

People's Democratic Republic of Algeria Ministry of Higher Education and Scientific Research Sétif 1 University – Ferhat Abbas

Faculty: Sciences

Master's Degree in Cyber Security

Presentation and objective of the CS

Today, as computer networks invade every aspect of our lives, training managers in cyber security is becoming vital.

Cyber security ensures that data is managed in secure conditions. It protects computer systems and data in circulation against so-called cyber criminals. Today, IT security has an impact on all businesses and is becoming a very important factor to be taken into consideration.

Admission requirements:

Hold a bachelor's degree in computer science
+ ranking in the course of study

Career Prospects/Professions:

- Security Developer
- Security administrator
- Security tester
- Threat analyst

Organization of Studies and Official Duration of the Program:

Program Overview:

Training Canvas:

Designing and Managing Secure Systems Advanced Cryptography Artificial Intelligence for Cyber Security Quantum Computing Ethical Hacking and Systems Defense Web Application Security Machine Learning for Cyber Security Information And Network Security Secure Software Development

Semestre 01 :

DMSS: Designing and Managing Secure Systems AC: Advanced Cryptography A2CS: Artificial Intelligence for Cyber Security QC: Quantum Computing USA: Unix System Administration CAV: Computer-Aided Verification AVR: Augmented and Virtual Reality CC: Cybercrime CE 1: Communication skills in English 1

Semestre 02 :

EHSD: Ethical Hacking and Systems Defense WAS : Web Application Security MLCS: Machine Learning for Cyber Security INS: Information And Network Security OSFS: Operating Systems Forensics And Security SSD: Secure Software Development CC: Cloud Computing BC: Blockchain CE 2: Communication skills in English 2

Semestre 03 :

NF: Network Forensics SPBD: Security and Privacy for Big Data DSF: Databases Security And Forensicsy CF: Computer Forensics CS: Cloud Security DACS: Data Analytics For Cyber Security IOTS: Internet Of Things (Iot) Security MFS: Multimedia Forensics And Security RM : Research Methodology

Semestre 04 :

Internship in a research laboratory or company, culminating in a final thesis and defense.

Curriculum Highlights:

Cyber security ensures that data is managed under optimal and secure conditions. It provides protection for IT systems and the data in transit against what are known as cybercriminals. The technical skills acquired by malicious individuals present risks that should not be taken lightly. Today, IT security impacts all professions and is becoming a crucial factor to consider. In addition to defending against cyber-attacks, cyber

Advanced training modules:

Network Forensics Security and Privacy for Big Data Databases Security And Forensicsy Computer Forensics Cloud Security Data Analytics For Cyber Security Internet Of Things (Iot) Security Multimedia Forensics And Security

Language of instruction:

French and English

Training framework:

The tables provided in the previous section "Program Overview"

Coordinator of the Program:

Pr. Zibouda ALIOUAT

Contact: zaliouat@univ-setif.dz

security establishes processes among employees to promote good practices. Indeed, human error is a genuine source of data breaches. Raising team awareness about issues such as identity theft is a key component of an IT security policy. As computer networks permeate every aspect of our lives, training leaders in the field of cyber security becomes essential.

Admission Information:

The current application of Articles 171 and

1023 of Decrees:

- Skills and knowledge acquisition are assessed every six months through continuous assessment and a final exam.
- Progress from the first to the second year is automatic if the student has completed the first two semesters of the training program.
- The student's assessment focuses on, depending on the training program: lectures, practical work, tutorials, and practical internships.