



Chandigarh University

NAAC A+, UGC-Entitled, NIRF #19, QS World Global Universities #Top
1%

M.Sc (Data Science)

Type

Pg Program

Mode

Online

Duration

2 Years

Total fees

₹ 111,000

Chandigarh University

Accredited by NAAC with the prestigious A+ Grade in the first cycle itself, CU is an institution committed to excellence in research, innovation, interdisciplinary education and active promotion of promising young talent. CU is the best Online Education University in Punjab, India which couples the experience of top industry leaders and renowned academicians and fosters a worldly approach. CU has been envisioned to provide inspirational and experiential learning through internationally recognized curriculum matching the challenging industrial needs. CU has been emerging as the best Online Education University in Punjab, India and the most preferred destination for the students as well as renowned faculty, and recruiting companies of the country. The university has been bestowed with many awards and recognitions, including Asia's Fastest Growing Private Institution, Outstanding Engineering Institute, and the Limca Book of Records for inviting the most number of companies in a single year for campus placements. The University has signed MoUs with over 250 foreign universities and institutions from countries like USA, Canada, UK, Australia, Italy, Russia, South Korea, Spain, Thailand, etc.

M.Sc (Data Science)

Highlights

- ◆ A balanced learning format that brings data science, analytics, and statistical decision-making within reach for learners with varied schedules.
- ◆ Course content touches SQL Programming, Advanced Database Management Systems, Python Programming, and Applied Probability and Statistics, allowing students to connect fundamentals with practical relevance.
- ◆ Designed to build confidence gradually, from concept clarity to more independent academic thinking.
- ◆ Includes opportunities to reflect on datasets, patterns, trends, and evidence-based questions through assignments, cases, or application-led tasks.
- ◆ Helps learners prepare for future education, professional transition, or stronger domain understanding in analytics, data operations, business intelligence, and data-driven decision roles, with added focus on research orientation.

Learning outcomes

- ◆ Within M.Sc (Data Science) from Chandigarh University, relate theories, methods, or tools from SQL Programming, Advanced Database Management Systems, Python Programming, and Applied Probability and Statistics to datasets, patterns, trends, and evidence-based questions.
- ◆ Address data preparation, analysis, modelling, and interpretation challenges through structured reasoning and subject-specific approaches.
- ◆ Critically evaluate decisions guided by data quality, modelling logic, and business or research context while maintaining accuracy, responsible interpretation, and clarity of insight.
- ◆ Develop clear dashboards, analytical reports, data models, and insight summaries for assignments, projects, or professional communication.
- ◆ Use the learning foundation to plan further academic or professional growth in analytics, data operations, business intelligence, and data-driven decision roles, while strengthening research orientation.

Eligibility Criteria

Candidate must have completed bachelor's degree in B.A. / BCA / B.Sc. (Statistics or Mathematics or Computer Science) / B.E / B.Tech.

Curriculum Overview

Semester 1 (5 subjects)

- ◆ SQL Programming
- ◆ Python Programming
- ◆ Advanced Database Management Systems
- ◆ Applied Probability and Statistics
- ◆ Communication and Soft Skills

Semester 2 (5 subjects)

- ◆ Calculus and Linear Algebra for Data Scientists
- ◆ Machine Learning
- ◆ Deep Learning
- ◆ Advanced Machine Learning
- ◆ Data Analysis and Visualization

Semester 3 (6 subjects)

- ◆ Web Technologies
- ◆ Data Structures and Algorithms
- ◆ Optimization
- ◆ Cloud Native Development
- ◆ Java Programming
- ◆ Minor Project (Software Dev)



Curriculum Overview (continued)

Semester 4 (5 subjects)

- ◆ Natural Language Processing
- ◆ Data Engineering
- ◆ Data Mining and Warehousing
- ◆ Applied Business Analytics
- ◆ Major Project

Fee Structure

Fee heads	Year 1	Year 2	Total
Admission Fee	₹ 1,000	—	₹ 1,000
Course Fee	₹ 55,000	₹ 55,000	₹ 110,000
Total	₹ 56,000	₹ 55,000	₹ 111,000