ITMO UNIVERSITY

ONLINE

SUMMER CAMP
in Cyber Security 2021

WHEN?
July 5 – 16, 2021

ECTS?
Yes! 3 ECTS + Official ITMO Certificate

FEES?
22,000 RUB (~€245)

APPLICATION DEADLINE?
June 24, 2021

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

July 5–16, 2021

Date	Topic	Time	Type
JULY 5 **MONDAY**	History of Malware & Antimalware Debugger and Disassembler. PE–header and Win32 Executable Files	**17:00 — 19:00** **19:00 — 21:00**	Lecture Practice
JULY 6 **TUESDAY**	Malware Classification and Naming Analysis of Simple File Virus. Algorithms of EXE Infection	**17:00 — 19:00** **19:00 — 21:00**	Lecture Practice
JULY 7 **WEDNESDAY**	Techniques of Protection Against Detection. Malware Behavior Analysis of Simple File Virus. Reaching the Payload	**17:00 — 19:00** **19:00 — 21:00**	Lecture Practice
JULY 8 **THURSDAY**	Review of Malware Detection Algorithms Techniques of Manual Unpacking of Binaries, Dumping and Healing the PE Files	**17:00 — 19:00** **19:00 — 21:00**	Lecture Practice
JULY 9 **FRIDAY**	Malware Detection Algorithms. Machine Learning. Unpacking the Simple Trojans I	**17:00 — 19:00** **19:00 — 21:00**	Lecture Practice
JULY 12 **MONDAY**	Structure of Botnets. P2P Botnets Unpacking the Simple Trojans II	**17:00 — 19:00** **19:00 — 21:00**	Lecture Practice
JULY 13 **TUESDAY**	Zeus Botnet and Its Protocol Reaching the Payload of Trojans	**17:00 — 19:00** **19:00 — 21:00**	Lecture Practice
JULY 14 **WEDNESDAY**	Antivirus Quality Estimation. Comparing Antivirus Products Structure of Payload of Trojans	**17:00 — 19:00** **19:00 — 21:00**	Lecture Practice
JULY 15 **THURSDAY**	Sandbox Analysis of Malware Working with Viruses in Sandbox: Restrictions and Limitations	**17:00 — 19:00** **19:00 — 21:00**	Lecture Practice
JULY 16 **FRIDAY**	Review and discussion	**17:00 — 21:00**	Lecture & Practice

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