinicians at Ben-Gurion University of the Negev to bring those ideas to fruition.

Or don't imagine at all – come visit Beer-Sheva and see for yourself. The future is here: brilliant people, gleaming buildings, and sparkling labs that generate the products and applications of tomorrow's world today.

BGU: Making It Happen

The extraordinary and unprecedented ecosystem of technology innovation and business collaboration booming in Beer-Sheva today exists because Ben-Gurion University of the Negev is the catalyst. BGU, with its stellar faculty and cutting-edge facilities, is at the heart of what has been called an “Oasis of Innovation” and a “New Silicon Valley in the Middle East”: a unique environment where higher education, hi-tech, industry, business, medicine, and government come together to develop groundbreaking research and bring new applications to the marketplace.

The unique history and location of Ben-Gurion University of the Negev have shaped our pioneering spirit, our commitment to pushing the boundaries of knowledge, and our interest in interdisciplinary collaborations. As we count up to our 50th anniversary and lay ambitious plans for our future, it is clear that our hard work and determination, our investment in brilliant scholars and state-of-the-art infrastructure, have borne fruit and transformed the University into a world leader. We are partnering in novel ways with business, industry, and government to conduct original research, leading to the creation and marketing of new technologies to improve peoples’ lives.

BGU’s world-class scientists and dedicated students are the intellectual foundations of this unique innovation ecosystem. A range of cross-disciplinary programs, institutes, and centers of excellence, such as the National Institute for Biotechnology in the Negev and the Ilse Katz Institute for Nanoscale Science and Technology, bring

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together scientists from different fields to imagine truly innovative solutions to contemporary issues. University initiatives, such as the revolutionary Bengis Center for Entrepreneurship and Innovation, mentor and train the next generation of entrepreneurs, establishing connections with business leaders and industry.

BGN Technologies, the University’s company for technology transfer and commercialization, took the lead in the establishment of the Advanced Technologies Park (ATP) adjacent to the Marcus Family Campus. It partnered with Deutsche Telekom Innovation Labs, Dell EMC, and JVP to establish CyberSpark, an industry initiative aimed at facilitating the growth of a cyber security ecosystem in



the Negev. BGN manages the University’s patent and IP portfolio and has signed dozens of collaborative research agreements with a range of universities and companies – public and private, international and Israeli – in the fields of clean-tech, biotech, hi-tech, and more.

Companies and entrepreneurs that are part of this remarkable environment enjoy the benefits that come from close proximity and collaboration with BGU, as well as public and private support through grants and guidance through all stages of development, from initial concept to production and distribution, thus enhancing their potential for success and directing Beer-Sheva’s trajectory of growth as an international technology center.

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360° of Innovation: BGU's Mission

“Israel's capacity for science and research will be tested in the Negev.”

David Ben-Gurion, Israel's first Prime Minister

- Create the best possible environment for innovative research and development, encouraging original thinking and the open exchange of ideas.
- Encourage collaborative partnerships between the University, industry, government, and the IDF, by providing the leadership, innovative leaps, and the infrastructure necessary to make it happen.
- Attract the best and brightest researchers, students, and entrepreneurs to the Negev and retain them.
- Drive economic growth in Beer-Sheva and the Negev region and expand opportunities for local residents.

BGU: Realizing the Dream

An unprecedented ecosystem of technology innovation and business collaboration is booming in Beer-Sheva, with Ben-Gurion University of the Negev at its heart.

BGU's top-notch academic programs, such as those at its **Faculty of Health Sciences**, educate tomorrow's researchers and professionals. A range of interdisciplinary programs, institutes, and centers of excellence, such as the **Homeland Security Institute** and the **ABC Robotics Initiative**, bring together researchers from diverse fields to conceive original solutions to the world's most pressing problems.

BGN Technologies, the University's technology transfer company, manages BGU's ties with the business world by licensing those innovations and technologies, creating joint

research centers with government and the private sector, and investing in incubators, accelerators, and start-ups.

Together with more than 15 companies and government agencies, BGN worked to establish the **Advanced Technologies Park (ATP)** adjacent to BGU's Marcus Family Campus, providing an ideal setting for collaborations between the University and industry.

With this level of support and collaboration, it's no wonder that Beer-Sheva is becoming known as Israel's Silicon Valley and one of the world's most innovative centers for cyber security.



“The group is building an evolving ecosystem that is anticipating the companies that have not yet been imagined or created.”

Steve Forbes, Chairman and Editor-in-Chief, Forbes Media

A Winning Hand: BGU's Key Partners

The **Advanced Technologies Park (ATP)**, adjacent to the University, is a hi-tech complex established by Ben-Gurion University, the Beer-Sheva municipality, KUD International, and Gav-Yam, with the goal of transforming the region into a major resource of the "Start-Up Nation."

The ATP is currently home to Deutsche Telekom, Dell EMC, IBM, Oracle, Elbit Systems, Ness Technologies, Jerusalem Venture Partners (JVP), RAD, Leidos, Allscripts, AudioCodes, PayPal, Wix, WeWork, Incubit, CDI, and more.

Indeed, just a couple of years after the ATP's inauguration, this modern expression of David Ben-Gurion's vision to develop the Negev through science and industry provides employment to over 2,000 hi-tech workers and entrepreneurs, many of them graduates of BGU. This number is expected to reach 10,000 over the next decade as the Park grows to more than a dozen buildings.

Israel Defense Forces (IDF)

The IDF's main technology campus, where the army's strategic technology units will be concentrated, is being relocated adjacent to the University and the ATP. The relocation of additional army intelligence and training bases to Israel's Negev region over the next few years will bring over 32,000 highly trained and talented personnel to the Negev.

A range of collaborative educational programs between BGU and the IDF are expected, as well as joint R&D centers that will leverage military knowledge and expertise together with BGU's scientific edge to produce world-class research in cyber security and a host of related fields.

Soroka University Medical Center, adjacent to the University, is one of Israel's most important medical institutions and the only major hospital serving Israel's southern region. It is also the teaching hospital of BGU's Faculty of Health Sciences. Its outstanding physicians, researchers, and medical personnel train the next generation of healthcare professionals and conduct cutting-edge applied research in a range of medical fields.

“Adjacent to the University, the ATP is a hi-tech complex established with the goal of transforming the region into a major resource of the Start-Up Nation.”



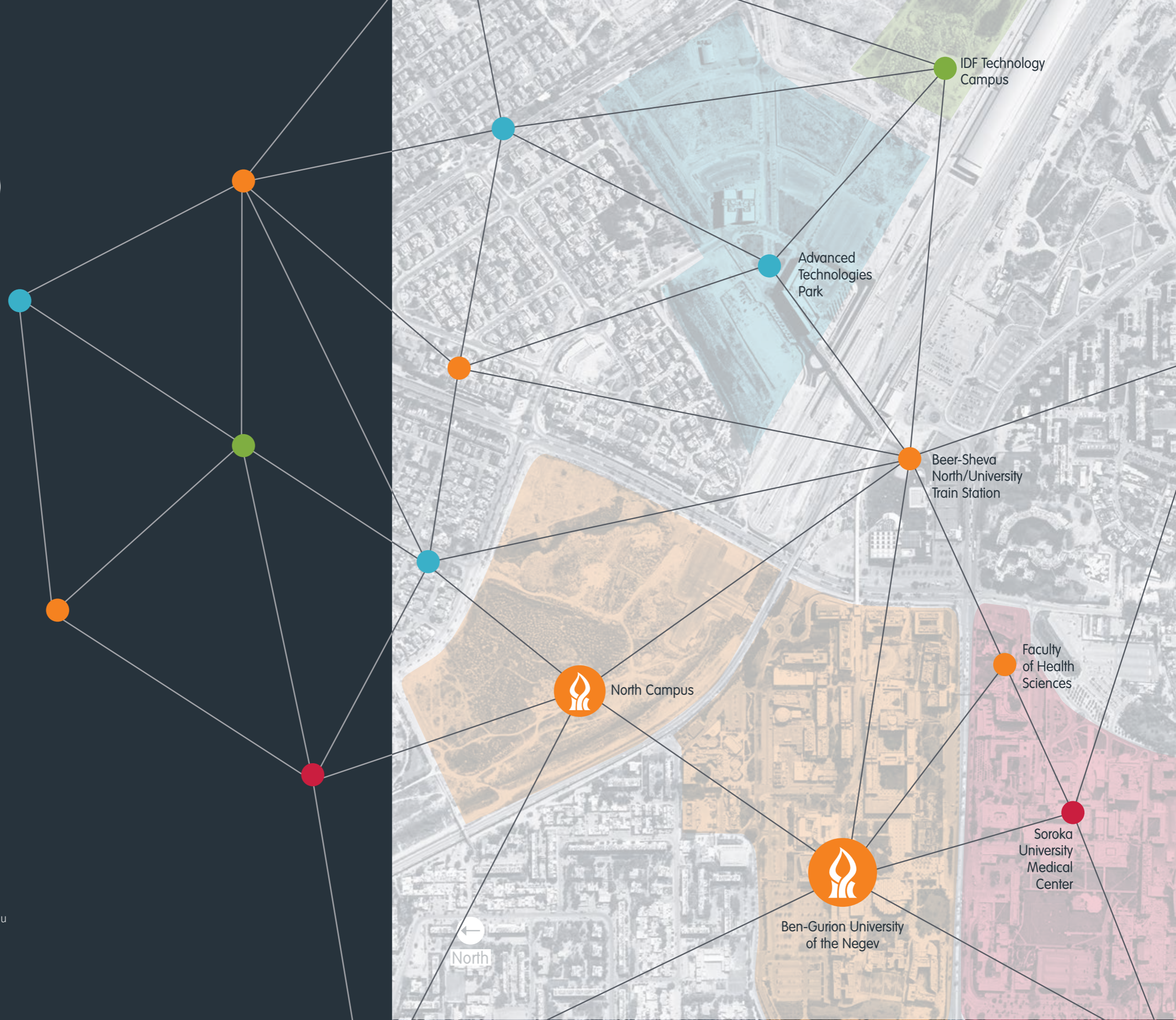
BGU 360°

- Ben-Gurion University of the Negev
- Bengis Center for Entrepreneurship and Innovation
- BGU Energy Initiative
- National Institute for Biotechnology in the Negev
- Homeland Security Institute
- ABC Robotics Initiative
- Zlotowski Center for Neuroscience
- Zuckerberg Institute for Water Research
- Ilse Katz Institute for Nanoscale Science and Technology
- Ben-Gurion National Solar Energy Center
- National Cyber Research Institute
- BGN Technologies
- BGU Innovation Labs
- Inno-Negev – Accelerator Program

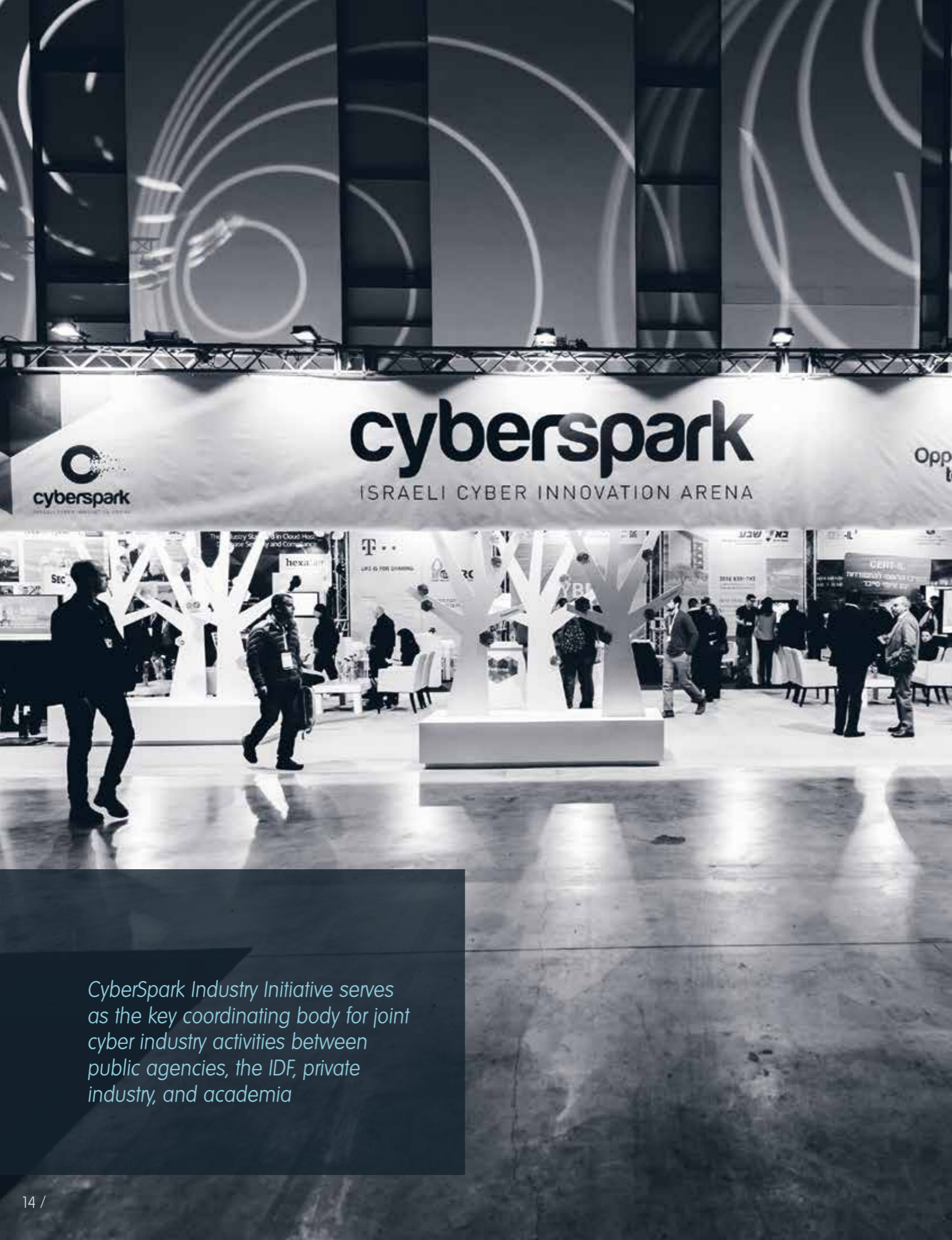
- Soroka University Medical Center

- Advanced Technologies Park
- CyberSpark Industry Initiative
- Center for Digital Innovation
- IBM Center of Excellence
- Deutsche Telekom Innovation Labs@BGU
- Dell EMC
- Oracle
- Elbit Systems
- Ness Technologies
- Jerusalem Venture Partners
- JVP CyberLabs
- RAD
- Leidos
- Allscripts
- AudioCodes
- PayPal
- Wix
- WeWork
- Incubit
- SecBI
- Morphisec
- Cyberbit

- IDF Technology Campus
- Israel National Cyber Bureau
- CERT-IL
- Tech7 Online Community
- Municipality of Beer-Sheva



North



CyberSpark Industry Initiative serves as the key coordinating body for joint cyber industry activities between public agencies, the IDF, private industry, and academia

Synergy in Action

Ben-Gurion University has been collaborating with **Deutsche Telekom Innovation Labs** in the field of network security since 2004. The DT Innovation Labs @ BGU serve as a crystallization point, where the University's cutting-edge knowledge is boldly transformed into revolutionary technologies of the future. This is the only Deutsche Telekom R&D center outside of Germany, yet some 80% of Deutsche Telekom's new patents are developed here.

BGU has also partnered with Jerusalem Venture Partners in establishing **JVP Cyber Labs**, a cyber security incubator program situated at the ATP. In its first two years of operation, JVP Cyber Labs established seven start-ups. The first of these, CyActive, was acquired by PayPal and became the core of its cyber security R&D center in Beer-Sheva.

The **IBM Center of Excellence for the Protection of Critical Infrastructure and Assets** is a joint venture between IBM and BGU, which focuses on emerging fields such as "big data." Researchers at the Center develop solutions for the enterprise market, with a focus on the protection of critical assets and computing environments, including cloud, mobile, connected cars, and the "Internet of Things."



“Beer-Sheva will not only be the cyber capital of Israel, but one of the most important places in the cyber security field in the world.”

Benjamin Netanyahu, Prime Minister of Israel

CyberSpark Industry Initiative serves as the key coordinating body for joint cyber industry activities between public agencies, the IDF, private industry, and academia. The Initiative offers seminars, encourages joint academia-industry research, supports programs to recruit and develop human resources in the field, and facilitates incentives to bring companies to the region.

In light of this concentration of cyber-related research at BGU, it is no surprise that Israel's **National CERT (Cyber Emergency Response Teams)** have relocated to the ATP. What's more, the National Cyber Bureau recently established the **National Cyber Research Institute** at BGU, which, along with the Department of Software and Information Systems Engineering, is certain to lead to even more activity in the field.

The Formula for Success

A Place for Innovation and Collaboration

The co-location of a variety of companies, researchers, and institutions around Ben-Gurion University provides opportunities to collaborate with innovators and problem-solvers in academia and industry.

Access to Exceptional Human Capital

BGU's world-class faculty members consult, contribute, and participate in groundbreaking research in many fields. 31% of BGU's students are involved in advanced research and they are a great source of quality employees even before they graduate.

Access to Innovative New Technologies

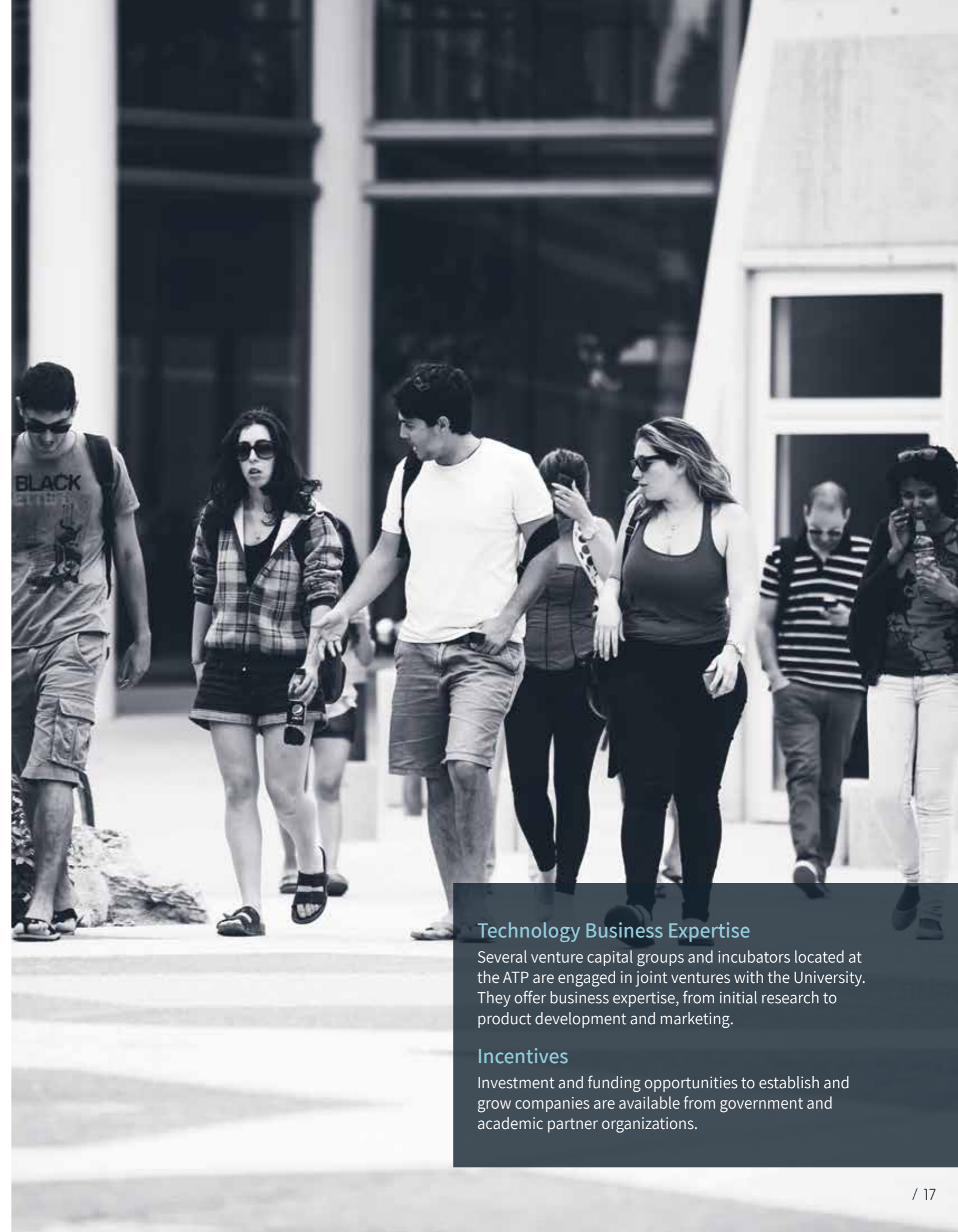
Access to emerging innovations out of Ben-Gurion University of the Negev.

A Choice of Research Facilities

Companies can contract to test products at the University's research facilities, or lease their own research space on campus or at the ATP.

“Government-private sector collaboration could turn Beer-Sheva into a new region of excellence in Israel and position it internationally as well.”

MK Erel Margalit



Technology Business Expertise

Several venture capital groups and incubators located at the ATP are engaged in joint ventures with the University. They offer business expertise, from initial research to product development and marketing.

Incentives

Investment and funding opportunities to establish and grow companies are available from government and academic partner organizations.

BGU Facts & Figures

51 academic departments, units, and world-class research institutes

Over **60** interdisciplinary research programs and **6** national research centers

1 in **3** of all university-trained Israeli engineers graduate from Ben-Gurion University

20,000 students, with **31%** pursuing advanced degrees



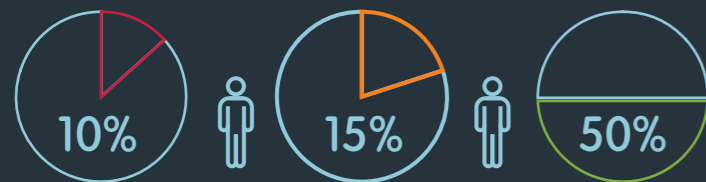
39th among the world's top technological universities

Among the top **1.5%** of universities in the world, according to the Center for World University Rankings

Among the top **100** universities worldwide granted U.S. patents; BGU was invited to join the National Academy of Inventors

1st among Israeli universities on the UI GreenMetric World University Rankings

Last year Cyberspark hosted companies with a net worth of **\$1.2** trillion seeking cybersecurity solutions



The hi-tech industry in Israel employs 10% of all workers and produces 15% of the GDP and 50% of Israel's exports, with Beer-Sheva, and BGU at its heart, recognized as the cybertechnology capital.



1 of **7** global cities: A *Global Technology Emerging Markets* study by Brandeis University and T3 Advisors has identified Beer-Sheva as one of seven global cities poised to become leading hubs of technology and life sciences, thanks to BGU, Soroka University Medical Center, and the Advanced Technologies Park.

Ben-Gurion University of the Negev is the fastest growing research university in Israel, fulfilling the vision of David Ben-Gurion, Israel's first prime minister, who envisaged the future of Israel emerging from the Negev. From medicine to the humanities to the natural sciences, BGU conducts groundbreaking research and offers insightful instruction.

The University is at the heart of Beer-Sheva's transformation into the country's cyber capital, where leading multi-national corporations leverage BGU's expertise to generate innovative R&D. A third of Israel's university-trained engineers graduate from BGU, with that number destined to rise as the IDF moves south and sends its brightest to swell the ranks of BGU's student body. To accommodate that growth, BGU has launched an ambitious campaign to double the size of its main campus.

As it counts up to its fiftieth anniversary, the University's research becomes ever more relevant as its global reach broadens.

www.bgu.ac.il

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אוניברסיטת בן-גוריון בנגב
Ben-Gurion University of the Negev