

Training program of Cyber Security

No.	Module code	Module title in English	ECTS
I	Core modules		
1.1	General training modules		
1	MAT1.001	Calculus 1	4
2	MAT1.002	Linear Algebra	4
3	MAT1.003	Calculus 2	3
4	PHY1.001	Fundamental Physics 1	4
5	MAT2.002	Probability and Statistics	4
6	MAT1.006	Discrete Mathematics	4
7	ICT1.001	Introduction to Informatics	3
8	ICT1.002	Basic programming	4
9	ICT1.004	Introduction to Algorithms	3
10	MAT1.007	Optimization 1	3
1.2	Core specialized modules		
11	ICT1.003	Computer Architecture	3
12	ICT1.005	Operating Systems	3
13	ICT1.006	Fundamentals of databases	4
14	ICT2.014	Data Structures and Algorithms	4
15	ICT2.003	Object-Oriented Programming	4
16	ICT2.013	Advanced Programming with Python	4
17	CS2.003	Law of Cyberspace and Ethics	4
18	ICT2.006	Computer Networks	4
19	CS2.004	Introduction to Cryptography	4
20	ICT3.005	Web application development	4
21	CS3.003	Intrusion Detection and Prevention System	4
22	CS3.005	Malware Analysis	4
23	CS3.002	Digital Forensics	4
24	CS3.008	Web security	4
25	CS3.014	Penetration Testing	4
1.3	Group project and graduation internship		
26	CS3.012	Group Project	4
27	CS3.013	Graduation Internship	12

No.	Module code	Module title in English	ECTS
1.4	Foreign languages		
28	FR2.001	French 2.1	4
29	FR2.002	French 2.2	4
30	ENG1.012	English Academic Writing	3
31	ENG1.013	English Presentation	3
No.	Module code	Module title in English	ECTS
32	ENG1.014	English Listening & Note-taking	2
II	Optional module group 1		
1	CS2.001	Advanced Computer Architecture and x86 ISA	4
2	CS2.002	Network Programming	4
3	ICT2.021	Mobile Wireless Communication	4
4	CS2.005	Administration of Computer Systems	4
5	ICT2.016	Software Engineering	4
6	ICT2.017	Machine Learning and Data Mining 1	4
7	CS3.015	Monitoring techniques for information and network security	4
8	ICT3.004	Object-Oriented System Analysis and Design	4
9	CS3.016	Data Security and Disaster Recovery	4
10	CS3.001	Cloud Security and Privacy	4
11	ICT3.028	Network Simulation	4
12	ICT3.003	Mobile Application Development	4
13	ICT3.022	Distributed Systems	4
14	ICT3.027	Advanced databases	4
15	PHI1.001	Philosophy	3
III	Optional module group 2		
IV	Conditional modules (for Vietnamese students only)		
1	QP1.001	National defense and security education	0