

## Specialization:

The Department offers multiple specializations according to the expertise of the available faculty members.

- Computer Science
- Software Engineering
- Information Technology
- Cyber Security
- Project Management
- Etc

### Tentative Revised Scheme of Study for ADP in Computing Effects from Fall 2025 to onwards

Semester - 1			
Code	Course Title	Pre-req	Credit Hrs
CSC-1113	Programming Fundamentals	-	3
CSC-1111	Programming Fundamentals - LAB	-	1
CSC-1012	Application of Information & Communication Technologies	-	2
CSC-1011	Application of Information & Communication Technologies - LAB	-	1
ENG-1213	Functional English	-	3
MTH-1423	QR-1 (Calculus and Analytical Geometry)	-	3
MTH-1413	QR-2 (Discrete Structures)	-	3
ISL-1011	Fahm-e-Quran I (Only for Muslims)	-	1
HUM-1011	Ethics and Culture I (Only for non-Muslims)	-	1
PAK-1022	Pakistan Studies	-	2
MTH-1410	Pre Calculus I (If mathematics was not in Intermediate)	-	3 (NC)
Total			19

Semester - 2			
Code	Course Title	Pre-req	Credit Hrs
CSC-1123	Object Oriented Programming	CSC-1113	3
CSC-1121	Object Oriented Programming - LAB	CSC-1111	1
CSC-1022	Digital Logic Design	-	2

CSC-1021	Digital Logic Design - LAB	-	1
CSC-1033	Database Systems	-	3
CSC-1031	Database Systems - LAB	-	1
CSC-1042	Computer Networks	-	2
CSC-1041	Computer Networks - LAB	-	1
MTH-1433	Linear Algebra	MTH-1423	3
ISL-1021	Fahm-e-Quran II (Only for Muslims)	-	1
HUM-1021	Ethics and Culture II (Only for non-Muslims)	-	1
MTH-1420	Pre Calculus II (If mathematics was not in Intermediate)	-	3 (NC)
<b>Total</b>			<b>18</b>

Semester - 3			
Code	Course Title	Pre-req	Credit Hrs
CSC-2133	Data Structures	CSC-1123	3
CSC-2131	Data Structures - LAB	CSC-1121	1
CSC-2063	Software Engineering	-	3
CSC-2082	Artificial Intelligence	-	2
CSC-2081	Artificial Intelligence - LAB	-	1
CSC-2072	Information Security	-	2
CSC-2071	Information Security - LAB	-	1
ENG-2223	Expository Writing	ENG-1213	3
CSC-2142	Computer Org. & Assembly Language	CSC-1022	2
CSC-2141	Computer Org. & Assembly Language - LAB	CSC-1121	1
<b>Total</b>			<b>19</b>

Semester - 4			
Code	Course Title	Pre-req	Credit Hrs
CSE-2612	Elective 1 (Example: Advanced Database-Lab)	-	2
CSE-2622	Elective 2 (Example: Web Technologies)	-	2
CSE-2621	Elective 2 (Example: Web Technologies-Lab)	-	1
CSE-2631	Elective 3 (Example: Mobile Application Development)	-	1
CSE-2632	Elective 3 (Example: Mobile Application Development-Lab)	-	2
CSE-2642	Elective 4 (Example: Advanced Programming)	-	2
CSE-2641	Elective 4 (Example: Advanced Programming-Lab)	-	1
CSE-2652	Elective 5 (Example: Cyber Security)	-	2
CSE-2651	Elective 5 (Example: Cyber Security-Lab)	-	1
HUM-2342	Islamic Studies	-	2
HUM-2372	Ideology and Constitution of Pakistan	-	2
HUM-2322	Entrepreneurship	-	2
<b>Total</b>			<b>20</b>