



JAIN (Deemed-to-be University)

NAAC A++, UGC-Entitled, NIRF #62

B.Sc (Hons.) Data science and Analytics

Type

Ug Program

Mode

Distance

Duration

3 Years

Total fees

₹ 59,000

JAIN (Deemed-to-be University)

JAIN (Deemed-to-be University), based in Bengaluru, is a leading institution committed to academic excellence, innovation and holistic development. The University offers diverse programs across engineering, management, commerce, sciences, humanities, design and other disciplines. With a strong emphasis on research, entrepreneurship, sports and industry-focused education, it prepares students for evolving global opportunities. Its vibrant campuses bring together learners and faculty from diverse cultural and academic backgrounds. Through classroom, online and open-distance learning, JAIN provides accessible and future-ready education that empowers students to make a meaningful impact.

B.Sc (Hons.) Data science and Analytics

Highlights

- ◆ Flexible open and distance learning format designed around students beginning their higher education journey, with room to balance study, work, and personal commitments.
- ◆ Course coverage includes statistics, data visualization, machine learning basics, and data handling, giving learners a clearer view of data science, analytics, and statistical decision-making and its applications.
- ◆ Learning is supported through guided modules, faculty-led inputs, and examples connected to current academic or professional contexts.
- ◆ Assignments and applied exercises help learners connect concepts with datasets, patterns, trends, and evidence-based questions rather than studying the subject in isolation.
- ◆ Useful for building confidence, subject depth, and readiness for future pathways in Research Associate, Academician, and Data Scientist and related analytics, data operations, business intelligence, and data-driven decision roles, with added focus on project-based reflection.

Learning outcomes

- ◆ Within B.Sc (Hons) (Data Science and Analytics) from JAIN (Deemed-to-be University), understand how statistics, data visualization, machine learning basics, and data handling shape practice within data science, analytics, and statistical decision-making.
- ◆ Apply concepts to interpret datasets, patterns, trends, and evidence-based questions and respond to practical questions.
- ◆ Review decisions guided by data quality, modelling logic, and business or research context using evidence, context, and accuracy, responsible interpretation, and clarity of insight.
- ◆ Build dashboards, analytical reports, data models, and insight summaries that support effective communication and problem-solving.
- ◆ Demonstrate readiness to pursue deeper learning or relevant roles connected to Research Associate, Academician, and Data Scientist and related analytics, data operations, business intelligence, and data-driven decision roles, while strengthening project-based reflection.

Eligibility Criteria

The eligibility for the program is 12th board exam or equivalent as specified in the university notification and the candidate must have studied any one of the following courses i.e. Mathematics, Computer Science or Statistics in secondary school education.

Curriculum Overview

Semester I (9 subjects)

- ◆ Database Management System
- ◆ Programming with C and C++
- ◆ Basic Mathematics I
- ◆ Database Management System Lab
- ◆ Programming with C and C++ Lab
- ◆ Basic Mathematics I Lab
- ◆ General English I
- ◆ Kannada/ Hindi/ Sanskrit / Additional English I
- ◆ Mind Management & Human Values - I



Curriculum Overview (continued)

Semester II (10 subjects)

- ◆ Programming with R
 - ◆ Operating Systems
 - ◆ Basic Mathematics II
 - ◆ Programming with R Lab
 - ◆ Operating Systems Lab
 - ◆ Basic Mathematics II Lab
 - ◆ General English II
 - ◆ Kannada/ Hindi/ Sanskrit / Additional English
 - ◆ Project -I
 - ◆ Mind Management & Human Values - II
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Semester III (9 subjects)

- ◆ Spread sheet Modelling
- ◆ Distribution and Inference Theory
- ◆ Python for Analytics
- ◆ Spreadsheet Modelling LAB
- ◆ Distribution and Inference theory LAB
- ◆ Python for Analytics LAB
- ◆ Social Networking or Financial Economics
- ◆ Introduction To Cloud Computing
- ◆ Indian Constitution

Semester IV (9 subjects)

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| ◆ Data Visualization using R and Python | ◆ Machine Learning Lab |
| ◆ Advanced statistics | ◆ E-Commerce /  |
| ◆ Machine Learning | ◆ Environmental Studies |
| ◆ Data visualization using R and Python LAB | ◆ Project II |
| ◆ Advanced statistics LAB | |

Semester V (9 subjects)

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| ◆ Deep Learning | ◆ Deep Learning Lab |
| ◆ Big Data Analytics / Internet of things | ◆ Big Data Analytics Lab/ Internet of things Lab |
| ◆ Forecasting Techniques / Financial Analysis | ◆ Regression Analysis Lab/ Financial Analytics Lab |
| ◆ Emotional Intelligence / Entrepreneurship | ◆ Project |
| ◆ Web Development | |

Semester VI (9 subjects)

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| ◆ Artificial Intelligence | ◆ Artificial Intelligence Lab |
| ◆ Advanced Analytics / Marketing Analytics | ◆ Advanced Analytics Lab / Marketing Analytics Lab |
| ◆ Data Cleaning / NLP | ◆ Data Cleaning Lab / NLP Lab |
| ◆ Visual Narratives /  | ◆ Project III |
| ◆ Software Engineering and Testing | |

Fee Structure

Fee heads	Year 1	Year 2	Year 3	Total
Registration Fees (Payable at the time of admission)	₹ 500	—	—	₹ 500
Examination Fee / Year	₹ 4,500	₹ 4,500	₹ 4,500	₹ 13,500
Course Fee	₹ 15,000	₹ 15,000	₹ 15,000	₹ 45,000
Total	₹ 20,000	₹ 19,500	₹ 19,500	₹ 59,000