



Master's Degree Program in Desert Studies


Master's Degree Program in Hydrology & Water Quality

Ph.D. Degree Program

The Albert Katz International School for Desert Studies



The Jacob Blaustein Institutes
for Desert Research



Ben-Gurion University of the Negev's Jacob Blaustein Institutes for Desert Research are acknowledged leaders in desert studies. In light of the worldwide need for expertise in the study of drylands, the University and the Institutes have established the Albert Katz International School for Desert Studies, which offers a two-year program leading to a Master's degree in Desert Studies or in Hydrology and a Ph.D. Program.

The multi-disciplinary research areas have emerged in response to the lack of science-based responses to the urgent needs of humanity. Desert Studies, as a discipline is likely to grow into a distinct scientific activity in its own right.

The innovative, multidisciplinary program in Desert Studies is structured to provide an integrated approach, offering students exceptional opportunities to pursue a combination of basic and applied research. Students are exposed to a wide range of disciplines complementary to their major areas of specialization.







The Albert Katz International School for Desert Studies

The Albert Katz International School for Desert Studies (AKIS) was established in 1999 as part of the Jacob Blaustein Institutes for Desert Research (BIDR).

The School offers a few graduate programs:

- A two-year Master's program in Desert Studies
- A two-year Master's program in Hydrology & Water Quality
- A four-year Ph. D. program.

The courses in all programs are taught in English by researchers from the BIDR and from other faculties at Ben-Gurion University of the Negev, and, occasionally, by leading scholars from the international community.

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Location

AKIS is located on the Sede Boqer Campus of Ben-Gurion University of the Negev. The campus is set within the arid Negev Highland region, some 50 km south of the city of Beer-Sheva. The School's research and teaching facilities are all located on the Sede Boqer Campus. Some fieldwork is done in research stations situated in various parts of the Negev.

Our modern students' dormitories were designed according to the principles of climate and energy conscious architecture. We have accommodation for single as well as married students.

Master's program in Desert Studies

Specializations

- **Agriculture and Biotechnology for Sustainable Dryland Development**
Dryland Agriculture, Animal Husbandry, Algal Biotechnology, Desert Plant Biotechnology, Aquaculture.
- **Irrigation and plant environment**
Irrigation regimes, Plant physiology, Hydrometeorology, plant nutrition, Salinity and reuse of water, Soil physics, Soil chemistry.
- **Water Sciences and Technologies**
Water Resources Management, Water Treatment, Water Desalination.
- **Environmental and Aquatic Microbiology**
Physiology and Biodiversity of Microorganisms, Role of Microorganisms in Nutrient Cycling, Biodegradation of Environmental Pollutants, Microbial Activities.
- **Solar Energy and Environmental Physics**
Meteorology, Remote Sensing, Solar Energy, Physical Aspects of the Environment.
- **Ecology of Drylands**
Nature Conservation, Ecophysiology, Biodiversity, Population Ecology.
- **Environmental Studies**
Desert Architecture, Urban Planning, and the Built Environment; Social, Anthropological, Economic and Policy-related Dimensions of Human-Environment Interactions.

The curriculum includes:

- Enrichment courses in addition to the main curriculum of the student's specialization
- Advanced specialization – specific courses
- Research thesis

Upon completion of the program's requirements the student will receive either a Master degree (M.Sc) or a Master of Arts degree (M.A.) depending on the student's Bachelor's degree.



Master's program in Hydrology & Water Quality

The program is structured to strengthen and expand scientific and practical foundations of hydrology, hydrogeology, hydrochemistry, hydro-microbiology, subsurface saturated and an unsaturated flow in aquifers and soils, flow processes in channels and rivers and management of water resources, in accordance with chemical and physical principles.

The curriculum has two tracks:

- M.Sc. with thesis
- M.Sc. without thesis

Graduates of both programs are qualified to carry out research and continue their studies towards a higher degree, or to take positions in management of drylands, and to lead the battle against desertification.

Ph.D. Program

The Ph.D. program follows the academic requirements of the University's Kreitman School of Advanced Studies (Please refer to: http://www.bgu.ac.il/kreitman_school/).

Who Is Eligible?

Desert Studies

- Applicants must hold a B.Sc. degree in Science or Engineering, except for Man in the Drylands, where a B.A. in Social Sciences or Humanities, or an academic/professional degree in Architecture is required.

Drylands Environmental Studies

- Applicants should hold either a B.Sc. or a B.A. degree.

Hydrology & Water Quality program

- A Bachelor's degree in Science or Engineering is required.

Proficiency in English is mandatory (successfully passing the TOEFL).

Students may apply for admission in the fall or spring semesters.





For more information please visit our website at
<http://www.bgu.ac.il/akis>

Or contact us

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