



# START-UP NEGEV

WHERE **BGU** INNOVATION AND  
RESEARCH ARE MAKING A DIFFERENCE



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



North Campus

Marcus Family Campus

Faculty of Health Sciences

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

David Ben-Gurion,  
Israel’s first Prime Minister

The Negev includes 60% of Israel’s landmass, but less than 10% of its population

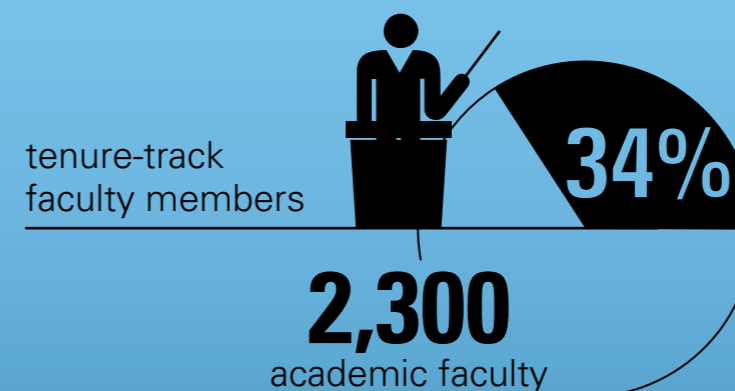
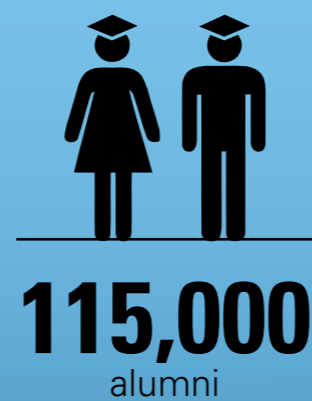
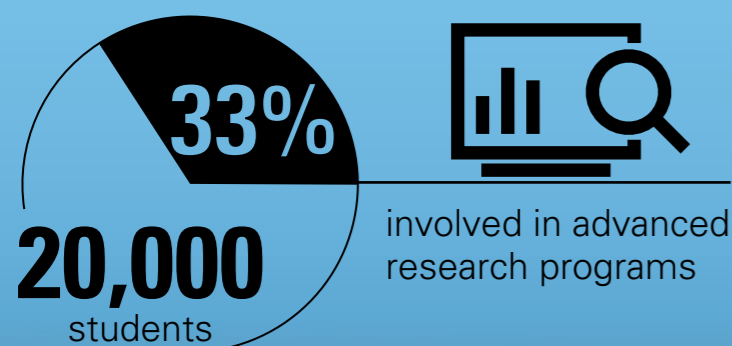
# University with a Mission

It all began with a **spark of an idea** – a belief grounded in the very core of the Zionist endeavor – that a university located in the heart of the Negev desert would **bring development to the region**, which comprises some 60 percent of Israel but houses less than 10 percent of its population.

The only Israeli university created by government mandate, Ben-Gurion University of the Negev was **founded in 1969** with a mission – to transcend the boundaries of academia and create a new model of education and research that would have a **direct impact on people's lives**.

Today, BGU has succeeded beyond expectations with five campuses, building an academic institution that is **deeply rooted in the community**, while achieving **international recognition** for its inspired scholarship and thought-leading research.

BGU attracts the best and brightest students from Israel and around the world. Consistently **voted the number-one choice of** Israeli undergraduates, BGU combines the warm atmosphere of a small university with the powerhouse academics of one of the country's **leading institutions** of higher learning.



# Inspiring Scholarship

**Ben-Gurion University of the Negev was founded with a special pioneering spirit – a desire to realize the potential of the frontier region**

Known as Israel's youngest and most dynamic university, BGU attracts top-notch students from around Israel and the world. Students are engaged – working in the community and volunteering around the world — challenging accepted norms while imagining new use-based ideas. Interaction is the norm – between faculty and students, across the different disciplines.

This open approach has resulted in the creation of many unique, cutting edge educational programs – in multi-disciplinary areas as diverse as Israel Studies, Creative Writing, Global Health, Nano- and Bio-Technologies, Information Systems and Desert Studies.

The Mandel Social Leadership MBA Program is Israel's only management program specializing in the non-profit field.

The program fosters innovation in an interdisciplinary degree program that trains graduates to work effectively for social change.

Students are encouraged to pursue their passions, with teams competing and placing in international competitions that showcase their skills – from building autonomous submarines to a Formula One racecar, challenging their opponent in an open debate or at a business plan competition. No challenge is too daunting, from seeking synthetic microbiology solutions to solve world problems or joining a night long hackathon.

This is the heart of the Israeli educational experience – the excitement and energy that is part of the academic endeavor that nurtures creativity and excellence.

**Degree-granting Faculties** Engineering Sciences // Health Sciences // Natural Sciences // Pinchas Sapir Faculty of Humanities and Social Sciences // Guilford Glazer Faculty of Business and Management // Jacob Blaustein Institutes for Desert Research. **Schools** Kreitman School of Advanced Graduate Studies // Joyce and Irving Goldman Medical School // Medical School for International Health // Albert Katz International School for Desert Research // Leon and Mathilde Recanati School for Community Health Professions

“We are dedicated to educating independent thinkers who make change happen.”

Prof. Rivka Carmi, BGU President





“We relate to Israel not only as the “start-up nation” but also an agrarian state founded on the principles of sound agricultural development.”

Patrick Maisonnave,  
French Ambassador to Israel

# Research Matters

**At BGU a welcoming atmosphere encourages the open exchange of ideas and original thinking**

Research at Ben-Gurion University of the Negev strives to unravel the secrets of life and humanity, while discovering innovative solutions to the world’s most pressing challenges.

The University is in a constant state of growth. Building on its core strengths, BGU research spans all life sciences – including futuristic nanotechnology, autonomous robotics, clean-tech, biotech and bioinformatics – as well as the traditional humanities and social sciences.

BGU maintains interdisciplinary collaborations with prestigious universities and research institutes around the world such as the University of Chicago, the University of Oxford and the CERN Institute in Switzerland.

Strategically located at the heart of the Negev desert, BGU has a longstanding

tradition of outstanding research in alternative energy, water reclamation, sustainable development of drylands and environmental engineering.

Events like the bi-annual Drylands, Deserts and Desertification conference, organized by and held at the Jacob Blaustein Institutes for Desert Research, attract hundreds of participants from over 50 countries.

The diverse local population enables rare insights into the human genome and has been one of the inspirations behind the creation of BGU’s National Institute for Biotechnology in the Negev. Extending research beyond the classroom, BGU scholars are socially proactive in mobilizing support for initiatives that range from assuring that all school-age children receive a balanced diet to lobbying for greater access to healthcare.

**Interdisciplinary Institutes** National Institute for Biotechnology in the Negev // Ilse Katz Institute for Nanoscale Science and Technology // Jacob Blaustein Institutes for Desert Research // Ben-Gurion Research Institute for the Study of Israel and Zionism // Heksherim – The Research Institute for Jewish and Israeli Literature and Culture // Homeland Security Institute. **Research Centers** Zlotowski Center for Neuroscience // Ben-Gurion National Solar Energy Center // Blechner Center for Catalysis and Process Development // ABC Robotics // Goldstein-Goren International Center for Jewish Thought // Moshe David Gaon Center for Ladino Culture

# Global Impact

**BGU is affecting the world through inspired ideas, unique academic programs and far-reaching social action initiatives.**

Through global partnerships, BGU students are exposed to a world of thinking that broadens their horizons. The Office for International Academic Affairs is at the center of the University's efforts to encourage the globalization of campus life, while outreach activities by the Student Union ensures that the students are integrated into the general BGU community.

International students enrich campus life while becoming ambassadors for Israeli know-how and experience. Many continue in academia, paving the way for future research collaborations around the world.

The University attracts a wide array of international students through a range of programs, from a summer university program for German speakers to specialized graduate and post-graduate programs targeting students from China, India and the European Union.

The Medical School for International Health in affiliation with Columbia University

Medical Center brings together students who are united in their commitment to global health, practicing medicine in a compassionate and multi-cultural setting. At the Albert Katz International School for Desert Studies students from over 20 countries create an incomparable ecosystem for sustainability studies.

Unique academic courses such as "Water in the Developing World" and "Healthcare in Africa" are structured around life-changing visits to relevant communities by Israeli students, while regional research centers – such as the Chaim Herzog Center for Middle East Studies and Diplomacy, the Centre for the Study of European Politics and Society and the Tamar Golan Africa Centre – encourage students to integrate volunteering into their learning experience.

BGU's participation in the Erasmus-Mundus and Euraxess programs has created a context for European Union students to spend a semester or two in advanced research laboratories at BGU.

**"You can broaden your mind if you interact with people from all over the world."**

Xintong Yuan, PhD student



“This is an historic change which will turn Beer-Sheva into a knowledge center.”

Beer-Sheva Mayor Ruvik Danilovich

# Start-Up Negev

## **BGU is the catalyst driving development in the region**

Innovation is the catchword of the day but at BGU it is part of its founding spirit. The challenge of “making the desert bloom” attracted a special kind of person with unbounded creativity and determination that can be seen across the region.

Farmers raise fish in the desert, while a new state-of-the-art hi-tech park is flourishing adjacent to the Marcus Family Campus.

The Advanced Technologies Park (ATP) opened for business in 2013, with the goal of ensuring that a critical mass of graduates would be able to find employment in the region. The brainchild of former University President Prof. Avishay Braverman, the ATP is a public-private partnership of BGU, the Beer-Sheva Municipality, KUD International LLC and Gav-Yam Negev. With a 23-acre campus, the ATP maximizes the collaborative relationship between academia and industry.

Within the ATP framework, university researchers, students and alumni are joining some of the world’s foremost entrepreneurial companies in fields such as big data and analytics, data storage, cyber security, telecommunications and nanotechnology.

This spirit is nurtured through a series of events on and off campus. The Bengis Center for Entrepreneurship and Hi-Tech Management works with students and staff to turn the seed of an idea into a start-up. Campus-wide events such as Innovation Day and Global Entrepreneurship Week attract thousands of participants, providing them with the tools and connections to succeed. BGN Technologies, the University’s technology transfer company, leverages the University’s intellectual capital and technologies to serve industry as well as the common good.

**ATP “resident” companies include** Allscripts (dbMotion) // BGN Technologies // Dalet // Deutsche Telekom // Elbit HS Incubator // EMC<sup>2</sup>-RSA // JVP Cyber Incubator // Ness Technologies // Oracle

# Securing Our Future

## **BGU's multi-disciplinary Homeland Security Institute is prepared – identifying threats and finding solutions**

Homeland security has taken on many more aspects than just traditional physical protection in the 21st century. With the threats multiplying from non-state actors, natural disasters and industrial accidents, researchers have had to work together to develop strengthen resilience and develop new protective technologies.

Novel and effective security encompasses the physical homeland but also the virtual one. It requires sensitive sensors as well as trained rapid response personnel.

Bringing together scientists from diverse disciplines the guiding principle is to create a state free from danger or injury: To protect our social wellbeing, to protect our borders and infrastructures, and to protect our virtual environment from cyber attacks.

The Deutsche Telekom Innovation Labs at BGU have been at the forefront of mobile data protection for nearly a decade.

Harnessing the financial and innovative might of the telecommunications giant to the inventive brainpower of BGU researchers has led to numerous breakthroughs and created an environment that fosters innovation.

The Israeli government has announced plans to turn Beer-Sheva into the cyber capital of Israel, including moving the elite information systems units of the Israel Defense Forces to the region. The Prime Minister's Office, through the National Cyber Bureau, launched CyberSpark, the Israeli Cyber Innovation Arena, to leverage BGU's research capacity and proven ingenuity, the support of the National Cyber Bureau and the local municipality.

The new ecosystem will benefit from the University's vast educational resources and a superb research environment, while creating a critical mass of researchers who are committed to defending Israel's physical and digital borders.



“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.”

Prime Minister Benjamin Netanyahu declared at the opening of the Cyber Tech Israel conference



# Community Outreach

“Thou shalt love thy neighbor as thyself.”

Leviticus 19:18

## Deep in the University's DNA is a desire to make a difference

From its inception, BGU has been involved in the community. Engaged in how to make a difference. Living and working in the city's most challenged neighborhoods.

Research and education go hand in hand. Innovative social entrepreneurship projects empower the disadvantaged while enriching the lives of those who get involved. Students learn to be involved citizens while seeing how the smallest acts of kindness can make a huge difference.

Access is the key. The Negev is home to more than 70 different ethnic groups. BGU creates specially-tailored programs to make education accessible to all.

The Deichmann Building for Community Action provides a dedicated home to a range of unique programs, including the Rothschild Cube, a “civic simulator” and visitor's center that emphasizes social issues.

### Negev Health Forum – From academia to activism

University researchers from the Faculty of Health Sciences have taken the initiative to lobby the Israeli Knesset to reduce health disparities for the different population groups in the Negev. Comprised of medical practitioners, members of the Department of Health Systems Management, government employees and local NGOs, the Forum is at the forefront of shaping policy to improve the health of all the residents of the region.

### Green Campus – Following the 3Rs

Based on the principles of “Reduce, Reuse and Recycle,” BGU is promoting environmentally sound practices on campus and in the community. The Green Campus Initiative, organized in collaboration with the Ministry for Environmental Protection, adopts energy and water saving measures in campus buildings; increases the number of relevant academic offerings in all disciplines; develops focused educational projects such as community gardens and funds an annual contest for original “green” ideas.

**Flagship community programs** Lillian and Larry Goodman Open Apartments // Keren Moshe Fellows // Robert H. Arnow Center for Bedouin Studies and Development // Kidumatica Math Club // Ilan Ramon Youth Physics Center // Perach Mentoring // Access to Higher Education

# Alumni Impact

**Our graduates get involved – putting their education to work to make a difference**

BGU alumni care. They get involved. They pursue their passions and work to improve the world around them. Many are staying in the Negev, building Israel's last frontier with their enthusiasm and creativity. Others have set off for faraway places, applying their skills and experience in new and exciting ways around the world.

They work for NGOs, pursue advanced degrees, launch groundbreaking start-ups and volunteer in their communities. They are leaders, with the skills to make a difference.


BGU graduates comprise more than one-third of the country's engineers –

the engine of Israel's spectacular hi-tech growth. They are innovators with an eye to making a difference. They are medical practitioners who see their patients as people – part of a community. They are looking for the cure to ensure a healthier future. They are social workers, educators, scientists and entrepreneurs who are at the forefront of their professions.

They are artists and writers and philosophers, engaged in realizing the dream of creating something that will change the way people think.

They have learned from the past but are focused on the future.





“Israel will stand or fall on what is accomplished in the Negev”

David Ben-Gurion

# Negev is Now

**Located in the geographical center of Israel, BGU is taking a central role in Israel’s development**

BGU believes that developing the Negev will do more than benefit the communities of the region. It will strengthen Israel as a whole and be a “light unto the nations.” Science and technologies developed here are impact around the world through our graduates and alumni.

In 2013, the University doubled its physical size by leasing a 57-acre tract

of land for a new north campus. Located across the railway tracks from the Marcus Family Campus, the land will help the University realize its potential as part of its long-term plan for strategic growth. Infrastructure development is already underway allowing for the initial building of new dormitories, a visitors and convention center and new laboratories.

The University is working with national and regional agencies to ensure that alumni find meaningful employment in the South – both at BGU and the growing Advanced Technologies Park – which is already starting to bear fruit.

BGU has invested in building a supportive infrastructure to welcome young

researchers, including a university-affiliated daycare facility together with WIZO and a dedicated program to advance women in academia. Incentive relocation packages help attract the very best scientists and scholars to ensure that BGU remains competitive in Israel and the world.

# Ben-Gurion University of the Negev

As a comprehensive university, BGU has academic programs in a wide range of fields and encourages students to engage in multi-disciplinary research

**The Pinchas Sapir Faculty of Humanities and Social Sciences** offers undergraduate and graduate students the opportunity to explore modern society's collective history, ideas and culture. This foundation provides them with the knowledge they need to become well-rounded, critical thinkers able to operate in today's complex world.

**Humanities Departments:** Arts, Bible, Archaeology and Ancient Near Eastern Studies, English as a Foreign Language, Foreign Literatures and Linguistics, General History, General Studies, Hebrew Language, Hebrew Literature, Jewish History, Jewish Thought, Middle East Studies, Philosophy

**Social Sciences Departments:** Communications Studies, Economics, Education, Geography and Environmental Development, Politics and Government, Psychology, Social Work, Sociology and Anthropology

**Special Programs:** Africa Studies, Behavioral Science, Conflict Management, Gender Studies, Israel Studies, Promotion of Excellence in Teaching, Science and Technology Education

**The Faculty of Natural Sciences** pursues scholarly research, both basic and applied, in the natural sciences, computer sciences and mathematics, attracting a growing number of outstanding young scientists who have made it a leader in such fields as informatics, structural biology and chemistry. The Faculty is responsible for providing foundation courses in the basic sciences for students majoring in engineering, medical and social sciences.

**Departments:** Chemistry, Computer Science, Geological and Environmental Sciences, Life Sciences, Mathematics, Software Engineering Unit, Physics

**The Faculty of Engineering Sciences** advances knowledge in all areas of technology, focusing on promoting research and development of new technologies and methodologies. The Faculty's vision is highly collaborative, with researchers engaged in interdisciplinary projects in medicine, computer sciences, physics, mathematics and chemistry. The University offers degree programs in new disciplines that are shaping tomorrow, such as biomedical engineering, environmental engineering, cyber security and electro-optics.

**Departments:** Biomedical, Biotechnology, Chemical, Communication Systems, Electrical and Computer, Electro-optical, Energy, Environmental, Industrial Management, Information Systems, Management and Safety, Materials, Mechanical, Nuclear, Software, Structural

**The Faculty of Health Sciences** has earned an international reputation for its pioneering approach to multi-cultural healthcare that is a model for related programs around the world. Its revolutionary approach to community care, enhanced through an emphasis on clinical research and interdisciplinary studies, is based on the integral linkage between compassionate doctors and outstanding medical care.

**Research Departments:** Clinical Biochemistry and Pharmacology, Health Systems Management, Microbiology, Immunology and Genetics, Physiology and Cell Biology, Public Health

**Clinical Departments:** Anesthesiology, Community Health, Gynecology and Obstetrics, Internal Medicine, Pediatrics, Psychiatry, Surgery

**The Guilford Glazer Faculty of Business and Management** provides undergraduate and graduate students with the tools they need to meet the challenges of operating a business in a 21st century global economy. Benefiting from an orientation that integrates both leadership and ethics into a rigorous academic curriculum, the Faculty's graduates are making their mark in the public and private sectors, both in Israel and abroad.

**Departments:** Business Administration, Health Systems Management, Hotel and Tourism Management, Management, Public Policy and Administration

**Special Programs:** Executive Master's Program, Mandel Social Leadership MBA

**The Jacob Blaustein Institutes for Desert Research** are at the forefront of the exploration of drylands and sustainability studies, combining the power of three exceptional research institutes: the Zuckerman Institute for Water Research; the French Associates Institute for Agriculture and Biotechnology of Drylands; and the Swiss Institute for Dryland Environmental and Energy Research.

**Departments:** Department of Environmental Hydrology & Microbiology, Department of Desalination & Water Treatment, Bona Terra Department of Man in the Desert, Alexandre Yersin Department of Solar Energy and Environmental Physics, Marco and Louise Mitrani Department of Desert Ecology

## International Degree Programs (Taught in English)

- BA in Literature & Linguistics
- The Medical School for International Health
- MA Israel Studies

- MA Linguistics
- MA Literature
- MSc Chemistry
- MSc Physics
- MSc Life Sciences
- MSc Geological and Environmental Sciences
- MSc Mathematics
- MSc In Information Systems with focus in Data Mining & Business Intelligence (BI)
- MD in Global Health
- PhD in all fields: Engineering, Natural Sciences, Health Sciences, Social Sciences and Humanities, Management, Desert Studies

## Albert Katz Int'l School for Desert Studies (MA, MSc/PhD):

- Agriculture & Biotechnology for Sustainable Development
- Ecology of Drylands
- Solar Energy & Environmental Physics
- Irrigation & Plant Environment
- Environmental & Aquatic Microbiology
- Environmental Studies
- Water Sciences and Technology
- MSc in Hydrology & Water Quality: Water Resources, Desalination & Water Treatment, Microbiology & Water quality

## International Non-Degree Programs

- Ginsburg-Ingerman Overseas Student Program
- Hebrew Language Studies
- Sustainable Development Track
- Global Health Track
- Israel Studies Track
- Academic Internships (for credit)
- Anthropology, Politics, Communication, History, Sociology and more

## International Summer School

- Global Health Program
- Internationale Sommeruniversität (for German Speakers)
- Human Rights Program
- Intensive Arabic Ulpan
- Intensive Hebrew Ulpan

To learn more about studying at BGU, visit our website at [www.bgu.ac.il/international](http://www.bgu.ac.il/international) or contact us directly at [study@bgu.ac.il](mailto:study@bgu.ac.il)



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