

	Domain	HEC Requirements	Subjects	Courses	Credit Hours	%Area Course	%Area Cdt.	%O Courses		
Technical	Core Courses	Core Courses	Introduction to Computing, Basic Electrical Circuits, Information and Communications Technology, Computer Programming & Problem Solving, Digital Logic Design, Computer Aided Engineering Design, Operating Systems, Data Structure & Algorithms, Signals and Systems, Microprocessor & Microcontroller Systems, Data Communication & Networks, Linear Control System, Sensors and Transducers, Principles of Applied Mechatronics, Big Data and Cloud Computing, Emerging Trends in Connected Systems , Artificial Intelligence & Machine Learning, Cyber physical Systems, Complex Variable and Transforms	19	63	47.50%	43.75%	47.50%		
Non-Technical	Business	Management	Principles of Management, Introduction to Financial Accounting, Human Resource Management, Technology Management, Digital Financial Management, Introduction to ERP, Small Business & Entrepreneurship, Total Quality Management	8	23	20.00%	15.97%	52.50%		
	Gen Ed. Breadth	Arts & Humanities	Foreign Language-1, Foreign Language -2	2	6	5.00%	4.17%			
		Social Sciences	Engineering Economics, Organizational Behavior	2	6	5.00%	4.17%			
		Natural Sciences	Applied Physics, Renewable Energy	2	7	5.00%	4.86%			
	Foundational Skills	Expository Writing	Functional English, Technical Report Writing, Communication Skills	3	9	7.50%	6.25%			
		Quantitative Reasoning	Calculus & Analytical Geometry, Linear Algebra	2	6	5.00%	4.17%			
	Civilizational Courses	Pakistan Studies	Pakistan Studies	1	3	2.50%	2.08%			
		Islamiat	Islamic Studies	1	3	2.50%	2.08%			
					Core	40	126		87.50%	
					Elect	4	12		8.33%	
				FYP	2	6	4.17%			
				46	144		100.00%			

SSC 100 Community Services to be offered as Non-Credited Course.

*This non-credit course will be taken by those students who have not been able to reach the desired level of competence in the English section of admission test

**This non-credit course will be taken by those students who have not been able to reach the desired level of competence in the Mathematics section of admission test

9-week Internship as well as Community Service are to be offered as non-credit hour.