<u>Learn Upskilling Courses in B.Tech & M.Tech (Artificial Intelligence & Data Science)</u>

COURSE TITLE	Artificial Intelligence & Data Science
COURSE IMAGE	Artificial Intelligence Machine Learning Data Science Big Data
COURSE DESCRIPTION	Man-made brainpower (AI) and Data Science (DS) gain its criticalness because of the investigation of Internet. With the fast development of PCs and registering, AI and DS are inescapable and give ground-breaking answers for savvy situations including Internet of Things and Industry 4.0. Computer based intelligence and DS conveys information driven arrangement utilizing computational standards, techniques and frameworks for separating information from information and present day computational frameworks that exhibit capacities of discernment, thinking, learning and activity that are run of the mill of human insight. Back in the 1950s, the fathers of the planet Minsky and McCarthy, described AI as any task performed by a program or a machine. Building human-level points of view through the formation of manmade consciousness (AI) is the best in class in Computer Science. Wise machines are impacted by developing advances, keen gadgets, sensors, figuring power, quicker information preparing, colossal capacity and human-machine communication abilities. Information Science is an interdisciplinary field with the capacity to remove information/experiences from information - be it organized, unstructured, or semi-organized information. Twinned with Artificial Intelligence, progressively productive answers for find important data from colossal pools of information are conceivable today, with information from different sources - sensors, pictures, gushing video, satellite, clinical symbolism and the cloud. This B.Tech/M.Tech program has a far reaching inclusion of applied arithmetic utilized in information science and man-made consciousness while setting up the understudies to investigate, structure and analysis answers for issues. The educational plan targets specialized and structure abilities, AI

devices, and information the board, with the goal of making creative systems to take care of testing genuine issues. "Artificial intelligence will reach human levels by around 2029. Follow that out further to, say, 2045, we will have multiplied the intelligence, the human biological machine intelligence of our civilization a billion-fold." Artificial Intelligence (AI) refers to the simulation of human intelligence in machines that are programmed to think like humans and mimic their actions. In today's technology-driven world, data is just a bit like the raw diamond, and Data Science is that the mining infrastructure set-up that creates the information useful for transforming the world. Data science is an expansive field of study relating to information frameworks and procedures, planned for keeping up informational indexes and determining significance out of them. Information researchers utilize a blend of apparatuses, applications, standards and calculations to understand arbitrary information groups. practically a wide range of associations today are creating exponential measures of information around the globe, it gets hard to screen and store this information. Information science centers around information demonstrating and information warehousing to follow the everdeveloping informational collection. The data separated through information science applications are utilized to manage business procedures and arrive at authoritative objectives.



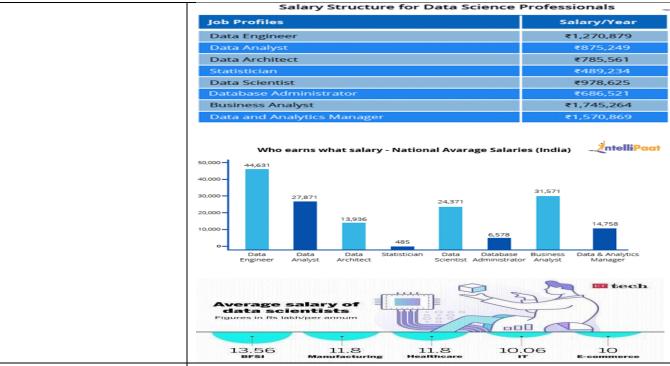
PROGRAM OUTCOMES:

Empower graduates to structure and tackle the intensity of AI in expansive application fields from vision to cutting edge independent frameworks.

Inspect a lot of information to reveal shrouded designs, relationships, bits of knowledge, and assist associations with tackling their information to recognize new chances.

Obtain expertise to turn actionable insights and cutting-edge technology

Inculcate independent research ability that addresses fundamental problems. SYLLABUS FOR B.TECH/M.TECH - CSE (AI & DS) Computing for Data Science, Optimization for Data Science, Deep Learning, IoT systems and the Cloud, Communication Skills, Maths, Introduction of AI, Programming and Logic Building skills, Data Science and Machine Learning, Python Programming, Iava Programming, Advance lava Programming, Operating Systems, DBMS. Introduction to Machine learning, Signal Processing, Introduction to Drata Structures, Computer Architecture Algorithms, Robotics, informatics, Deep learning, Introduction to Brain and Neuroscience, Introduction to Industry 4.0, IOT, Computer Networks, Data Visualization, and other prominent subjects related AI with Advanced AI electives. Pursued by the scholars from 1st semester to 8th semester alongside 2 projects, 1 mini-project in or after 6 semester and 1 final project in 8 semester for B.Tech and from 1st & 2 nd semesters theory and 3 nd and 4 th Semesters final projects for M.Tech. COURSE JOB SCOPE According to an IBM report, Data Science jobs would likely grow by 30 percent. The estimated figure of job listing is 2,720,000 for Data Science in 2020. Also, according to the US Bureau of Labor Statistics, about 11 million jobs will be created by 2026. India is expected to see 1.5 lakh new job openings in data sciencethis year, which is an increase of about 62% from last year, according to a report prepared by an edtech firm. A majority of these jobs would preferably be for professionals with less than five years of experience.Jan 20,2020 For three years in a row, the role of a data scientist has been named the number one job in the US by Glassdoor. According to a report by the US Bureau of Labour Statistics, the rise of data science needs will create roughly 11.5 million job openings by 2026. The World Economic Forum		into innovative products towards solving real-world problems.
Computing for Data Science, Optimization for Data Science, Deep Learning, IoT systems and the Cloud, Communication Skills, Maths, Introduction of Al, Programming and Logic Building skills, Data Science and Machine Learning, Python Programming, lava Programming, Advance lava Programming, Operating Systems, DBMS, Introduction to Machine learning, Signal Processing, Introduction to Drones, algebra, Data Structures, Computer Architecture, Algorithms, Robotics, informatics, Deep learning, Introduction to Brain and Neuroscience, Introduction to Industry 4.0, IOT, Computer Networks, Data <u>Visualization</u> , and other prominent subjects related Al with Advanced Al electives. Pursued by the scholars from 1st semester to 8th semester alongside 2 projects, 1 mini-project in or after 6 semester and 1 final project in 8 semester alongside 2 projects, 1 mini-project in or after 6 semester and 1 final project in 8 semester for B. Tech and from 1st & 2 nd semesters theory and 3 nd and 4 th Semesters final projects for M. Tech. COURSE JOB SCOPE According to an IBM report, Data Science jobs would likely grow by 30 percent. The estimated figure of job listing is 2,720,000 for Data Science in 2020. Also, according to the US Bureau of Labor Statistics, about 11 million jobs will be created by 2026. India is expected to see 1.5 lakh new job openings in data sciencethis year, which is an increase of about 62% from last year, according to a report prepared by an edtech firm. A majority of these jobs would preferably be for professionals with less than five years of experience. Jan 20,2020 For three years in a row, the role of a data scientist has been named the number one job in the US by Glassdoor. According to a report by the US Bureau of Labour Statistics, the rise of data science needs will create		· · · · · · · · · · · · · · · · · · ·
Learning, IoT systems and the Cloud, Communication Skills, Maths, Introduction of AI, Programming and Logic Building skills, Data Science and Machine Learning, Python Programming, lava Programming, Advance lava Programming, Operating Systems, DBMS, Introduction to Machine learning, Signal Processing, Introduction to Drones, algebra, Data Structures, Computer Architecture, Algorithms, Robotics, informatics, Deep learning, Introduction to Brain and Neuroscience, Introduction to Industry 4.0, IoT, Computer Networks, Data Visualization, and other prominent subjects related AI with Advanced AI electives. Pursued by the scholars from 1st semester to 8th semester alongside 2 projects, 1 mini-project in or after 6 semester and 1 final project in 8 semester for B.Tech and from 1st & 2nd semesters theory and 3nd and 4th Semesters final projects for M.Tech. COURSE JOB SCOPE According to an IBM report, Data Science jobs would likely grow by 30 percent. The estimated figure of job listing is 2,720,000 for Data Science in 2020. Also, according to the US Bureau of Labor Statistics, about 11 million jobs will be created by 2026. India is expected to see 1.5 lakh new job openings in data sciencethis year, which is an increase of about 62% from last year, according to a report prepared by an edtech firm. A majority of these jobs would preferably be for professionals with less than five years of experience.Jan 20,2020 For three years in a row, the role of a data scientist has been named the number one job in the US by Glassdoor. According to a report by the US Bureau of Labour Statistics, the rise of data science needs will create		SYLLABUS FOR B.TECH / M.TECH - CSE (AI & DS)
According to an IBM report, Data Science jobs would likely grow by 30 percent. The estimated figure of job listing is 2,720,000 for Data Science in 2020. Also, according to the US Bureau of Labor Statistics, about 11 million jobs will be created by 2026. India is expected to see 1.5 lakh new job openings in data sciencethis year, which is an increase of about 62% from last year, according to a report prepared by an edtech firm. A majority of these jobs would preferably be for professionals with less than five years of experience. Jan 20,2020 For three years in a row, the role of a data scientist has been named the number one job in the US by Glassdoor. According to a report by the US Bureau of Labour Statistics, the rise of data science needs will create		Learning, IoT systems and the Cloud, Communication Skills, Maths, Introduction of AI, Programming and Logic Building skills, Data Science and Machine Learning, Python Programming, Java Programming, Advance Java Programming, Operating Systems, DBMS, Introduction to Machine learning, Signal Processing, Introduction to Drones, algebra, Data Structures, Computer Architecture, Algorithms, Robotics, informatics, Deep learning, Introduction to Brain and Neuroscience, Introduction to Industry 4.0, IOT, Computer Networks, Data Visualization, and other prominent subjects related AI with Advanced AI electives. Pursued by the scholars from 1st semester to 8th semester alongside 2 projects, 1 mini-project in or after 6 semester and 1 final project in 8 semester for B. Tech and from 1st
year, which is an increase of about 62% from last year, according to a report prepared by an edtech firm. A majority of these jobs would preferably be for professionals with less than five years of experience. Jan 20,2020 For three years in a row, the role of a data scientist has been named the number one job in the US by Glassdoor. According to a report by the US Bureau of Labour Statistics, the rise of data science needs will create	COURSE JOB SCOPE	30 percent. The estimated figure of job listing is 2,720,000 for Data Science in 2020. Also, according to the US Bureau of Labor Statistics,
number one job in the US by Glassdoor. According to a report by the US Bureau of Labour Statistics, the rise of data science needs will create		year, which is an increase of about 62% from last year, according to a report prepared by an edtech firm. A majority of these jobs would preferably be for professionals with less than five years of
predicts that by 2022, data scientists and analysts will become the number one emerging role in the world.		number one job in the US by Glassdoor. According to a report by the US Bureau of Labour Statistics, the rise of data science needs will create roughly 11.5 million job openings by 2026. The World Economic Forum predicts that by 2022, data scientists and analysts will become the number
COURSE SALARY Average salary in abroad \$ 139,840/year	COURSE SALARY	
RANGE Average salaries in India is Rs.3.6L to 15.2L	RANGE	



COURSE JOB ROLES

Career path one can choose after the course

- Machine Learning Engineer
- Data Scientist
- Artificial Intelligence Engineer
- Data Analyst
- Machine Learning Architect



COURSE PROMINENT
JOB COMPANYS

(CO)	Mu Sigma Inc. Data Scientist salaries	₹600,000/yr
Pullius Singernia	India	Range: ₹302,000 - ₹745,000
	Tata Consultancy Services Data Scientist salaries	₹860,000/yr
SARALES .	India	Range: ₹207,000 - ₹1,930,000
_	Accenture Data Scientist salaries	₹1,000,000/yr
	India	Range: ₹293,000 - ₹2,700,000
	Microsoft Data Scientist salaries	₹1,930,000/yr
	India	Range: ₹750,000 - ₹2,850,000
Source and	Cognizant Data Scientist salaries	₹753,000/yr
	India	Range: ₹428,000 - ₹1,620,000
ractal.	Fractal Analytics Data Scientist salaries	₹1,150,000/yr
	India	Range: ₹737,000 - ₹1,900,000