



LAHORE UNIVERSITY OF MANAGEMENT SCIENCES

Name: **Mahad Mubashir Beg**
 Roll No.: **2023-10-0089**
 ID: **23496**
 Date of Birth: **Aug 10, 2001**

Degree: **Bachelor of Science - BS**
 Major: **Computer Science**
 Year Admitted: **2019-20**
 Year Graduated: **2022-23**

| COURSE CODE | DESCRIPTION | CREDITS | GRADE |
|-------------|-------------|---------|-------|
|-------------|-------------|---------|-------|

Fall Semester 2019-20

| | | | |
|----------|-------------------------------|---|----|
| CHEM 101 | Principles of Chemistry I | 3 | B |
| CS 100 | Computational Problem Solving | 3 | B+ |
| EE 100 | Engineering Laboratory | 1 | A |
| MATH 101 | Calculus I | 3 | B+ |
| PHY 101 | Mechanics | 4 | B |
| SS 101 | Islamic Studies | 2 | B- |

Spring Semester 2019-20

| | | | |
|----------|--|---|----|
| BIO 100 | Biology Laboratory | 1 | B+ |
| BIO 101 | Introductory Biology | 3 | P |
| CHEM 100 | Experimental Chemistry | 1 | P |
| MATH 120 | Linear Algebra with Differential Equations | 3 | P |
| PHY 100 | Experimental Physics Lab I | 2 | A- |
| PHY 104 | Modern Physics | 4 | P |
| SS 100 | Writing and Communication | 4 | A- |

Placed on Dean's Honour List.

Fall Semester 2020-21

| | | | |
|---------|--|---|----|
| CS 200 | Introduction to Programming | 4 | B- |
| CS 210 | Discrete Mathematics | 4 | P |
| CS 225 | Fundamentals of Computer Systems | 4 | B- |
| PSY 100 | Human Behaviour | 4 | A- |
| SS 102 | Pakistan Studies: Culture and Heritage | 2 | P |

Spring Semester 2020-21

| | | | |
|----------|---|---|----|
| CS 202 | Data Structures | 3 | C+ |
| CS 331 | Introduction to Artificial Intelligence | 3 | P |
| CS 382 | Network-Centric Computing | 3 | P |
| MATH 102 | Calculus II | 3 | A- |
| MATH 230 | Probability | 3 | B+ |

Fall Semester 2021-22

| | | | |
|----------|---|---|----|
| CS 310 | Algorithms | 3 | C |
| CS 334 | Principles and Techniques of Data Science | 3 | B |
| CS 340 | Databases | 3 | B+ |
| CS 370 | Operating Systems | 3 | C |
| MGMT 142 | Principles of Management | 3 | C+ |

Spring Semester 2021-22

| | | | |
|---------|---|---|----|
| CS 220 | Digital Logic Circuits | 3 | B+ |
| CS 220L | Digital Logic Circuits Lab | 1 | B |
| CS 300 | Advanced Programming | 3 | C- |
| CS 360 | Software Engineering | 3 | C+ |
| CS 432 | Introduction to Data Mining | 3 | B |
| CS3812 | Introduction to Blockchain: Technology and Applications | 3 | B+ |

Fall Semester 2022-23

| | | | |
|----------|--|---|----|
| CS 491A | Senior Project | 3 | A |
| CS 589 | Recent Developments in Blockchain Technology | 3 | A- |
| GSL 102 | Chinese Language for Beginners (HSK Level 1) | 4 | A- |
| MGMT 384 | Entrepreneurship and Management in the Restaurant Industry | 3 | B+ |
| POL 228 | Introduction to Quantitative Research Method | 4 | A- |

Spring Semester 2022-23

| | | | |
|----------|---|---|----|
| CS 320 | Computer Organization and Assembly Language | 4 | A- |
| CS 491B | Senior Project | 3 | A |
| ORSC 201 | Organizational Behaviour | 3 | B |
| PSY 321 | Life Span Development | 4 | B |
| SWR 102 | Swimming for Beginners | 1 | P |

| | | | |
|-------------------------------|---------|------|------|
| | CREDITS | | |
| ATTEMPTED | 130 | | |
| TAKEN TOWARDS GPA | 106 | CGPA | 3.13 |
| TRANSFERRED | 0 | | |
| CREDITS GIVEN ON RE-ADMISSION | 0 | | |
| SUCCESSFULLY COMPLETED | 130 | | |

| | | | |
|-------|------------------|-------|------|
| MAJOR | Computer Science | SCGPA | 2.96 |
|-------|------------------|-------|------|

Graduated with Merit.

Completed the graduation requirements for Bachelor of Science - BS Programme, June-2023

End of Undergraduate Programme Transcript

Official Seal



Z. F. Qizilbash

Registrar

Date Printed: 12-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 | Required Units/Credits (Minimum) | Passing CGPA |
|--|----------------------------------|--------------|
| 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.A.-LL.B | 220/162 | 2.20/2.00 |
| B.A.-LL.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 |

*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 |
| B | 3.0 | Good |
| B- | 2.7 | Average |
| C+ | 2.3 | Satisfactory |
| C | 2.0 | Low Pass |
| C- | 1.7 | Marginal Pass |
| D | 1.0 | Unsatisfactory |
| F | 0 | Fail |
| P | -- | 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

Office of the Registrar
Lahore University of Management Sciences (LUMS)
Sector U, DHA, Lahore-54792, Pakistan
Phone: (+92-42) 3560 8000
Transcript Enquiries only: registrar@lums.edu.pk
General Enquiries: helpdeskro@lums.edu.pk
Website: www.lums.edu.pk

Counter Signed by

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

TO TEST FOR AUTHENTICITY: The face of this transcript is printed on blue safety paper. When photocopied, a latent security statement containing the words COPY COPY COPY appear over the face of the entire document. When this paper is touched by liquid bleach, an authentic document will stain. A black and white or color copy of this document is not an original but may be accepted as an official document when stamped and signed 'Certified True Copy' by LUMS.

Artificial Watermark: A white ink applied during the printing process that is visible when the paper is held up to a light at an angle. On this particular paper, you will see the words "Original Document".

Coin Reactive Ink: The box to the right contains a white ink that when rubbed with the edge of a coin will verify the authenticity of the document by the presence of black smudges.

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