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JAIPUR

Why Pursue B. Tech in
Data Science & Artificial Intelligence

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What is Data Science & Artificial Intelligence Engineering?

B. Tech (Data Science and Artificial Intelligence) is a 4-year full-time undergraduate course that makes a student ready for intelligent data analysis which is now extremely vital for real-world applications. It is said that Data Science and AI are the future of all computing applications.

Data Science

Data Science is the analysis of data addressed to find solutions to problems by collecting, analysing and interpreting data with implementation of the right algorithms. Data Science utilizes various modern techniques and tools to find useful information, derive meaningful data, and make business decisions with proper insights. It uses intricate machine learning algorithms and processes to build predictive models that are used to draw a conclusion based on estimated significance from a set of input variables.

Artificial Intelligence

Artificial Intelligence (AI) is the intelligence demonstrated by machines, unlike natural intelligence that's displayed by living beings. Artificial Intelligence utilizes highly intelligent software or machines that are developed in such a way that their reactions seem to be almost humanlike. The most basic as well as the most complex processes are involved in building these kinds of smart machines. This also includes enabling them to do tasks such as – perform decision making with the data that is readily available to them in an organization. To be honest, AI seems like a replica of the human mind that is designed to synthesize and absorb any kind of information and provide the system with the required decision.

Do you know Artificial Intelligence is one of the most adopted technologies in the world? Robotics, sea and space exploration, finance, banking, automobile, healthcare, retail trade, software development, and hardware manufacturing are a few to name such industries which are rapidly using AI! In layman's term, AI has transformed the way people are thinking, communicating, and interacting with each other. From Amazon Alexa to Apple Siri and Google Assistant most of the platforms are using AI these days.

Future of Data Science & Artificial Intelligence

Artificial Intelligence as well as Data Science have a bright future as these technologies are getting adopted in various industries. Hundreds and thousands of students are taking admissions in reputed colleges so that they can have a degree in AI and Data Science to enjoy a prosperous career and live a happier life. The following facts and figures will prove why learning AI is the best option to flourish in the present market. After Artificial Intelligence, we will see why it is important to learn Data Science as it holds a rewarding future for all the aspiring students who wish to take their knowledge and skills to a whole new domain.

▶ The largest companies (100,000 employees) are most likely to have an AI strategy, but only half of them apply AI in their organizations (source).

▶ 54% of executives say that AI solutions implemented in their businesses have already increased their total productivity (source).

▶ 83% of business owners say that AI is a strategic priority for their businesses nowadays (source).

▶ 31% of marketing, creative, as well as IT professionals worldwide, are planning to invest in AI technology in the upcoming 12 months (source).

▶ 27% of executives mention that their organizations are planning to invest in cybersecurity that uses AI and machine learning technologies, this year.

▶ The market size of artificial intelligence was valued at $27.23 billion in 2019 and is projected to reach $266.92 billion by 2027

▶ Global spending on AI systems will reach around $57.6 billion in 2021 (IDC)

▶ AI industry will be generating revenues around $118.6 billion a year by 2025.

▶ By 2030, China will have the largest AI market, accounting for 26.1% of the global AI market share. (PwC)

▶ 75% of commercial enterprise applications are going to use AI by 2021 (IDC)

▶ By 2021, 80% of all emerging technologies will have AI foundations.

▶ 47% of digitally established organizations will have a defined AI strategy (Adobe)

▶ Almost 77% of the devices we use today are featuring one form of AI or another.

▶ Investments in AI start-ups have grown 6 times since 2000.

▶ AI-driven hardware market revenue globally is foreseen to grow around $234.6 billion in 2025

Now, let us see why learning Data Science has become crucial these days
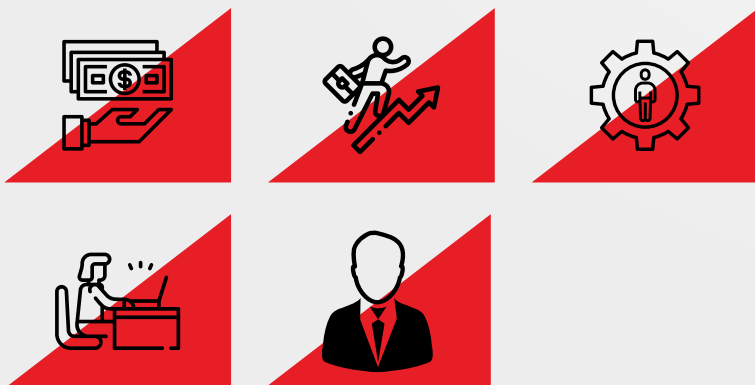
Better packages: The package of a data scientist is higher than professionals who are working in any similar niche. According to Payscale, a data scientist may earn Rs. 12 to 15 Lac Per Annum.

Recession-proof career: The demand for knowledgeable data scientists is growing every day and the current trend will stay for a long time. Data Science skills never go out of style and an aspiring student will enjoy the perks of a secured future by pursuing a degree in Data Science.

Exciting job roles: The job of a data scientist is paved with numerous interesting and challenging opportunities. This field makes an aspiring student learn something new every day which is not so common in other fields. Numerous enterprises contact data scientists for organization-related problems due to their advanced problem-solving and decision-making skills.

Work anywhere you like: If you have a dream to work abroad then you must go for a degree in Data Science not only because it has a huge demand in India but countries like UK, USA, Germany, and France are also looking for talented data scientists to join their top-notch organizations and start-ups.

Become an entrepreneur: By having a degree in Data Science you can become a skilled entrepreneur. You will have an opportunity to know your customers and clients better and with that you will be able to exceed their expectations. You can develop amazing products or offer services by conducting proper market research via Data Science.

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Scope of Data Science & Artificial Intelligence Engineering

A career in Data Science is highly rewarding as various industries are hiring professionals who are great in data analysis and proficient in similar skills. That's also the reason why HRs and recruiters of top organizations are constantly on the lookout for skilled Data Science professionals. Do you know – according to Forbes Data Science is one of the hottest jobs of the 21st century? So, if you are planning to start a career in Data Science, consider this as the best time because according to the job search portal - Naurki.com there are 19375 job openings for candidates currently.

The U.S. Bureau of Labour Statistics predicts a drastic growth in the role of Data Science and the report states that the number of jobs available in this field will increase by about 28% through 2026. The scope of Data Science is enormous as top SMB and enterprise organizations want to know what to do with the available data in raw form; how to process it and convert it into useful information to achieve their business-related goals.

Moreover, a massive amount of population around the world firmly believe that AI can produce newer job opportunities than ever before. The School of Thought said that Artificial Intelligence will become one of the most prominent job engines the world has ever seen. Thus, now is the right time to upskill oneself because artificial intelligence is definitely going to eradicate low-skill jobs from the market and successfully develop enormous opportunities for highly skilled AI professionals.

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CAREER OPPORTUNITIES AFTER B. TECH DATA SCIENCE & ARTIFICIAL INTELLIGENCE ENGINEERING

Here are the 5 top highly rewarding career opportunities for a candidate after completing B. Tech in Data Science and Artificial Intelligence Engineering

- **Business Intelligence Analyst:** A business intelligence analyst is a person who is designated to gather and analyse business-oriented information/data. This can be achieved via numerous ways that generally include data mining through an organization's data that's stored on a server or computer and looking into the data while keeping an eye on the latest industry trends.

- **Data Architect:** Data architects are responsible to develop blueprints for data management systems; they also assess an organization's potential data sources that include data obtained via internal and external activities. The data architects work closely with other teams to design a data plan and to integrate, centralize, protect and maintain it in a proper way so that it can be accessible in the easiest ways possible.

- **Data Scientist:** A data scientist is responsible to extrapolate and share business and data insights. They are the professionals who assist an organization to solve complex and persistent issues as soon as possible. A data scientist combines computer science, modelling, statistics, analytics, and math to achieve business goals and reach long as well as short-term objectives in an organization.

- **Artificial Intelligence Engineer:** An artificial intelligence engineer is responsible to build various AI models by utilizing the concepts of machine learning and intricate algorithms as well as deep learning to garner business insights. This data can be utilized by an enterprise or an SMB to make business-related decisions that have the potential to affect the entire work of an organization.

- **Robotics Engineer:** Robotics Engineers are those engineers who do their job in the field of automation as well as robotics. They are mainly responsible to design and develop various applications and tactical operations of a robotic system. They are also known as robotics test engineers or automation system engineers.

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WHY CHOOSE THE ICFAI UNIVERSITY, JAIPUR FOR B. TECH DATA SCIENCE & ARTIFICIAL INTELLIGENCE?

The ICFAI University, Jaipur is one of the best Universities in India to pursue B. Tech in Data Science and Artificial Intelligence because of its experienced faculty with a proven track record, conducive infrastructure, and enabling placement services dedicated for your growth.

Our state-of-the-art infrastructure, modern laboratories, and libraries are other amenities that make B. Tech (Data Science and AI) course a lucrative one.

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