Cyber Security

Enrichment programs are one of the most important global methods used to enrich the knowledge of gifted students. From this point of view, Mawhiba has designed specialized scientific enrichment units representing 75% of the program, enriching students' knowledge and experiences and challenging their abilities in a number of scientific fields, in cooperation with the best international expert houses in the field of Talent and creativity, provided with progressive levels of knowledge; With the aim of continuing to build quality cumulative scientific experiences, which increase in depth and diversity as students progress in participation year after year.

As well as for the importance of the skill aspect, Mawhiba allocated 25% of the summer enrichment program, and therefore a set of skill bags were designed that are concerned with building the basic and important life skills of gifted students, which contribute to the development of personal, social and innovative skills that keep pace with the skills of the twenty-first century such as future vision and digital security. leadership, social influence and other skills .

What is the Cyber Security unit?

Students in this unit will introduce to the most important basic concepts in cybersecurity and cryptography, nature of the security threats facing computer systems and how to protect them from intrusions, and students shall be introduced to functions related to this field.

Furthermore, students will learn how to use digital evidence and solve their information security problems using programming languages. Moreover, the focus of the science module shall increase to include case studies in the field of cybersecurity and cryptography.

Unit objectives

The student will take an introduction to cybersecurity, cybersecurity fundamentals, protecting systems from intrusions, career Path in cybersecurity and various cyber-attack methods. The student will learn about the following techniques: Phishing, Sniffing, SQL Injection (Structured Query Language), MITM (Man-in-the-

Middle) attack, DDOS attack (Distributed Denial-of-Service), DNSMAP (Domain Name System Map), How to implement each and Router Split, and studying various cases in cybersecurity and building on the same for developing projects for groups of students.

The skills that students will acquire

Students will be able to build and develop basic skills, such as "teamwork, problem solving, reading and analyzing scientific literature, demonstrating understanding through oral and written communication, in addition to a number of targeted skills, which are provided through training packages appropriate to the age group, provided by Specialized and trained staff, including:

- Future vision.
- Digital security.
- Leadership and social influence.

Program components

- A specialized enrichment scientific unit.
- Practical activities and scientific projects.
- Skill activities.