

# Cybersecurity

full time - bachelor's degree

## First course

### First Semester

№	Course	Hours	Final Exam	Ongoing Assessment
<b>Compulsory Courses</b>				
1	Linear Algebra	60	X	
2	Web Design Basics	60	X	
3	Basics of Information and Communication Technologies	60	X	
4	Applied Electrical Engineering and Electrical Measurements	60	X	
5	English Language	60		X
6	Physical Training and Sport	15		
<b>Elective Subjects</b>				
1	English Language	60		X
2	Teamwork	45		X

### Second Semester

№	Course	Hours	Final Exam	Ongoing Assessment
<b>Compulsory Courses</b>				
1	Mathematical Analysis	60	X	
2	Algorithmization and Programming Basics	60	X	
3	Digital Electronics Basics	60	X	
4	Computer Organization and Architecture	60	X	
5	English Language	60		X
6	Physical Training and Sport	15		X
<b>Elective Subjects</b>				
1	English Language	60		X
2	Search Engine Optimization (SEO)	45		X
<b>Educational practice</b>				
1	Practical Training 1	30		

## Second course

### Third Semester

№	Course	Hours	Final Exam	Ongoing Assessment
<b>Compulsory Courses</b>				
1	Discrete Structures	60		X
2	Windows Operating Systems	60	X	
3	Cybersecurity Basics	60	X	
4	Introduction to Computer Networks	60	X	
5	Object-oriented Programming Basics	60	X	
<b>Elective Subjects</b>				
1	English Language	120		X
<b>Educational practice</b>				
1	Practical Training 2	30		X

### Fourth Semester

№	Course	Hours	Final Exam	Ongoing Assessment
<b>Compulsory Courses</b>				
1	Operations Research	60		X
2	Computer Networks: Routing and Switching	60	X	
3	UNIX and Linux Operating Systems	60	X	
4	Database Design and Administration	60	X	
5	Cryptography and Cryptanalysis	60		X
6	Microprocessors and Microcontrollers	60	X	
7	Course Project (on a second and third semester subject)	30		X
<b>Elective Subjects</b>				
1	English Language	120		X

## Third course

### Fifth Semester

№	Course	Hours	Final Exam	Ongoing Assessment
<b>Compulsory Courses</b>				
1	Computer Networks: Scaling Networks	60	X	
2	Administration of Windows Operating Systems	60	X	
3	Databases: Big Data	60	X	
4	Object-oriented Programming	60	X	
5	Penetration testing	60		X
6	Computer Peripherals	45		X

### Sixth Semester

№	Course	Hours	Final Exam	Ongoing Assessment
<b>Compulsory Courses</b>				
1	Computer Networks: Connecting Networks	60	X	
2	Internet Application Programming	60	X	
3	Administration of UNIX and Linux Operating Systems	60	X	
4	Physical Protection Systems	60		X
5	Internet of Things (IoT), part 1	60	X	
6	Course Project (on a fourth and fifth semester subject)	30		X
<b>Educational practice</b>				
1	Internship			X

## Fourth course

### Seventh Semester

№	Course	Hours	Final Exam	Ongoing Assessment
<b>Compulsory Courses</b>				
1	Network Security Basics	60	X	
2	Virtualization Systems	60	X	
3	Software Security and Reengineering	60	X	
4	Database Security	60	X	
5	Methods and Means of Authentication	60		X
6	Course Project (free choice topic)	30		X
<b>Elective Subjects</b>				
1	Internet of Things - IoT - II часть	60		X

### Eight Semester

№	Course	Hours	Final Exam	Ongoing Assessment
<b>Compulsory Courses</b>				
1	Forensics and Cybersecurity Risk Management	60	X	
2	Cybersecurity Audit and Certification	60	X	
<b>Elective Subjects</b>				
1	Web-based Systems Security	45	X	
2	Cloud technologies	45	X	
3	Mobile Device Programming and Security	45	X	
4	Cybersecurity Incident Management	45		X
5	Ethical Hacking	45		X