

Bachelor of Engineering Technology (Cyber Security)

Admission Eligibility:

Criteria for admission to Bachelor of Engineering Technology (Cyber Security) program is defined in National Technology Council (NTC) HEC Program Accreditation Policy and Procedures Manual for Engineering & Other Technologies. The Salient features for eligibility for admission are:

- A person holding intermediate (HSSC) examination certificate in (Pre- Engineering, Pre-Medical, such as A-levels/ICS/DAE or equivalent qualification certified by IBCC with at least 50% marks shall be eligible to apply for admission (sports and Hafiz-e-Quran marks are not included).
- Entrance Test
- Admission will be on open merit basis

Semester-wise Scheme of Studies

Semester-wise scheme of studies for Bachelor of Engineering Technology (Cyber Security) program, spanning 4 years, spread over 8 semesters, and totaling 139 credit hours, is presented below:

1st Semester

Sr. No	Course Code	Pre Reqs	Subject	Nature	Credit Hours
1.	MTH-101		Calculus & Analytical Geometry	Natural Sciences	3(3-0)
2.	IS-201		Islamic Studies/Ethics	Humanities and Social Sciences	2(2-0)
3.	PHY-201		Applied Physics	Natural Sciences	3(2-3)
4.	ENG-102		Functional English	Humanities and Social Sciences	3(3-0)
5.	CSC-100		Application of Information & Communication Technologies	Computing	3(2-3)
6.	CS-101		Programming Fundamentals	Computing	4(3-3)
7.	FQ-301		Fehm e Quran I		1 (0-3)
			Total Credit Hours		19

2nd Semester

Sr. No	Course Code	Pre Reqs	Subject	Nature	Credit Hours
1.	CSC-204	CSC-101	Computer Networks	Computing	3(2-3)
2.	CYS-101		Introduction to Cybersecurity	Core	3(3-0)
3.	CSC-102		Object Oriented Programming	Computing	4(3-3)
4.	CSC-110	MTH-101	Discrete Structure	Computing	3(3-0)
5.	SSH-302		Pakistan Studies	Humanities and Social Sciences	2(2-0)
6.	ENG-201		Expository Writing	Humanities and Social Sciences	3(3-0)

7.	FQ-302		Fehm e Quran II		1(0-3)
			Total Credit Hours		19

3rd Semester

Sr. No	Course Code	Pre Reqs	Subject	Nature	Credit Hours
1.	CSC-201		Data Structures	Engineering Foundation	4(3-3)
2.	CYS-202		Information Privacy and Security	Engineering Foundation	3(2-3)
3.	CYS-203		Information System Audit	Major based Breadth	3(3-0)
4.	CYS-204		Cyber Risk Management	Major based Depth	3(2-3)
5.	MTH-102		Linear Algebra	Humanities/ English	3(3-0)
6.	SOS-302		Seerat Studies		2(2-0)
			Total Credit Hours		18

4th Semester

Sr. No	Course Code	Pre Reqs	Subject	Nature	Credit Hours
1.	CYS-207		IT Forensics and Investigation	Core	3(3-0)
2.	CSC-103	CSC-111	Database Systems	Computing	4(3-3)
3.	CSC-301		Operating Systems	Computing	3(2-3)
4.	CYS-210	CSC-102	Principals of Data Protection	Core	3(3-0)
5.	MTH-104		Differential Equations	Natural Sciences	3(3-0)
			Total Credit Hours		16

5th Semester

Sr. No	Course Code	Pre Reqs	Subject	Nature	Credit Hours
1.	CYS-301		Network Security	Core	3(2-3)
2.	CYS-302		Cryptography	Core	3(2-3)
3.	CYS-303		Intrusion Detection Systems	Core	3(3-0)
4.	CSC-205		Software Engineering	Computing	3(3-0)
5.	CSC-251		Web Technologies	Computing	3(2-3)
6.	ENG-401	ENG-201	Technical & Business Writing	Humanities and Social Sciences	3(3-0)
			Total Credit Hours		18

6th Semester

Sr. No	Course Code	Pre Reqs	Subject	Nature	Credit Hours
1.	CYS-307		Secure Software Design	Core	3(3-0)
2.	MS-308		Security of Smart Devices	Core	3(2-3)
3.	CYS-309		Design & Analysis of Algorithms	Core	3(3-0)
4.	CYS-310		Cloud Computing and Security	Core	3(2-3)
5	CYS-311		Computer Forensics	Core	3(3-0)
6.	SSH-401		Entrepreneurship	Management Sciences	2(2-0)
			Total Credit Hours		17

7th Semester

Sr. No	Course Code	Subject	Credit Hours	
1.	CYS-401	Trusted Supervised Industrial Training-I	00	16
		Grand Total	16	

OR

Sr. No	Course Code	Pre Reqs	Subject	Nature	Credit Hours
1.	CSC-251		Web Technologies	Optional	3(2-3)
2.	CSC-258		Virtual Systems & Services	Optional	4(3-3)
3.	CAI-262	CAI-203	Machine Learning	Optional	3(2-3)
4.	CAI-361		Artificial Neural Networks & Deep Learning	Optional	3(2-3)
5.	CSC-353		Mobile Application Development 1	Optional	3(2-3)
			Total Credit Hours		16

8th Semester

Sr. No	Course Code	Subject	Credit Hours	
1.	CYS-401	Trusted Supervised Industrial Training-I	00	16
		Grand Total	16	

Pre-Calculus Deficiency (for Pre-Medical Students)

Mathematics Deficiency as per HEC & Punjab Govt Requirement of Translation of Quran			
1	MTH-001	Pre-Calculus I	3 (3-0)
2	MTH-002	Pre-Calculus II	3 (3-0)