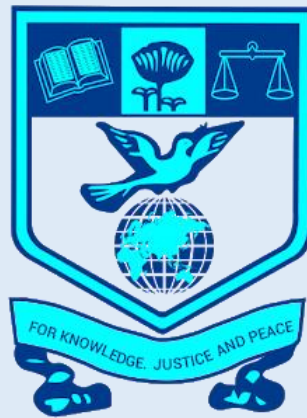# NEHRU MEMORIAL COLLEGE

(AUTONOMOUS)

NATIONALLY ACCREDITED WITH "A" GRADE BY NAAC

PUTHANAMPATTI, TRICHY – 621007

Data Science

1.1.1 Curricula developed and implemented have relevance to the local, national, regional and global developmental needs

Name of the Programme	Course code	Title of Course	Need	Description
B.Sc. (DATA SCIENCE)	18DS101	CC-I Java Programming	Global	Acquire the basic concepts of java
B.Sc. (DATA SCIENCE)	18DS102L	CP-I Java Programming Lab	Global	Understand the concept of java programming
B.Sc. (DATA SCIENCE)	18DS103A	AC-I Basic Statistics I	Global	Learn the basics of probability and statistics
B.Sc. (DATA SCIENCE)	18DS104L	AP-I R Programming Lab	Local	To develop the basic r programming
B.Sc. (DATA SCIENCE)	18DS205	cc-II Database Systems	National	Awareness of database systems
B.Sc. (DATA SCIENCE)	18DS206L	CP-II MySQL Lab	National	How to write and execute basic queries
B.Sc. (DATA SCIENCE)	18ds207A	AC-II Basic Statistics II	Global	Learn the basics of probability and statistics
B.Sc. (DATA SCIENCE)	18DS104L	AP-I R Programming Lab	Global	To develop various skills using r programming
B.Sc. (DATA SCIENCE)	18DS308	CC-III python programming and data structure	Global	Understand the concept of python

B.Sc. (DATA SCIENCE)	18DS309L	CP-III Python Programming Lab	Global	To develop the basic concepts of python
B.Sc. (DATA SCIENCE)	18DS310A	AC- III Operations Research – I	Local	Learn the various concept of operation research
B.Sc. (DATA SCIENCE)	18DS414L	AP-II Mathematical Tool Lab	Local	To learn the basics of sci lab
B.Sc. (DATA SCIENCE)	18XDS31L	SKBC- Office Automation / HTML Lab	Local	Describe the essential features of ms-office
B.Sc. (DATA SCIENCE)	18DS411	CC-IV Data Mining and Visualization	National	Knowledge to connect real time problems with Techniques to find insights in data
B.Sc. (DATA SCIENCE)	18DS412L	CP-IV Data Mining and Visualization Lab	National	Knowledge to connect real time problems with Techniques to find insights in data and visualizing the charts
B.Sc. (DATA SCIENCE)	18DS413A	AC-IV Operations Research – II	Local	Learn the various optimization techniques and their usage
B.Sc. (DATA SCIENCE)	18DS414L	AP-II Mathematical Tool lab	Local	Learn programs using sci lab
B.Sc. (DATA SCIENCE)	18XDS42L	SKBC- Shell Programming/ Animation Lab	Local	Develop the shell scripts to solve the problems
B.Sc. (DATA SCIENCE)	19DS515	CC-V no SQL Databases	National	Understand the difference between SQL and no SQL

B.Sc. (DATA SCIENCE)	19DS516	CC-VI Data Science for Business	Global	Learn to apply fundamental concepts of algorithm to proceed data
B.Sc. (DATA SCIENCE)	19DS517	CC-VII Machine Learning	Global	Knowledge in machine learning analytical skill
B.Sc. (DATA SCIENCE)	19DS518L	CP-V NoSQL Lab	Local	Understand and practice mango db
B.Sc. (DATA SCIENCE)	19DS519 a/b	MBEC-I Genetic algorithm/Data Security	National	Understand basic concepts and applications of genetic algorithm/describe the concepts of networking and cryptography techniques
B.Sc. (DATA SCIENCE)	19DS5N	NMEC Fundamentals of Data Science/ Data Science for Entrepreneurship Development	Local	Describe the key concepts in data science and tool kit used for data scientist
B.Sc. (DATA SCIENCE)	19DS620	CC-VIII Big Data Analytics	Regional	Knowledge in analytical skill use knowledge in big data
B.Sc. (DATA SCIENCE)	19DS621L	CP-V Big Data Analytics Lab	Global	Knowledge in analytical skill use knowledge in big data
B.Sc. (DATA SCIENCE)	19DS622 MP	CC-IX Mini project	Global	Knowledge in developing data products
B.Sc. (DATA SCIENCE)	19DS623 a/b	MBEC-II Simulation and Modelling /Data Warehouse Tools and Techniques	National	Define the basics of simulation modelling/learn the role of xml and how to process the data

B.Sc. (DATA SCIENCE)	19DS624 a/b	MBEC-III Cloud Computing /Internet of Things	Regional	Manipulating cloud services/state the basics of internet of things and protocols
M.Sc. Data Science	19PDS101	Mathematics for Data Science	Local	Acquire fundamental mathematical knowledge in data science
M.Sc. Data Science	19PDS102	Advanced Data Base Systems	National	Awareness of Various Data Base Systems
M.Sc. Data Science	19PDS103	Data Mining Techniques	National	Knowledge to connect real time problems with Techniques to find insights in data
M.Sc. Data Science	19PDS104	Information Security	Global	Awareness of Security issues
M.Sc. Data Science	19PDS105L	Data Base Systems & Data Mining Lab	National	Understand the concept of database and data mining
M.Sc. Data Science	19PDS206	Probability and Statistical Computing	Global	Understand the probability and statistical concepts for data science
M.Sc. Data Science	19PDS207	Artificial Intelligence and Machine Learning	Global	Knowledge in Machine Learning analytical skill
M.Sc. Data Science	19PDS208L	Machine Learning Lab (Python/R)		
M.Sc. Data Science	19PDS215a	Python Programming	Global	Knowledge in machine Learning analytical skill using Python programming
M.Sc. Data Science	19PDS215b	R Programming	Local	Knowledge in machine Learning analytical skill using R programming
M.Sc. Data Science	19PDS216a	Health Care Data Analytics	National	Knowledge to connect data science with healthcare issues
M.Sc. Data Science	19PDS216b	Social Media Mining	National	Awareness of Social Media

M.Sc. Data Science	19PDS309	Multivariate Techniques	Global	Understand the issues of the multivariate
M.Sc. Data Science	19PDS310	Big Data Analytics	Global	Knowledge in analytical skill use knowledge in Big Data
M.Sc. Data Science	19PDS311L	Big Data Analytics –Lab		
M.Sc. Data Science	19PDS317a	Natural Language Processing	Global	Analyse natural language to identify the insights
M.Sc. Data Science	19PDS317b	Financial Risk Analytics	Regional	Knowledge in analytical skill use knowledge in financial risk analysis
M.Sc. Data Science	19PDS318a	Cloud and Web Intelligence	Global	Manipulating the global Cloud Services.
M.Sc. Data Science	19PDS318b	Customer Relationship Management	National	Knowledge to marketing management
M.Sc. Data Science	19PDS412	Deep Learning	Global	Algorithms in Deep Learning identify important insights more precisely without human interactions
M.Sc. Data Science	19PDS413	Predictive Analytics	National	Knowledge to connect past data with future predictions
M.Sc. Data Science	19PDS414L	Predictive Analytics –Lab		
M.Sc. Data Science	19PDS419a	Business Intelligence	Global	To learn about business intelligence methods
M.Sc. Data Science	19PDS419b	Image and Video Analytics	Global	To know the methods involved in image and video analysis
M.Sc. Data Science	19PDS420P	Internship/Project Work	National	Deserve to seek employment