

**MA "CYBERSECURITY"
(TAUGHT IN BULGARIAN)**

Brief presentation of the program: Two of the main features of the Master "Cybersecurity" are relevance and uniqueness. The Master program is up to date because it provides students with knowledge and skills to deal with the latest threats and security challenges as the threats in cyberspace. Simultaneously, the Master program is unique because of the combination of knowledge and skills on the border of two crucial areas of human existence: security and advanced information technology. In its concept the program meets the European standards for training by providing:

- study of interdisciplinary courses covering a wide range of topics in areas such as cyber security management, design, construction and protection of information systems in the private and public sectors implementation of information and communication technologies in security systems, etc.;
- stimulation of auditory and the independent creative work of students by assessing their performance with established credit evaluation system of knowledge and skills;
- student participation in national and international projects, internships, seminars and conferences that contribute to building and strengthening the capacity for creative expression, teamwork, utilization of research methods, sharing and dissemination of achieved results.
- Training of master students "Cybersecurity" supports the mission of the NBU, aimed at building specialists with thorough training, knowledge and skills, able to independently solve problems in the professional field.
- The master program "Cybersecurity" prepares experts in cyber security as a result of studying the topics of key areas of cyber security management: risk management planning abilities for cyber-based scenarios, the human factor in cybersecurity, countering cybercrime and security domains: information security, application security, internet security, network security and communication systems security and critical information infrastructure. Students enrolled in the program gain practical skills in applying modern methods and technologies in project design for secure information systems.
- The level at which themes are addressed and the problems in the program focus on business-level organization (company, corporation) and government (ministry, government), whilst not excluding the levels of individual, national and global security, as well as issues of international cooperation on cybersecurity. Other topics in the program include public and private sectors, as well as issues of interaction in the creation and maintenance of cybersecurity.

In 2013, the Department "National and International Security", developed and won the project "Simulations in the interest of security" funded by the Central Fund for Strategic Studies at NBU. The project, in the laboratory of the department, is built computer network installation of the simulation software "Visual Battlespace 2", which provides the students an excellent opportunity to acquire skills and practical application of the knowledge acquired during the training.

The Master's program is accredited with the highest rating in the accreditation of professional fields 9.1. National security.

Major and qualification:

Specialization: Cybersecurity

Qualification: Master of Cybersecurity

Program structure:

First year, First Semester

Basic courses

SCTM102 Innovation and investment in security, 30h, 3 ECTS

SCTM109 Management of information systems in security, 30h, 3 ECTS
SCTM110 Introduction to Cybersecurity, 30h, 3 ECTS
SCTM123 Models and simulations, 30h, 3 ECTS
SCTM135 Cybersecurity management, 30h, 3 ECTS
SCTM254 Security on the Internet, 30h, 3 ECTS
SCTM259 Security and Social Media, 30h, 3 ECTS

Extracurricular credit courses

SCTM121 Individual course work: Innovation and investment in security, 30h, 3 ECTS
SCTM124 Individual course work: Introduction to Cybersecurity, 30h, 3 ECTS
SCTM126 Individual course work: Models and simulations, 30h, 3 ECTS
SCTM136 Individual course work: Management of cybersecurity, 30h, 3 ECTS
SCTM137 Individual course work: Security on the Internet, 30h, 3 ECTS
SCTM138 Individual course work: Management of information security systems, 30h, 3 ECTS
SCTM260 Individual course work: Security and Social Media, 30h, 3 ECTS

First year, Second Semester

Basic courses

SCTM130 Managing Risk in cybersecurity, 30h, 3 ECTS
SCTM202 Cryptographic basics of Security, 30h, 3 ECTS
SCTM223 Design of protective international systems, 30h, 3 ECTS
SCTM236 Policies for Cybersecurity, 30h, 3 ECTS
SCTM237 Protection of critical information infrastructure, 30h, 3 ECTS
SCTM250 Design of Defense Systems, 30h, 3 ECTS
SCTM257 Tackling cybercrime, 30h, 3 ECTS

Extracurricular credit courses

SCTM120 Individual course work: Designing Secure Information Systems, 30h, 3 ECTS
SCTM131 Individual course work: Managing Risk in cybersecurity, 30h, 3 ECTS
SCTM215 Individual course work: Cryptographic basics of Security, 30h, 3 ECTS
SCTM226 Individual course work: Design of Defense Systems, 30h, 3 ECTS
SCTM238 Individual course work: Policies for Cybersecurity, 30h, 3 ECTS
SCTM239 Individual course work: Protection of Critical Information Infrastructure, 30h, 3 ECTS
SCTM258 Individual course work: Counteracting cybercrime, 30h, 3 ECTS

Second Year, Third Semester

Basic courses

NISM216 Establishment and management of security systems, 30h, 3 ECTS
SCTM101 security and protection of information in computer systems, 30h, 3 ECTS
SCTM225 security testing computer systems and networks, 30h, 3 ECTS
SCTM251 Approaches to decision-making, 30h, 3 ECTS
SCTM252 planning abilities based on scenarios, 30h, 3 ECTS
SCTM256 Specialized Information Systems, 30h, 3 ECTS
SCTM300 The human factor in cybersecurity, 30h, 3 ECTS

Extracurricular credit courses

SCTM314 Internship, 30h, 3 ECTS