

ONLINE

WINTER CAMP

in Cyber Security **2022**

WHEN?

January 24 – February 4, 2022

ECTS?

Yes! 3 ECTS + Official ITMO Certificate

FEES?

22,000 RUB (~€245)

APPLICATION DEADLINE?

January 9, 2022

APPLICATION DOCUMENTS?

- Valid copy of your passport
- CV
- Send to Ms. Ekaterina Rassolenko at e.rassolenko@itmo.ru

REQUIREMENTS?

- Knowledge of assembly x86 and C language
- Experience of using C++ programming language
- English – B1 or above

REQUIRED PROGRAMS?

- x32-64dbg, IDA Pro Free edition, PE Tools, Zoom



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SCHEDULE

**January 24 –
February 4, 2022**

JANUARY 24 MONDAY	History of Malware & Antimalware Debugger and Disassembler. PE-header and Win32 Executable Files	11:00 – 13:00	Lecture
		13:00 – 15:00	Practice
JANUARY 25 TUESDAY	Malware Classification and Naming Analysis of Simple File Virus. Algorithms of EXE Infection	11:00 – 13:00	Lecture
		13:00 – 15:00	Practice
JANUARY 26 WEDNESDAY	Techniques of Protection Against Detection. Malware Behavior Analysis of Simple File Virus. Reaching the Payload	11:00 – 13:00	Lecture
		13:00 – 15:00	Practice
JANUARY 27 THURSDAY	Review of Malware Detection Algorithms Techniques of Manual Unpacking of Binaries, Dumping and Healing the PE Files	11:00 – 13:00	Lecture
		13:00 – 15:00	Practice
JANUARY 28 FRIDAY	Malware Detection Algorithms. Machine Learning. Unpacking the Simple Trojans I	11:00 – 13:00	Lecture
		13:00 – 15:00	Practice
JANUARY 31 MONDAY	Structure of Botnets. P2P Botnets Unpacking the Simple Trojans II	11:00 – 13:00	Lecture
		13:00 – 15:00	Practice
FEBRUARY 1 TUESDAY	Zeus Botnet and Its Protocol Reaching the Payload of Trojans	11:00 – 13:00	Lecture
		13:00 – 15:00	Practice
FEBRUARY 2 WEDNESDAY	Antivirus Quality Estimation. Comparing Antivirus Products Structure of Payload of Trojans	11:00 – 13:00	Lecture
		13:00 – 15:00	Practice
FEBRUARY 3 THURSDAY	Sandbox Analysis of Malware Working with Viruses in Sandbox: Restrictions and Limitations	11:00 – 13:00	Lecture
		13:00 – 15:00	Practice
FEBRUARY 4 FRIDAY	Review and discussion	11:00 – 15:00	Lecture & Practice

All classes are scheduled according to Moscow time (GMT +3).