



*Data Mining and Business  
Intelligence for Cyber Security  
Applications*

*A Unique Summer  
Program*



# Data Mining and Business Intelligence for Cyber Security Applications A Unique Summer Program

Data Mining and Business Intelligence focuses on automatic data analysis and the extraction of information and knowledge. Over the last few years, data mining has become a crucial factor in the competitive environment and serves organizations at all levels, from operational decisions to the improvement of strategic planning. The summer program in data mining and business intelligence will meet the obvious need for academic training in big data, business intelligence and data mining methods, especially for cyber security enhancement.

Ben-Gurion University of the Negev was founded in 1969, and established itself as one of the leading universities in Israel. Over the years, BGU has acquired an international reputation, and was ranked 18th in the QS ranking for Universities under 50.

In 2012, Israel's Prime Minister declared that Beer Sheva and BGU are to become the country's cyber security command center. Consequently, the Cyber Security Research Center and the Big Data Lab were established at Ben-Gurion University of the Negev in 2013. These developments have transformed BGU, with its research centers and leading academic faculty, together with the Advanced Technologies Park, into an ideal environment for a summer program in these fields.

## Program Description

The purpose of the Summer Program in Data Mining and Business Intelligence is to provide both theoretical and practical knowledge, including tools, on data mining. The program offers two academic courses (each for 3 credits), where students learn the basic tools of data mining and the utilization of machine learning techniques for solving cyber security problems. The program includes a mandatory one week internship at BGU's Cyber Security Research Center. The internship corresponds with the course materials and contributes the practical experience component. In addition, students will take part in professional fieldtrips to leading companies, in order to enhance their understanding of data mining and cyber security.

## Program Structure

- The program consists of three mandatory components; two courses and an internship:
- Basic and Advanced Methods in Data Mining (3 credits)
- Machine Learning-Based Solutions for Cyber Security Problems (3 credits).
- One week internship at the Malware-Lab at the Cyber Security Research Center at BGU and the Big-Data research Lab.
- Additionally, the students will take part in professional field trips, visiting the industry's leading innovators, supporting organizations and additional figures of the data mining and Cyber Security ecosystem.

## World Renowned Professors And Lecturers:

Prof. Yuval Elovici, Prof. Lior Rokach, Dr. Nir Nissim, Dr. Asaf Shabtai, Mr. Aviad Cohen, and Mr. Yisroel Mirsky

## Requirements:

- Students in their third year of undergraduates studies or at any stage of their graduate studies in: Information Systems Engineering, Software Engineering, Computer Science, Electrical Engineering, Communication Engineering, Data Science, Applied Mathematics, Statistics and Industrial Engineering & Management with Robotics or Information Systems track. The student must have a GPA of 82 or 3.0 at least.
- English proficiency required.
- Personal Laptop (windows OS).
- Programming experience - advantage
- All applications will be evaluated by an admissions committee.

## How to Apply

Please visit: <https://www.tfaforms.com/399172> for online application.

Please prepare the following documents:

- Up-to-date transcripts in English
- Course specific Recommendation letter from the head of the department
- Motivation letter in which you explain why you want to attend this program (maximum one page long)
- CV
- Passport-format photograph (JPG)
- Scanned copy of your passport

## Application Schedule:

- Application deadline: February 25<sup>th</sup> 2018
- Notification of Acceptance: March 22<sup>nd</sup> 2018
- Orientation day: July 2<sup>nd</sup> 2018
- Courses dates: July 3<sup>rd</sup> - 31<sup>st</sup> 2018

## Tuition

- Application fee - \$60
- Tuition - \$5200\*

\*Including housing, health insurance, 6 credits, trips and social activities, professional field trips.

Not including airfare, meals & personal expenses.

## Scholarships

Scholarships are available for outstanding students.



For more information about the program, please visit:

[http://in.bgu.ac.il/en/Global/Pages/OSP/Data\\_Mining\\_SummerProg.aspx](http://in.bgu.ac.il/en/Global/Pages/OSP/Data_Mining_SummerProg.aspx)