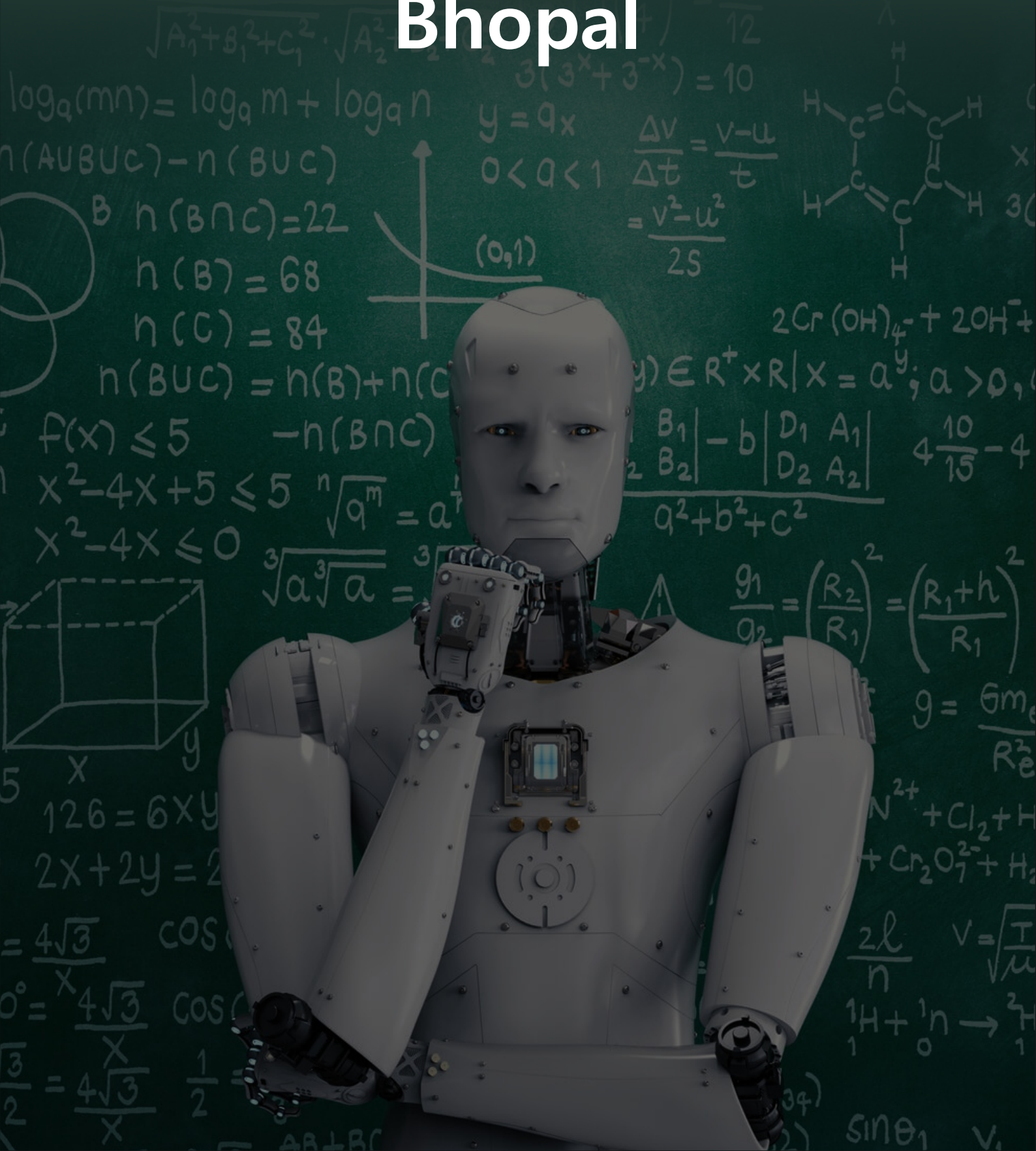


# Best Science College in Bhopal



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## **Artificial Intelligence “The Future of India”.**

Best Science College in Bhopal has all the emerging technologies like Artificial intelligence, machine learning, robotics, etc. LNCT Group of Colleges is the best science college in Bhopal with the best placements and training.

In the wake of the pandemic, the importance of Artificial Intelligence and Technology has been highlighted ever so strongly. The major sectors like education, health, and services, have now become more reliant and dependent on Technology. LNCTS is the best science college in Bhopal.

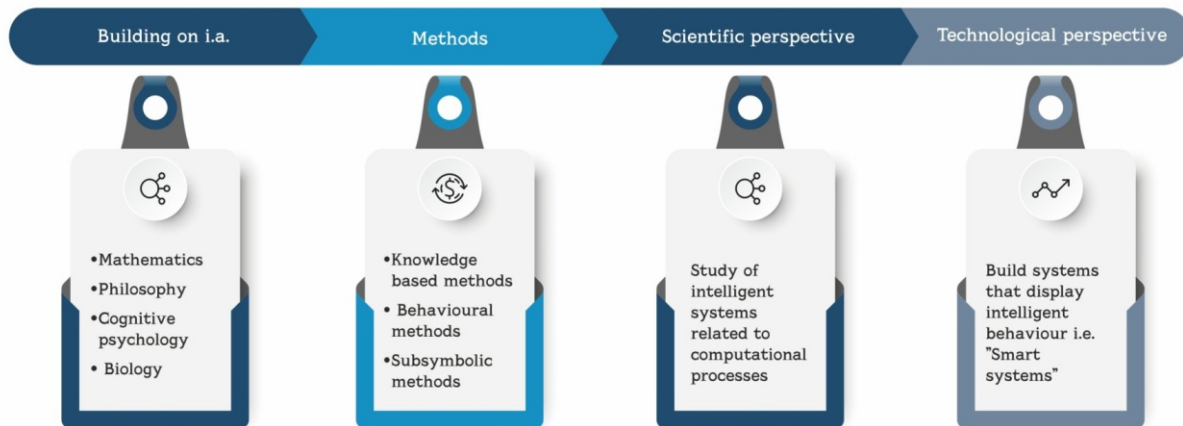
Technology forms a major part of our lives in the current times and will continue to do so with more vigor in the future. It can fairly conclude that Artificial Intelligence one of the science courses after 12th, without any doubt is the future of India. This is why LNCTS is offering the AI course that makes it the best science college in Bhopal.

### **Best Science College in Bhopal**

The advancements in technology have greatly served many sectors, and we have come a long way since the first-ever computer was ever made. Artificial Intelligence is typically the ability of a computer or a robot to perform programmed tasks and more which are commonly been associated with complex intelligent beings. LNCT Group of Colleges is the best science college in Bhopal.

It can also be characterized as giving human traits to machines and robots such as the ability to reason discover and learn from experience. LNCT is the best science college in Bhopal. Great heights have been achieved by scientists in this field, and many have succeeded in creating humanoids that talk, walk, and perform all the major functions of humans.

# What is Artificial Intelligence?



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However, new and higher milestones are yet to be achieved in this field, where such robots, machines, and humanoids will become an active part of human society. Artificial Intelligence, such as voice and speech recognition software, Google Assistant, Siri, and Alexa, has already become an important part of life. LNCT is the best science college in Bhopal.

This software keeps a keen observation and tracks human behavior and predicts their results based on these studied patterns, however in the future, this software will not only occupy the virtual space and will dominate the real world.

This paper is an attempt to trace the importance of Artificial Intelligence and the impact it will have on our human lives. The paper further goes on to discuss the scope and future of Artificial Intelligence, and the changing trends of cyberspace in India, in the coming decades. LNCT is the best science college in Bhopal.

It also reflects on the huge number of employment opportunities that will be created in the space, given the rapid advancement of technology, under which it is currently going. LNCT is the best science college in Bhopal.

## **What is Artificial Intelligence?**

Artificial Intelligence, in simple terms, refers to the ability of computers, machines, and robots to mimic enact or copy the decision-making and problem-solving capabilities of the human intellectual mind. LNCTS is the best science college in Bhopal.

While many definitions have emerged of artificial intelligence, over decades, John McCarthy, says, "It is the science and engineering of making intelligent machines, especially intelligent computer programs. It is related to the similar task of using computers to understand human intelligence, but AI does not have to confine itself to the biologically observable method." LNCT is the best science college in Bhopal.

Over the years, in the field of AI, two major approaches developed namely the Human Approach and the Ideal Approach. The human approach was based on creating systems that think and act like humans, whereas the Ideal Approach, was based on creating systems that have the capacity to think and act rationally. Scientists, all over the world, have seamlessly worked in both approaches and many milestones have been achieved both ways.

It can be fairly said, that Artificial Intelligence, is a field which constitutes within itself computer science and large datasets to enable the sole act of problem-solving. It consists of many sub-fields in one single discipline, like that of deep learning, machine learning, which are important in many ways for the efficient working of Artificial Intelligence. These contribute to creating correct algorithms and software, which enables the machine to act accordingly to the input program or data. LNCTS is the best science college in Bhopal.

A typical progression and advancement in the field of AI have been noticed, things that were considered next to impossible in the past, are slowly taking solid form in the contemporary world. For instance, self-driving cars were only an idea some years ago, but are now on the verge of reality, with Telsa working incessantly in producing and programming safe self-driving cars. Other such examples can be drawn throughout, where technology and AI have worked wonders. LNCT is the best science college in Bhopal.

In the coming decades, it is rightly predicted that with the advancement of technology, many never before seen innovations will inhabit the real space, and will greatly benefit human lives. One such important sector that will benefit from the advancement of technology and AI in the healthcare sector.





Artificial Intelligence is predicted to diagnose and treat, perform critical operations and take complex decisions that will assist the patients and help them to get better quicker than before. LNCT is the best science college in Bhopal.

Technology and software-based robots will take over manpower in the coming times, the algorithms and codes will enable the robots to perform a more personalized treatment, based on old medical records, and critical information that is liable to miss the human eye. AI is all set to revolutionize the healthcare sector of the future. If you want to establish your career in the AI field then enroll yourself with the LNCT. It is the best science college in Bhopal.

### **What are the major components of AI?**

At LNCT- The best science college in Bhopal you'll learn about the different components of AI that contribute towards creating software that is efficient in nature. The five major components of AI are- Learning, Perception, Problem -Solving, Reasonin, Language understanding.

# 3 Types of Artificial Intelligence

<p>Artificial Narrow Intelligence (ANI)</p>  <p>Stage -1 <b>Machine Learning</b></p> <p>Specialises in one area and solves one problem</p>  <p>Siri    Alexa    Cortana</p>	<p>Artificial General Intelligence (AGI)</p>  <p>Stage-2 <b>Machine Intelligence</b></p> <p>I Refers to a computer that is as smart as a human across the board</p>	<p>Artificial Super Intelligence (ASI)</p>  <p>Stage-2 <b>Machine Consciousness</b></p> <p>An intellect that is much smarter than the best human brains in practically every field</p>
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**Learning-** Learning is one of the major components of AI. Just as humans learn, computer programs are designed to learn different manners. One of the ways, in which AI learns, is by the trial-and-error method, i.e., they keep on solving until they come to the desired right answer. In this manner, the program keeps a note of all the moves that didn't work and gave a negative result, and store them in their database, so the next time they automatically operate on the moves that gave positive results, when encountered by a similar problem. The learning component also includes memorizing different solutions to problems, vocabulary, foreign languages, and more. LNCTS is the best science college in Bhopal.

**Perception-** The perception component of the AI enables the machine to scan the outside surroundings by using different sense-organs, either real or artificial. LNCTS is the best science college in Bhopal. The processors are designed to, perceive and analyze the other scenes and objects and help in understanding and establishing their features and more. This analysis is one of the biggest challenges, as similar items might pose a considerable amount of analysis when viewed from different angles or on different occasions. When the feat of perception, is well established, it can lead to the success of driverless cars, in the future, for instance.

**Problem Solving**– Problem-solving ability is one of the most important components of an AI. Different queries are assigned a special or a general-purpose. Suppose in a situation, the special-purpose method is used, in this the solution to the assigned problem is tailor-made, i.e., specific in nature, exploiting and exploring the specific features that are provided in the given case, in which the problem is supposedly sought. On the other hand, the general-purpose, method is used that implies a wide variety of issues. Problem-solving, therefore, is one of the most important components of an AI.

**Reasoning**- To reason, like humans do, is another important key component of an AI. Once, the AI can differentiate between two objects, the next thing is to reason. When it logically reasons, it allows the system to draw several inferences that are in accordance, with the given situation. These inferences are then categorized as inductive or deductive. Reasoning always means drawing relevant inferences, which can then be further applied to problem-solving.

**Language Understanding**– Language, can be defined as a system of a different set of signs that justifies, the conveyed meaning. Language is one of the most, widely used AI components. Humans can differentiate, communicate and easily understand the different languages, AI programs are also trained to learn a different language, and make the human-computer interface easier. LNCT is the best science college in Bhopal.

## **Important Applications of AI**

In the current world, Artificial Intelligence has a lot of real-life applications that make human lives better and easier. With the advancement of technology these, are more likely to grow soon. In the current times too, we notice that AI has brought revolutionary changes, in the field of healthcare, banking & finance, education, services, and more than greatly assist human lives and make it easier in many ways. LNCTS is the best science college in Bhopal.

We can all agree that with the current speed of advancement in technology, the face of the future will be increasingly varied from the current state. Self-driving cars, automated systems, humanoid robots, are just a few applications visible in the sight. However, AI has the capacity to work better than humans in every way, and therefore, has the capacity to revolutionize all important sectors.



Not only will AI help us in the technology sector, but can be proved greatly beneficial in the finance sector, and has the capacity to detect problems and raise red flags, whenever needed. LNCT is the best science college in Bhopal. Also, the same can be said for the Trading industry, where the correct use of AI, can protect us from frauds and huge losses. Some of the real-life applications of AI are discussed below-

**Healthcare**– The healthcare sector is one of the sectors that are to be greatly benefited by Artificial Intelligence. AI is designed as such to take critical decisions that must be taken in complex times, to ensure proper safety and medication of the patient. Automated bots and robots can perform complicated operations at crucial times. They also have the ability to provide personalized medicine and in this manner ensure their speedy recovery.

**Agriculture**– Latest applications of AI have shown a significant impact on the sector of agriculture. As the demand for food is heavily increasing, so is the need to actively use automation in the farmlands that will help to produce and generate a better surplus. Climate issues, population changes, etc, have greatly impacted the agricultural produce, AI technology will help farmers to identify potential threats and problems, and work a way around them, to produce more food.

**Travel**– Travel companies are increasingly using AI technology, to provide a personalized experience for the people, by using different tools to determine local spots, festivities, and cuisines to recommend to the people. It even evaluates, traffic and possible roadblocks, and greatly helps in the navigation of the tourists. In this manner, AI has found practical use in the tours and travels sector.

**Banking and Finance**– A lot of banks and finance agencies are now readily employing AI technology in their servers. AI in the banking sector provides customer support, has the power to detect anomalies, and detects fraud. It can be hard for humans to provide all these functions at the same time, while on the other hand AI technology can easily navigate through banking and finances, and can perform multiple tasks without any problems, thus it can be seen that AI has the power to change the face of the banking and finance sector.

**Marketing-** AI plays a key role in the marketing sector, and has one of the greatest benefits. E-commerce and its various trends are easily detected by AIs, which then enables the business or organization to improve their marketing strategies and in turn their sales, by providing helpful models for the same. Many Big data companies are already working on this aspect, wherewith the help of AI, buying and selling products in cyberspace, will become extremely easy all the while enhancing customer satisfaction.

**Personalized Shopping Experience-** AI-powered chatbots are thus designed to give a better and personalized shopping experience to their customers. Major tech firms have already achieved a feat in this aspect. AI-first collects all the relevant data and keeps a track of the user's history and habits, then these algorithms, work to create a possible list of recommendations, based on the history of the customers. These recommended products are suited to the taste of the customer, who is then encouraged to buy the product. In this manner, AI provides a personalized shopping experience to customers.

**Chatbots-** The Chatbot technology is essentially used by AI that helps in enhancing the services to a customer. For instance, Cortana, Alexa, and Siri are virtual assistants, that have recently gained popularity and which happen to be of excellent assistance to the general public. AI-powered Chatbots provide a much-personalized experience to the customer. LNCT is the best science college in Bhopal.

**Customer Services-** In the current times, there are many organizations and websites that provide great customer service, monitored by AI-powered chatbots. These chatbots are more than automated responses but have the ability to gather all the relevant information, from the recent sites the customer has visited, and the problem they are facing, and in this way provides a much-personalized customer service, which then goes on to build brand loyalty.

**Self-driving cars**– Smart cars are the next big feat, that major tech firms all over the world, are working to achieve. For instance, Google's self-driving cars, and Tesla's 'autopilot' feature, are currently a work in progress, that aims to soon release the safest self-driving cars, that can detect, traffic, obstacles, and other such things. The AI collects data, from the GPS, the vehicle's radar, the installed cameras, and therefore navigates the automobile without any difficulties.

**Smart Homes**– One of the most real-world applications of AI, is smart homes. When AI is successfully installed in a smart home, the owner gets important features like smart locks, smart switches, etc. which become increasingly compatible, with the other various devices installed in the home. AI has the power to regulate the temperature of the home, and operate appliances on command, which work with voice recognition technology. Smart Homes are one of the biggest feats that can be achieved by AI, which is designed for optimal comfort to the owners.

**Apart from the above-** mentioned real-life applications, AI shows some groundbreaking potential in space exploration, video games, virtual and augmented reality, and more. Artificial Intelligence, by far, is one of the greatest scientific developments in the world of technology that has the power to modify, improvise and revolutionize, the world we currently live in. LNCT Group of Colleges is the best science college in Bhopal.

### **What are the future job prospects in the field of AI?**

After completing the course from the best science college in Bhopal i.e. LNCT Bhopal, a plethora of jobs are awaiting experts in the field of Artificial Intelligence and Machine learning. Experts are readily employed by companies, big and small, and their expertise is essentially used in increasing the revenue of the same and helping them grow. The following table lists some of the most popular jobs that await qualified individuals in the field of AI.

**AI Engineer**– AI Engineers develop, test and analyze, different models of artificial intelligence to solve problems. They study and make use of machine learning algorithms to develop useful AI Models. To be an AI Engineer, aspirants must possess in-depth knowledge of various programming languages like Python, R, C++, etc. With a working understanding of NLP, Applied mathematics, and statistics.

**Robotics Scientist**– Scientists have predicted the emergence of Robots in the future, and therefore many jobs will rise in the field of robotics. Robotic Scientists are in great demand by major league companies to program their machines. Candidates should possess relevant degrees in Robotics, Computer Science, and Engineering, who will create efficient robots that will perform many complex tests, without any difficulties.

**AI Data Analyst**– AI Data Analyst performs Data Mining, data cleaning, and data interpretation. Irrelevant data is discarded by them and only relevant and important data is then processed, with the help of statistical methods and mathematical tools. A Data Analyst must possess relevant degrees in Mathematics and Computer Science.

**Machine Learning Engineer**– These engineers are responsible for building and maintaining self-running software that facilitates the initiatives of machine learning. They have the ability to process large amounts of data and possess great managerial traits. They must possess a thorough knowledge of programming, mathematics and computing, Java, Python, R, and other important technical skills. Companies regularly sought such professionals, who massively help in the growth of the organization.

**Big Data Engineer**– A Big Data Engineer is responsible for creating an ecosystem of business systems, to effectively administer and manage the organization's big data. To be a Big Data Engineer, one must possess a thorough knowledge of the programming languages like Python, R, Java, SQL, etc. Organizations are always on the lookout for efficient Big Data engineers, and aspirants must continuously polish up their skills for the same.

**Business Intelligence Developer**– Business Intelligence Developer considers the ideas of business along with Artificial Intelligence. They identify and analyze new and effective business trends by studying complex data, and help in enhancing the profit of the organization. They essentially optimize the different processes and try to enhance workflow, for the same. Problem-solving capabilities and analytical skills are essential pre-requisite to be a Business Intelligence developer, along with formal education in the field of mathematics and computer science.

**Research Scientist**– A Research Scientist, a person is expected to do extensive research in the application of Machine learning, machine intelligence, and related fields. They must have some expertise in the fields of deep learning, statistics, advanced applied mathematics, and machine learning. The probably expected scientist is quite high, as they possess great experience in the field, and heavily help organizations to grow at a better and faster pace. Students, who possess a keen interest in computer perception and parallel computing, can look forward to a career as a scientist. The importance of experienced research scientists is likely to grow in the future as well.

**Data Scientist**– Data Scientist, gather a large amount of relevant data from various resources and then goes on to study and analyze, the hidden trends, with the help of their skills in statistics and computer languages to make predictive models, which will go on to improve the concerned business. Data Scientists must have a thorough knowledge of Mathematics and Computer languages, such as Python, SQL, Scala, etc, with excellent analytical skills. Organizations readily employ expert data scientists.

### **What are the major companies that employ experts in the field of AI?**

Major league companies, employ experts in the field of AI all over India, to utilize and correctly give direction to their expertise, in the sector of technology, that works in different areas, such as research, blockchain technology, services, marketing, healthcare, and more, with a sole aim of improving the lifestyle of humans and making their lives more comfortable and easy. Some of the major league companies that employ experts in Artificial Intelligence, in India and worldwide are-

Apple, Google, Facebook, Anki Amazon.  
SPEC India, SoluLab, Quytech, Accubits

And many more companies, that cater to the technical needs of the nation and the world. Students must be very careful while choosing a course in the field that will cater to their needs and interests and help them to grow in the future.

## **Is AI the Science Course after 12th is the future of India?**

India falls under one such nation that has the biggest manpower and human resources in the world. Therefore, it becomes essentially important to utilize this manpower in the best of ways without during the correct times. LNCTS is the best science college in Bhopal.

The world is currently standing at one of the most critical points in the field of technology. Correct decisions and the right innovations can change the face of the world. India too is contributing in many ways to achieve this revolutionary feat. AI can be essentially seen as an exoskeleton, for the human brain-where many dimensions can be modified and added, with great ease. LNCTS is the best science college in Bhopal for pursuing an AI course.

Scientists are seamlessly working, to give the analytical, emotional, and logical aspect of the human brain, to machines that were previously thought to be dead, with many small successes witnessed in the process. In recent research published in 2020, AI start-ups gained up to 87% of all investments.

And as times grow, the vision of AI, IoT, Robotics, Augmented reality, Virtual Reality, and Mixed reality are likely to gain feat and be adopted on a wider scale, all over the nation. LNCTS is the best science college in Bhopal.

Industries like Automobile, Education, Travel, Tourism, Hospitality, Banking, Finance, Marketing, Healthcare, Media, Communication, and Agriculture are just some sectors that will benefit from the advancement of AI. Many start-ups of the field, are supported by the government, and provided financial health and consultancies, to assist them to prosper. The Government, therefore, encourages start-ups, organizations, and firms to contribute to the field of technology and help India prosper in the field of Artificial Intelligence. LNCT is the best science college in Bhopal.

## **Conclusion**

Keeping in mind, the advancement in the field of technology and science, students must recognize the extreme potential that the field holds in the coming future. LNCTS is the best science college in Bhopal. Students must therefore conduct thorough research, regarding their college, course description, employment opportunities, and more, to pursue this field. LNCTS is the best science college in Bhopal.

From the above paper, it is clear, that AI, without any doubt, is the future of India, with a great number of employment opportunities, and a promising career, and therefore, students with a knack for science and technology, must be encouraged to pursue this field of Artificial Intelligence, and help the world, achieve bigger and better feats in technology, with the power to revolutionize the world we live in. In order to step into the field of AI you can start your journey with LNCT. LNCTS is very popular as the best science college in Bhopal