



## UNIVERSITY OF HOME ECONOMICS – LAHORE

### BS CS

Nature of Course	Course Code	Name of Subject	Pre-Req.	Cr. Hrs.
<b>SEMESTER 1</b>				
CORE –I	ENG-101	English Reading and Writing (I)		3(3+0)
CORE-II	PS-100	Pakistan Studies		2(2+0)
CORE-III	CS-101	Introduction to Information & Communication Technologies		3(2+1)
GEN-I		(Choose from the list)		3
GEN-II		(Choose from the list)		3
FOUN-I	CS-102	Programming Fundamentals		4(3+1)
		<b>Total</b>		<b>18</b>
<b>SEMESTER 2</b>				
CORE-IV	ENG-102	English Reading and Writing (II)		3(3+0)
CORE-V	IS-200 IS-201	Islamic Studies OR Ethics		2(2+0)
CORE-VI	MT-102	Calculus & Analytical Geometry		3(3+0)
GEN-III		(Choose from the list)		3
FOUN-II	CS-103	Object Oriented Programming	Programming Fundamentals	4(3+1)
FOUN-III	SC-1xx	Applied Physics		3(3+0)
		<b>Total</b>		<b>18</b>
<b>SEMESTER 3</b>				
CORE-VII	ENG-201	Soft Skills and Emotional Intelligence		3(3+0)
GEN-IV		(Choose from the list)		3
GEN-V		(Choose from the list)		3
FOUN-IV	CS-201	Data Structures & Algorithm	Object Oriented Programming	4(3+1)
FOUN-V	CS-202	Digital Logic Design	Applied Physics	4(3+1)
		<b>Total</b>		<b>17</b>
<b>SEMESTER 4</b>				
CORE-VIII	ENG -202	Business Communication Skills		3(3+0)
CORE-IX	SC-103	Probability & Statistics		3(3+0)
GEN-VI		(Choose from the list)		3
FOUN-VI	CS-203	Operating Systems	Data Structures & Algorithm	4(3+1)
MAJOR-I	CS-204	Design & Analysis of Algorithm	Data Structures & Algorithm	3(3+0)
		<b>Total</b>		<b>16</b>
<b>SEMESTER 5</b>				
FOUN-VII	MT-301	Discrete Structures		3(3+0)
FOUN-VIII	CS-301	Theory of Automata		3(3+0)
FOUN-IX	CS-302	Software Engineering		3(3+0)
MAJOR-II	CS-303	Database Systems	Data Structures & Algorithm	4(3+1)



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MAJOR-III	CS-304	Computer Organization & Assembly Language		4(3+1)
		<b>Total</b>		<b>17</b>
<b>SEMESTER 6</b>				
FOUN-X	CS-305	Computer Networks		4(3+1)
MAJOR-IV	CS-306	Artificial Intelligence	Discrete Structures	4(3+1)
MAJOR-V	CS-307	Compiler Construction	Theory of Automata	3(3+0)
ELEC-I		(Choose from the elective courses list)		3
ELEC-II		(Choose from the elective courses list)		3
		<b>Total</b>		<b>17</b>
<b>SEMESTER 7</b>				
MAJOR-VI	CS-401	<b>Final Year Project – I/Thesis/Course</b>		3(0+3)
MAJOR-VII	CS-402	Parallel & Distributed Computing	Operating Systems	3(3+0)
GEN-VII		(Choose from the list)		3(3+0)
ELEC-III		(Choose from the elective courses list)		3
ELEC-IV		(Choose from the elective courses list)		3
<b>Internship***</b>				
		<b>Total</b>		<b>15</b>
<b>SEMESTER 8</b>				
MAJOR-VIII	CS-403	<b>Final Year Project – II/Thesis/Course</b>		3(0+3)
MAJOR-IX	CS-404	Theory of Programming Languages		3(3+0)
GEN-VIII		(Choose from the list)		3
MAJOR-X	CS-405	Information Security		3(3+0)
ELEC-V		(Choose from the elective courses list)		3
		<b>Total</b>		<b>15</b>
<b>Total Credit Hours</b>				<b>133</b>

\* Quran Studies is mandatory in all semesters, it's a noncredit course based on Pass/Fail evaluation.

\*\* List of Elective courses is attached.

\*\*\* Internship is mandatory, it's a noncredit course based on Pass/Fail evaluation.

\*\*\*\* General Courses may be offered from UHE approved general courses list.



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<b>List of Elective Courses</b>		
<b>Code</b>	<b>Course Title</b>	<b>Credit Hours</b>
IM-403	Electronic Resource Management	3 (3+0)
IM-404	School Library Media Center	3 (3+0)
IM-407	Personal Information and Knowledge Management	3 (3+0)
IM-408	Research Data Management	3 (3+0)

<b>List of General Courses</b>		
<b>Code</b>	<b>Course Title</b>	<b>Credit Hours</b>
SOC-211	Gender Studies	3 (3+0)
FD-101	Design History & Theory	2 (2+0)
TD-201	Textile Design & CAD	3 (1+2)
TD-102	Textile Basics	3 (1+2)
FST-101	Essentials of Food Science and Technology	3 (2+1)
HND-112	Micronutrients in Human Nutrition	3 (3+0)
HND-101	Fundamentals of Culinary Art	3 (2+1)
HND-212	Nutrition Health Education and Communication	2 (2+0)
PHN-102	Fundamental of Human Nutrition	3 (3+0)
PSY-101	Introduction to Psychology	3 (3+0)
PSY-103	Theories of Learning	3 (3+0)
PSY-104	Developmental Psychology	3 (3+0)
PSY-205	Social Psychology	3 (2+1)
SOC-219	Sociology of Family	3 (3+0)
SOC-215	Social Welfare and Community Development	3 (3+0)
SOC-102	Introduction to Anthropology	3 (3+0)
SOC-117	Social Problems of Pakistan	3 (3+0)
SOC-116	Sociology of Everyday Life	3 (3+0)
SOC-218	Basics of Social Entrepreneurship	3 (3+0)