

# LAHORE UNIVERSITY OF MANAGEMENT SCIENCES

Name: Zoha Khan
Roll No.: 2023-10-0021
ID: 22997
Date of Birth: Sep 18, 2000

Degree: Bachelor of Science - BS Major: Computer Science

Year Admitted: 2019-20 Year Graduated: 2022-23

COURSE CODE	DESCRIPTION	CREDITS	GRAD
		1100	
Fall Semester			
CHEM 101	Principles of Chemistry I	3	Α
CS 100	Computational Problem Solving	3	Α
MATH 101	Calculus I	3	Α
PHY 100	Experimental Physics Lab I	2	A+
PHY 101	Mechanics	4	A
SS 101 Placed on Dear	Islamic Studies o's Honour List.	2	A
Spring Semes	tor 2010 20		
BIO 100	Biology Laboratory	1	A+
BIO 101	Introductory Biology	3	A+
CHEM 100	Experimental Chemistry	1	A
EE 100	Engineering Laboratory	1	Α
MATH 120	Linear Algebra with Differential Equations	3	Α
PHY 104	Modern Physics	4	Α
SS 100	Writing and Communication	4	A+
Placed on Dear	n's Honour List at the end of academic year 2019-2020.		
Fall Semester	2020-21		
CS 200	Introduction to Programming	4	A+
CS 210	Discrete Mathematics	4	В
CS 225	Fundamentals of Computer Systems	4	B+
MATH 102	Calculus II	3	Α
SS 102	Pakistan Studies: Culture and Heritage	2	A+
Placed on Dear	n's Honour List.		
Spring Semes			
CS 202	Data Structures	3	Α-
CS 331	Introduction to Artificial Intelligence	3	Α
CS 382	Network-Centric Computing	3	Α
MATH 230	Probability	3	A-
			A-
	Principles of Marketing n's Honour List at the end of academic year 2020-21	3	
Placed on Dear	n's Honour List at the end of academic year 2020-21		
Fall Semester CS 310	n's Honour List at the end of academic year 2020-21  2021-22  Algorithms	3	Α-
Placed on Deal Fall Semester CS 310 CS 370	n's Honour List at the end of academic year 2020-21  2021-22 Algorithms Operating Systems	3 3	A- A
Fall Semester CS 310 CS 370 CS 436	n's Honour List at the end of academic year 2020-21  2021-22  Algorithms Operating Systems Computer Vision Fundamentals	3 3 3	A- A A
Fall Semester CS 310 CS 370 CS 436 CS 535	n's Honour List at the end of academic year 2020-21  2021-22  Algorithms Operating Systems Computer Vision Fundamentals Machine Learning	3 3 3 3	A- A A
Fall Semester CS 310 CS 370 CS 436 CS 535 MATH 210	n's Honour List at the end of academic year 2020-21  2021-22  Algorithms Operating Systems Computer Vision Fundamentals Machine Learning Introduction to Differential Equations	3 3 3 3 3	A- A A A+
Fall Semester CS 310 CS 370 CS 436 CS 535 MATH 210 MGMT 373	2021-22 Algorithms Operating Systems Computer Vision Fundamentals Machine Learning Introduction to Differential Equations Personal Effectiveness	3 3 3 3	A- A A
Fall Semester CS 310 CS 370 CS 436 CS 535 MATH 210 MGMT 373 Placed on Deal	n's Honour List at the end of academic year 2020-21  2021-22  Algorithms Operating Systems Computer Vision Fundamentals Machine Learning Introduction to Differential Equations Personal Effectiveness n's Honour List.	3 3 3 3 3	A- A A A+
Fall Semester CS 310 CS 370 CS 436 CS 535 MATH 210 MGMT 373 Placed on Deal	2021-22 Algorithms Operating Systems Computer Vision Fundamentals Machine Learning Introduction to Differential Equations Personal Effectiveness n's Honour List.	3 3 3 3 3	A- A A A A A
Fall Semester CS 310 CS 370 CS 373 CS 436 CS 435 MATH 210 MGMT 373 Placed on Deal Spring Semes CS 300	2021-22 Algorithms Operating Systems Computer Vision Fundamentals Machine Learning Introduction to Differential Equations Personal Effectiveness n's Honour List.  ter 2021-22 Advanced Programming	3 3 3 3 3 3	A- A A A+ A
Fall Semester CS 310 CS 370 CS 436 CS 535 MATH 210 MGMT 373 Placed on Deal Spring Semes CS 300 CS 360	n's Honour List at the end of academic year 2020-21  2021-22 Algorithms Operating Systems Computer Vision Fundamentals Machine Learning Introduction to Differential Equations Personal Effectiveness n's Honour List.  ter 2021-22 Advanced Programming Software Engineering	3 3 3 3 3 3	A- A A A-
Fall Semester CS 310 CS 370 CS 370 CS 376 CS 535 MATH 210 MGMT 373 Placed on Deal Spring Semes CS 300 CS 360 CS 473	2021-22 Algorithms Operating Systems Computer Vision Fundamentals Machine Learning Introduction to Differential Equations Personal Effectiveness n's Honour List.  Iter 2021-22 Advanced Programming Software Engineering Network Security	3 3 3 3 3 3 3	A-A A A A-A A-A
Fall Semester CS 310 CS 370 CS 370 CS 436 CS 535 MATH 210 MGMT 373 Placed on Deal Spring Semes CS 300 CS 360 CS 473 CS 497B	2021-22 Algorithms Operating Systems Computer Vision Fundamentals Machine Learning Introduction to Differential Equations Personal Effectiveness n's Honour List.  ter 2021-22 Advanced Programming Software Engineering Network Security Directed Research Project	3 3 3 3 3 3 3	A-A-A-A-A-A-A-A-A-A-A-A-A-A-A-A-A-A-A-
Fall Semester CS 310 CS 370 CS 436 CS 535 MATH 210 MGMT 373 Placed on Deal Spring Semes CS 300 CS 473 CS 497B CS 678	2021-22 Algorithms Operating Systems Computer Vision Fundamentals Machine Learning Introduction to Differential Equations Personal Effectiveness n's Honour List.  Iter 2021-22 Advanced Programming Software Engineering Network Security	3 3 3 3 3 3 3	A-A A A A-A A-A
Fall Semester CS 310 CS 436 CS 535 MATH 210 MGMT 373 Placed on Deal Spring Semes CS 300 CS 436 CS 473 CS 497B CS 678	2021-22 Algorithms Operating Systems Computer Vision Fundamentals Machine Learning Introduction to Differential Equations Personal Effectiveness n's Honour List.  Iter 2021-22 Advanced Programming Software Engineering Network Security Directed Research Project Topics in Internet Research	3 3 3 3 3 3 3	A- A A A A A A A A A A A A A A A A A A
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Fall Semester CS 310 CS 436 CS 535 MATH 210 MGMT 373 Placed on Deal Spring Semes CS 300 CS 473 CS 497B CS 678 Placed on Deal Summer Seminus HIST2325 Fall Semester CS 340 CS 491A	2021-22 Algorithms Operating Systems Computer Vision Fundamentals Machine Learning Introduction to Differential Equations Personal Effectiveness n's Honour List.  Iter 2021-22 Advanced Programming Software Engineering Network Security Directed Research Project Topics in Internet Research n's Honour List at the end of academic year 2021-22  ester 2021-22 A Brief History of Feminist Movement in Patients Pat	3 3 3 3 3 3 3 3 2 3	A-A A A-A A-A A-A A-A A-A
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Fall Semester CS 310 CS 436 CS 535 MATH 210 MGMT 373 Placed on Deal Spring Semes CS 300 CS 436 CS 497B CS 678 Placed on Deal Summer Seme HIST2325 Fall Semester CS 340 CS 491A CS 682 EE 212 MATH 341	2021-22 Algorithms Operating Systems Computer Vision Fundamentals Machine Learning Introduction to Differential Equations Personal Effectiveness n's Honour List.  Iter 2021-22 Advanced Programming Software Engineering Network Security Directed Research Project Topics in Internet Research n's Honour List at the end of academic year 2021-22  aster 2021-22 A Brief History of Feminist Movement in Pakistan  2022-23 Databases Senior Project Topics in Computer and Network Security Mathematical Foundations for Machine Learning and Data Science Operations Research I	3 3 3 3 3 3 3 3 2 3	A-A-A-A-A-A-A-A-A-A-A-A-A-A-A-A-A-A-A-
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COURSE CODE	DESCRIPTION	No. V	CREDITS	GRADE
		CREDI	18	
ATTEMPTED		130		
TAKEN TOW	ARDS GPA	127	CGPA	3.90
TRANSFERR	ED	0		
CREDITS GIV	EN ON RE-ADMISSION	0		
SUCCESSFU	LLY COMPLETED	130		
			SCGPA	
MAJOR	Computer Science		3.85	
Completed the	e graduation requirements for Bachelo	or of Science - BS	Programme, J	une-2023
	End of Undergraduate Pro	ogramme Transcrip	ot	

Official Seal



Z.F. airilbash

Date Printed: 06-Jun-2023

# Transcript Interpretation Undergraduate Programme

The University moved from Quarter (Units) to Semester (Credits) System in Fall 2009-2010. This interpretation applies to both units and credits.

The medium of instruction at LUMS is English.

#### Degree Requirements

Programme	ramme Required Passi Units/Credits	Passing CGPA
	(Minimum)	
BSc/BA (Honours), BS	180/130	2.20/2.00
BSc (Honours) Computer Engineering/BS (EE)	192/133	2.20/2.00
Double major	225/160	2.20/2.00
B.ALL.B	220/162	2.20/2.00
B.ALL.B/(Honours)	0.00/162	0.00/2.00

# Explanation of Cumulative GPA/Specialization CGPA (CGPA/SCGPA)

- Batches 1997 to 2004: Calculated on a scale of 4.30
- Batches 2005 onwards: Calculated on a scale of 4.00

### Specialization CGPA

At the time of graduation, SCGPA (Specialization CGPA) is also visible on the transcript and is calculated on the basis of all courses taken in the area of the major.

#### Notations

- (): Credits for the course(s) given on readmission/transfer. Upon readmission, all credits will count towards attempted credit hours but not included in computation of CGPA. Transfer credits will not count towards attempted credits.
- #: Under Repeat and Replace policy, this represents the lower grade for course(s) repeated. Credits and grades not included in computation of CGPA or towards completed credits. However, these credits count towards total attempted.
- R\*: Best grade for repeated course(s) which counts towards graduation requirements (i.e. CGPA and completed credits) and total attempted credits.
- ‡: Under All Grades Counts Policy, this represents the original grade of repeated course(s). Such credits and grades are included in the computation of CGPA. These credits are not included in total completed credits but are counted towards total attempted credits.
- \* For courses repeated between Academic Year 2014-15 to 2015-16, 'R' will denote the latest attempt instead of best grade.

#### Minor

Subject to fulfillment of the minor requirements; the title of the minor is displayed only on the transcript and not on the degree.

## **Graduation Honours**

CGPA	Recognition
3.80 and above*	Deans' Honour List and Graduation with High Distinction
3.60 to 3.79	Deans' Honour List and Graduation with Distinction
3.30 to 3.59	Graduation with High Merit
3.10 to 3.29	Graduation with Merit

<sup>\*</sup>For Batch 2014 and onwards.

#### **Grading Legend**

Letter Grade	Grade Points	Description
A+	4.3*	Exceptional
A+	4.0**	Exceptional
A	4.0	Outstanding
A-	3.7	Excellent
B+	3.3	Very Good
В	3.0	Good
B-	2.7	Average
C+	2.3	Satisfactory
С	2.0	Low Pass
C-	1.7	Marginal Pass
D	1.0	Unsatisfactory
F	0	Fail
P	1	Pass
NC		No Credit***
W		Withdrawn
WF		Withdrawn while failing
WP		Withdrawn while passing
NGR		No Grade Reported
I	-	Incomplete
IP		In-Progress
U		Unsatisfactory
T		Transfer

- \*For batches 2004 and earlier.
- \*\*For batches 2005 and onwards.
- \*\*\*From Spring 2020 onwards, this is a special accommodation due to COVID-19.

#### Authenticity

A signed and dated transcript provides a certified copy of the student's academic performance. A LUMS official transcript is printed on security paper and sealed in an envelope or emailed via password protected PDF document. An official, confidential transcript can only be obtained directly from the Office of the Registrar. If the document is received with a broken seal or the PDF is not secure, the transcript should be considered an unofficial document.

#### **Contact Information**

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Website: www.lums.edu.pk

Senior Assistant/Assistant Registrar
Lahore University of Management Sciences (LUMS)

Counter Signed |

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Thermochromic Ink: The box to the right contains a heat sensitive ink; when rubbed or breathed upon, the colour will fade and reappear.