



**NALLAMUTHU GOUNDER MAHALINGAM COLLEGE (AUTONOMOUS),
POLLACHI ACCREDITED BY NAAC
AN ISO 9001:2015 CERTIFIED INSTITUTION POLLACHI - 642001**

DEPARTMENT OF B.Sc (CS) with Data Analytics

VALUE ADDED COURSE: Fundamentals of Data Science and Big Data Analytics

Course Code: (22VAD201)

Course Objective

- ❖ To Inculcate the overview of Data science in computing
- ❖ To Instill the fundamentals of big data analytics



Course Duration: 30 Hours

Department of Computer Science with Data analytics

Value Added Course

Fundamentals of Data Science and Big Data analytics

Course Objective

The objective of this course is to expose the students to the knowledge of Data Science and the real-world applications of data science in business and academia with a usecase

Course Outcome (CO)

At the end of this course, students should be able to:

- 1) Develop the knowledge of Data Science and Data Analytics
- 2) Career Opportunities in Data Science
- 3) Analyze a data set for a small problem

Syllabus

Unit – 1

Digital Data – Classification of Digital Data -What is Data Science – Applications of DataScience – Historical Background of Data Science – Basic components – How Data Science works – Main Processes of Data Science (10 Hours)

Unit – 2

Data Science Tools - Real Life Usage of Data Science Systems – Top Industry Players of Data Science – Career opportunities – Challenges in Data Science (10 Hours)

Unit - 3

Big Data – Characteristics of Big Data – Big Data Analytics – Types of Big Data analytics – Advantages – Real Time Applications of Big Data analytics - Difference between qualitative and quantitative analysis – Difference between Data Analytics and Data Analysis – Sample Case Study on Data analytics (10 Hours)

Reference

<https://databasetown.com/introduction-to-data-science-a-beginners-guide/>

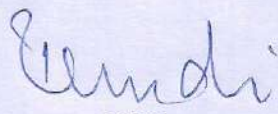
<https://www.fsm.ac.in/bigdata/csha.pdf>

https://www.pvpsiddhartha.ac.in/dep_it/lecture%20notes/FBDA1/FBDA%20UNIT-1.pdf



PRINCIPAL

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M. G. M. COLLEGE, POLLACHI



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Dr. E. RAMA DEVI, MCA., M.Phil., Ph.D.,
Associate Professor & Head
Department of Computer Science
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NGM College, Pollachi - 642 001.

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ARUTCHELVAR DR.N.MAHALINGAM



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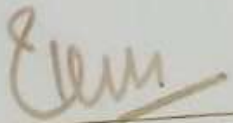
Value Added Course

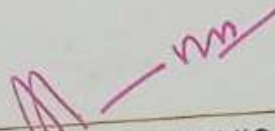
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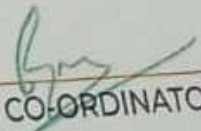
of **I B.SC DA** department

has successfully completed a Value Added Course
FUNDAMENTALS OF DATA SCIENCE
entitled **AND BIG DATA ANALYTICS - A PRACTICAL** and
APPROACH

secured a mark of **61** out of 100


COURSE TEACHER


DEAN - ACADEMIC


IQAC CO-ORDINATOR


PRINCIPAL

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ARUTHIYALAR DR. N. SATHANARAYAN



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