

BSc in **DATA SCIENCE**

2024 - 2028



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ABOUT BSE LIMITED

BSE Ltd. is the first stock exchange that came into existence in Asia. What is now popularly known as BSE Ltd. was established as "The Native Stock Brokers' Association" in 1875. BSE is the first to be granted permanent recognition under the Securities Contract Regulation Act, 1956.

Over the past 149 years, BSE has facilitated growth of the Indian corporate sector by providing it with an efficient capital raising platform. It is world's biggest bourse, in terms of listed companies. BSE, as a brand, has been and is synonymous with the capital market in India. It's S&P BSE SENSEX reflects the health of the Indian economy.



EXISTING SINCE 1989



300+ WORLD CLASS
PRACTITIONERS



EXPANSIVE
GLOBAL REACH



20,000+
PARTICIPANTS
YEARLY



150+ COURSES



ICONIC BUILDING &
BRANCHES ALL OVER

ABOUT BSE INSTITUTE LTD.

The BSE Institute Ltd, established as a 100% subsidiary of the World's Fastest Stock Exchange, leverages its core knowledge from the stock exchange and enjoys the distinct advantage of being at the center of the action - the Financial Capital of India and one of the world's most rapidly emerging markets. BIL inherits knowledge and insights into the capital markets industry from BSE, garnered over the past 149 years.

BSE Institute Limited offers a bouquet of courses related to financial markets for students interested in achieving and upgrading their skills in this field. The offerings range from Post Graduate Programs from Mumbai University, International PG programs, to more than 100 short-term certification courses in classroom and online modes.

The Institute focuses on developing skills for employability, providing education for talent development, and fostering innovation driven by entrepreneurs who create jobs. At the Institute, we offer market-designed courses with training by market practitioners, using cutting-edge curriculum to ensure that you are job-ready from the first day, first hour.

For more information, visit: www.bsebti.com.



Our Vision

Our vision is to become the globally acclaimed learning provider for financial and leadership education, by pioneering the generation and dissemination of knowledge for the enhancement of skills and capabilities of professionals and aspiring professionals.



Our Mission

As a center of learning, our mission is to forge an inclusive learning haven, uniting diverse perspectives to cultivate impactful leaders and entrepreneurs who drive positive change in organizations and communities through innovation.

ABOUT

Homi Bhabha State University

BSE Institute in collaboration with Dr. Homi Bhabha State University offers BSc in Data Science, BSc in Finance and BBA in Banking and Financial Analytics program. The Degree is awarded by Dr. Homi Bhabha State University.

Dr. Homi Bhabha State University (Dr. HBSU) is the first Cluster University of Maharashtra State, Established in February 2019 under Rashtriya Uchchatar Shiksha Abhiyan (RUSA) program of Government of India. Dr. HBS University comprises four oldest and prestigious Government Colleges of Mumbai viz., Institute of Science, Elphinstone College, Sydenham College and Secondary Training College. These colleges have a different prospectus, but a common belief.

Education is a process of learning where knowledge, skills, and habits move from one generation to the other. With this in our mind, University is running several Under-Graduate Courses in Science, Arts, Social Science, Humanities and Computer Applications in its four Constituent Colleges. Dr. HBSU is committed to transform and empower the students to become self-confident, knowledgeable and employable. The University is working relentlessly for the development of different courses in the light of New Education Policy-2020 considering the benefits of all the stakeholders to achieve all-round development of students.



MESSAGE

FROM MD & CEO



Mr. V. Narayanan Iyer

Managing Director & CEO
BSE Institute Limited

Dear Students,

In the dynamic landscape of data analytics, our focus extends to the comprehensive growth of professionals poised to lead the future of this industry. Our dedication lies in fostering an engaging and dynamic lifelong learning atmosphere, with the goal of nurturing the upcoming wave of skilled data analysts. We are committed to creating an environment that promotes continuous excitement and stimulation, as we strive to prepare the next generation of proficient data analysts.

Our program is meticulously crafted to offer you a comprehensive understanding of the dynamic and ever-changing realm of data science. Given the pivotal role data plays in today's interconnected world, it is essential to equip yourself with the knowledge and skills required to discover the complexities of this crucial industry.

At BSE Institute Ltd., we embrace a holistic approach to education. Our curriculum not only covers the fundamental aspects of data science but also integrates interdisciplinary elements such as statistical computing, time series modelling, machine learning, and R programming. We are committed to delivering a well-rounded education that extends beyond theoretical concepts, preparing you for the practical challenges of the data science landscape.

Our esteemed faculty members, with their wealth of industry experience, are dedicated to providing you with insights that stem from real-world scenarios. Their expertise will enrich your learning journey, ensuring that you graduate as a proficient and confident data science professional.

As you embark on this transformative journey, remember that learning extends beyond the classroom. Embrace the opportunities for real-world experiences, and you will find that our program is not just about education; it's about preparing you for a successful and fulfilling career in data science.

ABOUT

BSc in Data Science

Degree Awarded By :
Dr. Homi Bhabha State University



Mode of Learning
Classroom



Duration
4 Year

The Bachelors in Data Science program at BSE Institute Ltd. is a comprehensive four-year course designed to provide a thorough exploration of various aspects within the dynamic field of data science. In response to the exponential growth of the data science sector, this program assumes a pivotal role in contributing to both direct and indirect advancements in the global economy. Beyond offering in-depth insights into data science, the curriculum encompasses disciplines such as machine learning, artificial intelligence, big data analytics, cloud computing, and statistical modeling. The program is tailored to mold students into well-versed professionals prepared to excel in the data science industry, employing a blend of theoretical knowledge and hands-on practical experience facilitated by highly experienced faculty members.



PROGRAMS HIGHLIGHTS



Simulation Based Training*

Simulation exercises are valuable for training participants in core data science operations by creating realistic scenarios. They allow for the practical application of theory, enhancing understanding and skill development.



Industry Internship*

Industry internships are crucial for gaining hands-on experience and applying academic knowledge. They enhance resumes and provide a head start to meritorious students before entering their careers.



Career Guidance

Career exploration can be confusing, but guidance from industry specialists and career counselors can provide valuable insights and help you navigate various career opportunities. Their experiences and knowledge can assist you in making informed decisions about your career path.



300+ world class practitioners

Our trainers and coaches are experts in their fields of study, with intensive knowledge and industry experience that guide their teaching methodologies.



Iconic Campus

Iconic building and a place to meet merchant, bankers regulators, and market gurus to expand your network.



Industry Visits*

Industry visits provide students with valuable answers to their inquisitive questions regarding the data science sector. These visits are planned to generate curiosity and have exposure to the various industries for when they start working as professionals.

* As applicable

WHY

BSc in Data Science

Choosing a career in data science is a strategic decision for individuals aiming to fast-track their professional journeys and gain early exposure to the rapidly evolving digital landscape. It represents a pivotal step towards comprehending the impact of global data challenges, navigating the complexities of the data science realm, and positioning oneself for abundant opportunities, both domestically and internationally.

Our Bachelors in Data Science course not only imparts a profound understanding of data science operations but also focuses on cultivating students' managerial and technical competencies, ensuring they are well-equipped to tackle the intricacies of the data science landscape. Embracing innovation and real-world relevance, our course prepares students to become dedicated data science professionals capable of harnessing insights in an ever-changing data-driven landscape.



CURRICULUM SUMMARY

BSc in Data Science

SEMESTER I

Module Name	Credits
Major - Introduction to Data Science	3
Major - Foundation of Computer Science	3
Minor - C - Programming	2
Minor - Statistics Foundations with R	2
OE - Open Elective	2
VSC - C - Programming Lab	1
VSC - Statistics Foundations with R lab	1
IKS - Indian Ethos & Management Thoughts	2
L1 - English	2
VEC - Environmental Science	2
CC - Community Services and Engagement	2

SEMESTER I

Welcome to the Bachelors in Data Science Program! This program promises an exhilarating exploration into the intricate realm of data science, marking the commencement of your academic journey. The meticulously designed curriculum, offers a comprehensive foundation in data science and essential skills crucial for excelling in the dynamic field of data analytics.

Major - Introduction to Data Science

Explore the world of data science and learn how to analyze and interpret data to make informed decisions. Gain valuable skills in data visualization, machine learning, and data manipulation techniques using Python and other tools.

Major - Foundation of Computer Science

Dive into the fundamentals of computer science, including algorithms, data structures, and programming principles. Develop problem-solving skills and learn to design efficient and scalable software solutions for real-world problems.

Minor - C - Programming

Master the basics of C programming language, including syntax, control structures, and memory management. Build a strong foundation in programming logic and problem-solving techniques using C.

Minor - Statistics Foundations with R

Discover the essentials of statistics and learn how to use the R programming language for data analysis and visualization. Gain insights into statistical methods, hypothesis testing, and regression analysis to draw meaningful conclusions from data.

OE - Open Elective

Choose from a variety of elective courses to tailor your learning experience and explore areas of interest beyond your major and minor requirements.

VSC - C - Programming Lab

Apply your knowledge of C programming in hands-on lab sessions where you'll practice coding, debugging, and implementing algorithms to solve programming challenges.

VSC - Statistics Foundations with R lab

Reinforce your understanding of statistical concepts and R programming through practical exercises and projects in a supportive lab environment.

CURRICULUM SUMMARY

BSc in Data Science

IKS - Indian Ethos & Management Thoughts

Explore the rich heritage of Indian culture and philosophy, and learn how traditional management principles can be applied in modern organizational contexts.

L1 - English

Enhance your language skills in English through reading, writing, speaking, and listening exercises designed to improve communication and comprehension abilities.

VEC - Environmental Science

Gain an understanding of environmental issues and their impact on the planet, and explore sustainable solutions for preserving natural resources and mitigating environmental degradation.

CC - Community Services and Engagement

Engage with your local community through service projects and initiatives aimed at addressing social, economic, and environmental challenges. Develop leadership skills and contribute to positive change in society.



Abbreviation: OE - Open Elective, VSC - Vocational Skills Course, IKS - Indian Knowledge System, L1 - Language, VEC - Value Education Course, CC - Co-curricular Course, SEC - Skill Enhancement Course, FP - Field Project, CEP - Community Engagement and Service, RM - Research Methodology, OJT - On-Job Training/Internship/Apprenticeship

CURRICULUM SUMMARY

BSc in Data Science

SEMESTER II

Module Name	Credits
Major - Statistical Computing	3
Major - Database Management System with NoSQL	3
Minor - Data Structures	2
Minor - OOPs using Java Programming	2
OE - Open Elective	2
VSC - Data Structures	1
VSC - OOPs using Java Programming	1
IKS - Science and Technology in Ancient India	2
L1 - English	2
VEC - Constitution of India	2
CC - Community Services and Engagement	2

SEMESTER II

Major - Statistical Computing

Explore the world of data analysis and interpretation through statistical computing techniques. Learn how to use programming languages like R and Python to analyze large datasets and make informed decisions based on statistical methods.

Major - Database Management System with NoSQL

Dive into the realm of database management systems and learn about NoSQL databases like MongoDB and Cassandra. Gain practical skills in designing, implementing, and optimizing databases to handle vast amounts of unstructured data efficiently.

Minor - Data Structures

Master the fundamental building blocks of programming by studying data structures such as arrays, linked lists, stacks, and queues. Understand how these structures organize and store data, enabling efficient algorithms and problem-solving strategies.

Minor - OOPs using Java Programming

Delve into the principles of Object-Oriented Programming (OOP) using the Java programming language. Learn how to design and implement classes, objects, inheritance, polymorphism, and other key concepts to create modular and scalable software solutions.

OE - Open Elective

Choose from a variety of specialized topics to expand your knowledge and skills in an area of interest outside your main field of study.

VSC - Data Structures

Enhance your understanding of data structures by delving deeper into advanced topics such as trees, graphs, hash tables, and sorting algorithms. Develop proficiency in implementing and analyzing complex data structures to solve real-world problems.

VSC - OOPs using Java Programming

Build upon your foundational knowledge of Object-Oriented Programming in Java by exploring advanced concepts like design patterns, exception handling, multithreading, and GUI programming. Gain practical experience in building robust and scalable software applications.

CURRICULUM SUMMARY

BSc in Data Science



IKS - Science and Technology in Ancient India

Discover the rich legacy of scientific and technological advancements in ancient India, including contributions in mathematics, astronomy, medicine, and architecture. Explore the historical context and cultural influences that shaped these innovations.

L1 - English

Develop proficiency in the English language through comprehensive instruction in grammar, vocabulary, reading comprehension, writing, and communication skills. Enhance your ability to articulate ideas effectively in both academic and professional settings.

VEC - Constitution of India

Gain insights into the principles, provisions, and institutions outlined in the Constitution of India. Explore key legal concepts, fundamental rights, directive principles, and the structure of governance in the world's largest democracy.

CC - Community Services and Engagement

Participate in meaningful community service projects and engage with local organizations to address social issues and promote positive change. Develop leadership, teamwork, and communication skills while making a tangible impact on society.

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****Exit option: Award of UG Certificate in Major with 40-44 credits and an additional 4 credits core NSQF course/ Internship OR Continue with Major and Minor****

CURRICULUM SUMMARY

BSc in Data Science

SEMESTER III

Module Name	Credits
Major - Mathematics for Scientists - I	3
Major - Behavioral Data Analytics	3
Minor - Python Programming	3
Minor - Big Data- I	3
OE - Open Elective	3
SEC - Excel and Advanced Excel	3
L2 - Hindi / Marathi - I	2
CC - Sports Activities	2

SEMESTER III

The Year 2 of our Bachelors in Data Science Program academic journey continues to unfold with Semester 3 and Semester 4, focusing on specialized areas within the data science industry. These semesters offer an immersive experience, allowing you to deepen your understanding of key concepts and specialized skills that are vital in today's dynamic data science landscape.

Major - Mathematics for Scientists - I

Dive into the world of numbers, equations, and mathematical concepts essential for understanding scientific phenomena. Explore topics like calculus, algebra, and differential equations to build a solid foundation for advanced scientific studies.

Minor - Behavioral Data Analytics

Uncover insights into human behavior using data analysis techniques. Learn how to collect, analyze, and interpret data to understand patterns and trends in human behavior, aiding decision-making in various fields such as psychology, marketing, and social sciences.

Minor - Python Programming

Master the fundamentals of Python programming language, a versatile tool used in web development, data analysis, artificial intelligence, and more. Gain hands-on experience in writing code, solving problems, and building applications in Python.

Minor - Big Data - I

Explore the vast landscape of big data and learn how to manage, process, and analyze large datasets efficiently. Understand the tools and techniques used in big data processing, storage, and retrieval to derive valuable insights and make informed decisions.

OE - Open Elective

Choose from a variety of elective courses tailored to your interests and career goals. Expand your knowledge in areas other than your major subjects and customize your learning experience to suit your preferences.

SEC - Excel and Advanced Excel

Enhance your spreadsheet skills with Excel and Advanced Excel courses. Learn to manipulate data, create complex formulas, and visualize information effectively using Microsoft Excel, a powerful tool widely used in business and finance.



CURRICULUM SUMMARY

BSc in Data Science



L2 - Hindi/Marathi - I

Immerse yourself in the rich cultural and linguistic heritage of Hindi or Marathi language. Develop proficiency in reading, writing, and speaking while exploring the literature, history, and traditions of these vibrant languages.

CC - Sports Activities

Stay active and healthy with a range of sports activities designed to promote physical fitness and teamwork. Participate in various sports events, tournaments, and recreational activities to stay engaged and energized throughout your academic journey.

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CURRICULUM SUMMARY

BSc in Data Science

SEMESTER IV

Module Name	Credits
Major - Mathematics for Scientists - II	3
Major - R Programming for Data Science	3
Minor - Data Mining	3
Minor - Big Data- II	3
OE - Open Elective	3
SEC - Internet of Things	3
L2 - Hindi / Marathi - I	2
CC - Sports Activities	2

SEMESTER IV

Major - Mathematics for Scientists - II

In this major, you'll delve deeper into advanced mathematical concepts essential for scientific research and analysis. Topics covered include calculus, linear algebra, differential equations, and probability theory, providing you with a solid foundation for tackling complex scientific problems.

Major - R Programming for Data Science

This major equips you with the essential skills in R programming language for data manipulation, visualization, and analysis. You'll learn how to work with datasets, apply statistical techniques, and create insightful data visualizations, preparing you for a career in data science.

Minor - Data Mining

In this minor, you'll learn techniques and algorithms for extracting useful information and patterns from large datasets. You'll explore methods such as association rule mining, clustering, and classification, gaining valuable insights into the process of data discovery and analysis.

Minor - Big Data - II

This minor builds upon the fundamentals of big data technologies and analytics introduced in the first part. You'll dive deeper into distributed computing frameworks like Hadoop and Spark, explore data storage and processing techniques, and learn advanced analytics methods for handling massive datasets efficiently.

OE - Open Elective

The open elective allows you to choose from a variety of courses outside your major and minor areas of study, enabling you to explore diverse interests and broaden your academic horizons.

SEC - Internet of Things

In this course, explore the interconnected world of IoT, learning about sensors, actuators, and communication protocols used to connect devices and enable data exchange. You'll also study IoT applications in various industries, from smart homes to industrial automation, gaining insights into this rapidly evolving field.

L2 - Hindi / Marathi - I

This language course offers instruction in either Hindi or Marathi, providing you with basic language skills and cultural insights to communicate effectively in regions where these languages are spoken.



CURRICULUM SUMMARY

BSc in Data Science

SEMESTER IV

CC - Sports Activities

Engage in a variety of sports and recreational activities designed to promote physical fitness, teamwork, and healthy competition. From traditional sports like basketball and soccer to yoga and dance, there's something for everyone to enjoy and stay active.



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****Exit option: Award of UG Diploma in Major and Minor with 80-88 credits and an additional 4 credits core NSQF course/ Internship OR Continue with Major and Minor.****

CURRICULUM SUMMARY

BSc in Data Science

SEMESTER V

Module Name	Credits
Major - Machine Learning	4
Major - Data Visualization	4
Major - Artificial Intelligence	4
Major Elective - Time Series Analysis	3
Major Elective - Probability and Statistics	3
VSC - Advanced Statistical Computing	2
FP - Field Project	2

SEMESTER V

In Year 3 of the Data Science Program the journey into the expansive realms of Machine Learning, Artificial Intelligence, and advanced data analytics continues to unfold. In Semester 5 and Semester 6, you will delve into cutting-edge technologies, equipping yourself with the knowledge and skills required to navigate the forefront of the data science and data visualization landscape.

Major - Machine Learning

Learn how to teach computers to learn from data and make predictions or decisions using algorithms and statistical models.

Major - Data Visualization

Explore techniques to represent data visually through charts, graphs, and maps to uncover patterns and trends for better understanding and decision-making.

Major - Artificial Intelligence

Dive into the fascinating world of AI and discover how computers can simulate human intelligence to solve complex problems and improve efficiency.

Major Elective - Time Series Analysis

Gain insights into analyzing and interpreting data collected at different points in time to understand patterns and make forecasts for future trends.

Major Elective - Probability and Statistics

Understand the fundamental concepts of probability theory and statistical methods to analyze data and draw meaningful conclusions.

VSC - Advanced Statistical Computing

Learn advanced techniques and algorithms for statistical analysis and data manipulation using programming languages like R and Python.

FP - Field Project

Apply your knowledge and skills to a real-world project in collaboration with industry partners, gaining hands-on experience and valuable insights into the application of data science techniques.

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BSc in Data Science

SEMESTER VI

Module Name	Credits
Major - Neural Networks	4
Major - Deep Learning	4
Major - Reinforcement Learning	4
Major Elective - Regression Analysis	3
Major Elective - Data Management	3
VSC - Supervisory Control and Data Acquisition (SCADA) System and Information Hiding techniques	2
OJT - On Job Training	2

Learn about the fundamental building blocks of artificial intelligence, where computers mimic the structure and function of the human brain to solve complex problems. Dive into topics like perceptrons, backpropagation, and convolutional neural networks.

Explore advanced techniques in artificial intelligence that enable computers to learn from large amounts of data. Discover how deep neural networks can be trained to recognize patterns, make predictions, and generate creative outputs like images and text.

Delve into the exciting field of reinforcement learning, where algorithms learn to make decisions by trial and error in dynamic environments. Understand how agents interact with their surroundings to maximize rewards and achieve long-term goals.

Master the statistical techniques used to model and analyze the relationships between variables. Learn how to use regression analysis to predict outcomes, identify trends, and make informed decisions in various fields like economics, finance, and social sciences.

Gain practical skills in organizing, storing, and retrieving data efficiently. Explore database systems, data warehousing, and data integration techniques to ensure data quality, security, and accessibility for decision-making and business intelligence.

Discover how SCADA systems monitor and control industrial processes, from power plants to water treatment facilities. Learn about information hiding techniques to secure sensitive data and protect against cyber threats.



CURRICULUM SUMMARY

BSc in Data Science



SEMESTER VI

OJT - On Job Training

Apply your knowledge and skills in a real-world work environment through hands-on training opportunities. Gain valuable experience, build professional networks, and develop the practical expertise needed to succeed in your chosen field.

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****Exit option: Award of UG Diploma in Major and Minor with 80-88 credits and an additional 4 credits core NSQF course / Internship OR Continue with Major and Minor.****

CURRICULUM SUMMARY

BSc in Data Science

SEMESTER VII

Module Name	Credits
Major - Real Time System	4
Major - Financial Risk Analytics and Management	4
Major Elective - Network Basics and Network Attacks	4
RM - Research Methodology	4

SEMESTER VII

Year 4 of the Data Science Program – the final stretch! In Semesters 7 and 8, we'll dive into the subjects like Real Time System, Network Attacks, and Cloud Fundamentals. As the culmination of your academic journey, Semesters 8 will also offer a valuable internship experience, providing a real-world application of your acquired skills and a bridge to the professional realm.

Major - Real Time System

Learn to design and manage systems that respond instantly to input, ensuring timely and efficient operation. Gain skills in developing software and hardware solutions for industries requiring real-time processing, such as telecommunications and manufacturing.

Major - Financial Risk Analytics and Management

Explore techniques to assess and mitigate risks in financial markets and institutions. Develop expertise in analyzing data, modeling financial scenarios, and implementing risk management strategies to safeguard investments and assets.

Major Elective - Network Basics and Network Attacks

Understand the fundamentals of computer networks and learn about common network vulnerabilities and attacks. Acquire knowledge on how to secure networks and prevent unauthorized access, ensuring the integrity and confidentiality of data transmission.

RM - Research Methodology

Master the principles and techniques of conducting research in various fields. Learn to formulate research questions, design experiments, collect and analyze data, and draw meaningful conclusions. Develop critical thinking and problem-solving skills essential for academic and professional research endeavors.

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CURRICULUM SUMMARY

BSc in Data Science

SEMESTER VIII

Module Name	Credits
Major - Image and Video Analytics	6
Major - Cloud Fundamentals and Cloud Security and Cryptography	6
Major Elective - Cyber Security Analysis & Countermeasures and Advanced Security Analysis	6
OJT - On Job Training	4

SEMESTER VIII

Major - Image and Video Analytics

In this major, you'll learn how to analyze and interpret images and videos using advanced algorithms and techniques. Explore the fascinating world of computer vision and uncover insights from visual data to make informed decisions in various fields like security, healthcare, and entertainment.

Major - Cloud Fundamentals and Cloud Security and Cryptography

Dive into the world of cloud computing and understand its fundamental concepts while also exploring essential security measures and cryptographic techniques. Gain hands-on experience with cloud platforms and learn how to secure data and applications in the cloud environment, ensuring confidentiality, integrity, and availability.

Major Elective - Cyber Security Analysis and Countermeasures and Advance Security Analysis

Delve into the realm of cybersecurity and learn how to analyze threats, vulnerabilities, and risks to safeguard digital assets. Develop strategies to detect, mitigate, and prevent cyber-attacks, and explore advanced techniques for protecting networks, systems, and data from malicious activities.

OJT - On Job Training

Gain valuable real-world experience through on-the-job training opportunities that allow you to apply your knowledge and skills in a professional setting.

Abbreviation: OE - Open Elective, VSC - Vocational Skills Course, IKS - Indian Knowledge System, L1 - Language, VEC - Value Education Course, CC - Co-curricular Course, SEC - Skill Enhancement Course, FP - Field Project, CEP - Community Engagement and Service, RM - Research Methodology, OJT - On-Job Training/Internship/Apprenticeship

Four Year UG Honors Degree in Major and Minor with 160-176 credits



OUR PROMINENT FACULTY MEMBERS

Our faculty pool includes some of the most reputed practitioners in the industry, each with several years of experience. They possess the ability to convey unique insights, serving as subject matter experts in their respective fields. This expertise facilitates lively discussions, allowing participants to share their insights and experiences with the class.

At BIL, the inspirational talent of our faculty in the classroom is as important as their domain knowledge. They assist our learners in innovating business practices and encourage cutting-edge thinking, providing them with opportunities to both influence and apply evolving concepts.



20+ Years
of Experience

Prof. Rakesh Nair
Financial Derivatives
and Commodities Expert



15+ Years
of Experience

Prof. Suhas Worlikar
Financial Modelling Specialist



30+ Years
of Experience

Prof. Sanjay Ved
Technical Analysis
Expert



10+ Years
of Experience

Prof. Piyush Dave
Design Thinking and
Technology



15+ Years
of Experience

Prof. Medha Shetye
Business Law
and Banking Specialist



15+ Years
of Experience

Prof. Anita Toshniwal
Accounting and Mutual
Funds Expert




15+ Years
of Experience

Prof. Anshul Shrivastava
Financial Derivatives
and Commodities Expert



7+ Years
of Experience

Prof. Ranu Jain
Capital Markets
Specialist



10+ Years
of Experience

Prof. Vivek Garodia
Algorithmic Trading
Instructor

INFRASTRUCTURE

BSE Institute Ltd. is situated in the heart of the financial hub of India, the Bombay Stock Exchange. Being located on such an iconic campus, BSE Institute boasts a state-of-the-art training facility, which provides a holistic learning experience for the students. Additionally, lectures are conducted in and around the premises of the Bombay Stock Exchange, further immersing students in the dynamic environment of India's financial center.



LEARNING

OUTSIDE THE CLASSROOM

Teaching and learning can become spontaneous and student-centered when moved out of the confines of the classroom and into the world at large. Learning experiences outside the classroom are inherently interdisciplinary. Here, at BSE Institute, we provide an experiential learning environment where students feel energized and confident in speaking their minds, ensuring every participant is constantly engaged and continually learning.



STUDENT EVENTS

STOCK TORERO

Imagine yourself getting an opportunity to do real-time trading in the prestigious halls of the Bombay Stock Exchange. BSE Institute makes this a possibility for many youngsters by initiating a one-of-a-kind national-level financial market competition called 'Stock Torero: Tame the Bull', which seeks to cultivate the financial aptitude of aspiring students. The competition effectively renders real trading scenarios in the financial markets, including financial professionals such as brokers, bankers, and a media team that feeds mock news affecting the demand and supply of stocks, thereby giving an experiential front-row feel of competitive trading to the participants. Management students from reputed business schools participate to hone their financial prowess. The excitement and enthusiasm seen amongst the competitors is cosmic, to say the least. The purpose of this tournament is to acclaim financial trading as a specialized skill among young minds.



DALAL STREET LIT FEST

This one-of-a-kind event is a perfect collaboration and celebration of two completely diverse genres: - Finance and Art. Held at the iconic International Convention Hall at the Bombay Stock Exchange, the Dalal Street Lit Fest Exchange 2019 brought together many eminent business leaders, journalists, best-selling authors, storytellers, humanitarians, entertainers, great thinkers, and aspiring artists. With 'Water Conservation' being the theme for this edition, it managed to create awareness about its scarcity and the need for careful management.

A number of intriguing activities, like live sketching, tarot reading, henna art, pottery, food stalls, pop-up shops, and foot spa stalls, seemed to have greatly compelled the audience. Not to mention the splendid band events and enthralling performances that lifted our spirits on this enchanting venture!

True to its tagline, "The Flow of Life: from ideas to convictions to actions, via the diverse themes of Finance and Literature," this event has managed to disseminate motivational and inspirational messages while highlighting the need for water management and regulation.

STUDENT EVENTS

TORQUE

Torque at BSE Institute stands out as a significant and emotionally charged evening, blending happiness and nostalgia. It is the most important day in the life of the BIL students as it marks the culmination of their academic life. The graduates receive their degrees and awards for their achievements and also share their experiences via memorable speeches. During the annual flagship event of the institution, the Alumni Meet is also held to take a walk down the corridors of nostalgia. It is one of the most remarkable evenings that comprise the convocation, cultural show, prize distribution, and reunion.



CONVOCATION

The ceremony includes the felicitation of students with certificates and trophies, marking the celebration of their impactful journey with BIL. The convocation ceremony is followed by a cultural event with stunning performances by the students. This day is a milestone for BIL students, symbolizing the culmination of their academic endeavors. As they receive degrees and awards, they share their experiences through heartfelt speeches. During the annual flagship event of the institution, the Alumni Meet is also held to take a walk down the corridors of nostalgia. It is one of the most remarkable evenings that comprise the convocation, cultural show, prize distribution, and reunion.

STUDENT EVENTS

SPORTS

Discover the perfect blend of academics and excitement at the BSE Institute! As part of our annual BSE Institute Student's Fest week, both our girls and boys showcased their cricket skills, with the event inaugurated by Mr. Ambarish Datta, former MD and CEO of BSE Institute Limited. In addition to cricket, our students hit the turf to engage in some high-quality football. Followed by the sports event, the prize ceremony of sports event winners and participants was honored at the BSE International Convention Hall.



PLACEMENT ASSISTANCE

At BSE Institute, we understand that the ultimate goal of pursuing a BSc in Data Science is to transition seamlessly into a rewarding career. As you embark on this educational journey with us, we are committed to providing not just academic excellence but also unwavering support in achieving your career aspirations.

Our Placement Assistance Program is meticulously designed to bridge the gap between education and employment, ensuring that you are well-prepared to enter the dynamic and competitive world of data science.



Industry-Relevant Curriculum:

Our curriculum is crafted in collaboration with industry experts to equip you with the skills and knowledge that employers in the data science sector are actively seeking.



Networking Opportunities

We provide numerous opportunities for you to connect with industry professionals through workshops, seminars, and networking events. Building these relationships is crucial for opening doors to potential career paths.



Internship Programs

The internship embedded in our program is not just an academic requirement; it's a hands-on experience that allows you to apply theoretical knowledge in a real-world setting. This experience enhances your employability and expands your professional network.



Resume Building and Interview Preparation

Our career guidance team is dedicated to helping you create a compelling resume that showcases your skills and accomplishments. Additionally, we provide comprehensive interview preparation sessions to boost your confidence in facing prospective employers.



Placement Drives

We organize exclusive placement drives, inviting reputed organizations from the data science sector to recruit our talented graduates. These events provide you with direct access to potential employers and facilitate on-the-spot interviews.

CORPORATE CONNECT/PARTNERS



SOCIAL INITIATIVES

CSR ACTIVITIES

BSE Institute Ltd. aims to achieve societal goals by engaging in and supporting learning opportunities for students in every demographic. One of our key CSR activities involves conducting workshops on financial literacy and life skills for rural women. These workshops empower them to learn financial concepts that are imperative for effective money management, making them small-time entrepreneurs and helping them apply for loans to fund their small-scale initiatives, which started building their morale by teaching them the benefits of financial independence. Through this initiative, we have trained over 1000 self-employed women in the Shivaganga District of Tamil Nadu. BSE Institute has taken initiative for the sustainable livelihood program, through which we have imparted financial skills to over 100 women who worked as beedi workers and beauticians. In addition to trade skills, each of these women was also trained in financial and micro-entrepreneurship skills.



Signing an MoU with Municipal Corporation of Great Mumbai



School to workplace transition with World Bank



Building content to strengthen financial literacy



Livelihood training program in Jammu & Kashmir



Stock Torero Event



Financial literacy and life skills for rural women



BSE International Finance Olympiad (BIFO)



4000+ students trained for employment in BFSI sector



Workshops for school children on financial literacy



BSE Institute at World Skills Abu Dhabi, UAE 2017



Financial Literacy Board Games



Shiksha: Teaching English and Mathematics to government school students

THE GLOBAL CONNECT

BIL has an outstanding track record in conducting highly acclaimed international programs, which have been well received by overseas participants representing regulators, stock exchanges, financial institutions, banks, leading brokerage houses, and other professionals from financial intermediaries. Participation includes representation from a number of regions such as South Asia, Central Asia, Eastern Europe, Middle East and Africa. BIL has an MOU with the Australian Trade Commission, Government of Australia, Canada, Muscat and Singapore.

Some of the programs conducted by BSE Institute Ltd. are:

- Exposure to Indian Financial Markets
- Indian Rural Market Immersion
- BSE International Financial Olympiad
- Capstone Unit at BSE Institute



THE EDGE

BSE INSTITUTE LIMITED

BIL has the distinct advantage of being at the center of action, being located in the financial hub of India, and being one of the world's most rapidly emerging markets. Our commitment to always being at the forefront of competitive, contemporary, and evolving business practices has led to the initiation of programs that reflect the realities of the marketplace.

Furthermore, our course design and development are firmly grounded in knowledge of business processes - in entrepreneurial companies and established firms, unconstrained by the boundaries of academic disciplines.



APPLICATION PROCESS

BIL ENTRANCE TEST DATES

BIL Entrance Test	Entrance Test Date
BIL ET 1	05 th April 2024
BIL ET 2	19 th April 2024
BIL ET 3	03 th May 2024



Fees Structure

ELIGIBILITY CRITERIA	APPLICATION PROCESS	SELECTION CRITERIA	CANCELLATION PROCEDURE
Students with minimum 60% from a recognized Board. Preference will be given to students with Mathematics.	Students will need to apply for the program by making a payment of Indian students - Rs.250.	Valid BIL- ET* Scores for Indian as well as International students.	The students who wish to cancel their admission will have to submit an application within a month of application submission/before batch starts.
Students awaiting their 12th board results can also submit their application.	The payment has to be made online by visiting https://bsevarsity.com/products/bachelor-degree-of-science-in-data-science-bsc	Selected students will be called for Personal Interview after clearing the Entrance Test.	The original documents will be returned to the candidate after the cancellation.
	Once the payment is made, a screen shot of the payment is to be shared with the admission counsellor.		The Application fees once paid will not be refunded for any reason.
	Upon payment confirmation the candidate will be provided with the BIL Entrance Test date.		No fees will be refunded post commencement of the course.

Year	Details	Fees
First Year	Security Deposit (Refundable)	20,000/-
	Uniform Fees	11,800/-
	Sem 1	59,870/-
	Sem 2	50,000/-
Second Year	Sem 3	55,870/-
	Sem 4	50,000/-
Third Year	Sem 5	57,870/-
	Sem 6	50,000/-
	Total	3,55,410/-

* All queries should be mailed to: training@bsebti.com

* Refund will be processed for UG COURSES as per UGC Norms and guidelines.

* University charges as applicable

* Students to follow NEP policy for fourth year upgradation.



BSE Institute Limited,
19th Floor, P. J. Towers, Dalal Street, Mumbai - 400 001.

☎ 1800 22 9030 ✉ training@bsebti.com 🌐 www.bsebti.com

Scan for Course Details



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