





MSc Degree in Cyber Space Security

The MSc degree is a joint program of the Department of Information Systems Engineering and the Department of Computer Science

The program is designed to provide researchers and professionals with a high level of training in the field of Information Security in Cyberspace. The program covers a variety of topics, such as network security methods for identifying attacks, operating systems security, cryptography, advanced topics of malware detection, and secure systems development.

Studies are primarily intended for graduates with a bachelor's degree in Information Systems Engineering, Computer Science, Software Engineering and Communications Systems Engineering. Requirements for completion of studies include writing a research thesis in the field and eight required and elective courses, including at least six courses in Information Security.

The courses offered focus on meeting current market needs that have become a part of our daily life, with far-reaching implications on future quality of life, in addition to a wide range of opportunities for scientific and industrial related domains. Among other areas, our studies answer the needs of the Defense Industry in regards to cyber threats to the State of Israel. The curriculum was planned in coordination with security experts.

Cyber Security Studies Curriculum

The program is comprised of 39 academic points: 8 required/elective courses of 3-4 credit points each and a thesis, for an additional 15 credit points.

Supplementary courses (no points awarded)

Students who have been accepted but lack the specific required background can be requested to take supplementary courses from the courses offered in the department based on the decision of the teaching committee.

Required Courses

- Cryptography (4 pts)
- Network security (3 pts)
- Operation systems security (3 pts)
- Methods for attacks detection (3 pts)
- Systems security engineering (3 pts)
- Advanced topics in malware detection (3 pts)

Students in the program are required to take an additional elective course from the list of available electives in the department.

Please note that the course list is subject to change.

Thesis

Each student is required to perform research and write a thesis under the guidance of a faculty member, one of BGU experts in the field. The research proposal must be approved by the student's academic supervisor and the teaching committee. The thesis will undergo a process of evaluation according to Faculty procedures. The thesis should be in the field of Cyber Security or a related field.