



MAHATMA GANDHI UNIVERSITY

Kottayam, Kerala

**SCHOOL OF
DATA
ANALYTICS**



Prof.(Dr.)Sabu Thomas
Hon. Vice Chancellor
Mahatma Gandhi
University
Kottayam



Prof. (Dr.) C.T.
Aravindakumar
Pro Vice
Chancellor
Mahatma Gandhi
University
Kottayam



Prof. (Dr.)
Prakashkumar
B
Registrar
Mahatma
Gandhi
University
Kottayam



ABOUT M. G. UNIVERSITY

Established on 2nd October 1983 in the name of the Father of our nation, Mahatma Gandhi, by the Government of Kerala as a State University, Mahatma Gandhi University Kottayam has grown to the position of the Best University in Kerala bagging the Chancellor's Award three times during 2016, 2018 and 2020. It was reaccredited by NAAC in 2017 with A Grade and Score 3.24 out of 4.00. We have been included in Times Higher Education world universities ranking 2022 in the band 400-500. In the NIRF ranking we are 30th at National Level and in the Atal Ranking 2022 for Innovation and Achievements, we are 3rd at National Level. The CSIR has rated us with 13th rank for intellectual productivity and NISTADS has ranked it 19th at National Level in terms of h- index for scientific publications. At present the University has 17 Schools offering postgraduate and research programs in Arts and Humanities, Science and Technology, Social Science, Commerce and Management Science disciplines. The University welcomes students irrespective of caste, creed and nationality and has an inclusive policy.



MISSION

- To enhance data literacy among the public and decision-makers to foster the growth of a welfare society.
- To bring out innovations in data visualization, analysis and interpretation for forecasting and effective project implementation.
- To democratize data access to nurture a culture of genuine and impactful interdisciplinary research and consultancy.
- To train skilled manpower with values and ethics to meet the emerging challenges of both academia and industry.
- To emerge as a Centre of Excellence in Data Science and Analytics with global standards and expertise through National/International collaboration and linkage.

VISION

"HARNESS THE POWER OF DATA USING THE TOOLS OF DATA SCIENCE & ANALYTICS TO ACCELERATE INNOVATION IN PROBLEM-SOLVING, DECISION MAKING, RESOURCE MANAGEMENT AND TRANSLATIONAL RESEARCH."





ABOUT SCHOOL

In the present data driven world all decisions and planning are deep rooted in Data Analytics and Data Science. The School of Data Analytics is established to train students in all aspects of Data Science and Data Analytics to meet the demand from scientific and industrial fields as well as business/health/institutes. In the new era of increasing thrust on interdisciplinary applications in Statistical Data Analytics and Data Science, there is wide scope and potential for postgraduate and research level interdisciplinary programs in these disciplines one full semester Project Work and Internship are part of this program and will be carried out in reputed national/ international level research institutes/ universities/ industries etc. giving wide exposure for research and on the job training.

DIRECTOR'S SPACE

Prof (Dr) K. K. Jose,
The Hon. Director, School of
Mathematics & Statistics and School
of Data Analytics at Mahatma Gandhi
University, Kottayam. Dr. Jose is an
eminent academician who had
rendered more than 40 years of
meritorious service as a Principal of
repute, Professor & Head of the
Department, teacher, researcher and
organizer. He has successfully guided
25 research scholars and published
more than 6 books & 150 research
papers in the national & international
journals, bestowed with several
awards like Fellow of ISI, FRSS(U.K),
FISPS, FISMS, etc. He is the one who
is able to guide the students in right
direction to achieve their goals and
ambition.

PROGRAMS OFFERED

- 1. M. Sc. Data Science & Analytics**
- 2. Research Leading to Ph. D.**
- 3. P. G. Diploma in Data Science and Data Analytics**

ELIGIBILITY:

BSc Degree (Core subject as
Mathematics/Statistics/Computer Science)
BTech(CS IT)
BCA
with 55% marks
Admission through Common Admission Test (CAT)
in May / June

ADMISSION CRITERIA:

Admission will be solely on the basis of a rank list prepared as per the score obtained in the Common Admission Test.

Test Syllabus: Graduate level
Mathematics (25%), Statistics (25%),
Computer Science (25%), Logical
reasoning, General Mental Ability,
Numerical Ability (25%).

Number of seats:20+,
4(International), 4 (National Outside
Kerala), 1 (Sports/ Cultural Quota)
Statutory Reservations Allowed.

STUDENTS CORNER

School of Data Analytics is guiding through a career developing program. In the current competitive world students need to come up with their skills, which makes the course more interactive and meaningful. Students come across to meet new trending ideas.





PLANNING & DEVELOPMENT

The way of journey becomes smoother with a proper guidance. The eminent faculties are there to guide the students through the right path. Molding the students within the quality of the subject can ensure the students career.



FACULTY



Prof. (Dr) K K Jose
Hon. Director (SDA)



Dr. Ancy Joseph
Coordinator (SDA)



Dr. Satheesh S



Dr. Sharon Susan Jacob



Mr. Jiby Joseph



Ms. Abseena Habeeb



Dr Sandhya E



Ms. Beteena Kurian



Dr. Ajitha Sasi



Dr. Anupa Sunny



Dr. Silpa Subhash



Mr. Muhammad Rais



Dr Sayooj Aby Jose
IMU Breakout Fellow,
Academic Ambassador (SMS)

Administrative Staff



Mr. T. S. Rajesh
(A.O.)



Mr. Nirmal George
(A.A.)



Ms Ammu Raju

PROGRAM STRUCTURE

The post graduate course is held in 4 semesters with 18 core courses, 5 elective courses, and an open course offered from another school. Students have to undergo one full semester project work and internship as part their curriculum in reputed national / international level research institutes / universities / industries etc. giving wide exposure for research and on the job training.

CORE COURSE

- . INTRODUCTION TO DATA SCIENCE& DATA ANALYTICS
- . LINEAR ALGEBRA AND MATRICES
- . PROBABILITY AND DISTRIBUTION THEORY
- . DATA BASE MANAGEMENT SYSTEMS
- . PROGRAMMING IN PYTHON FOR DATA SCIENCE
- . STATISTICAL INFERENCE
- . SAMPLING METHODS & DESIGN OF EXPERIMENTS
- . APPLIED MULTIVARIATE ANALYSIS
- . APPLIED REGRESSION ANALYSIS
- . PROGRAMMING IN R FOR DATA ANALYTICS
- . DATA VISUALIZATION AND PRESENTATION
- . MACHINE LEARNING
- . STOCHASTIC MODELING & TIME SERIES FORECASTING
- . ARTIFICIAL INTELLIGENCE

ELECTIVE COURSE

- . NEURAL NETWORKS AND DEEP LEARNING
- . BAYESIAN INFERENCE & COMPUTING
- . BIG DATA AND HADOOP
- . INFORMATION RETRIEVAL TECHNIQUES
- . DATA WAREHOUSING & DATA MINING
- . WEB SCRAPING AND TEXT MINING
- . NATURAL LANGUAGE PROCESSING WITH PYTHON
- . FRAUD ANALYTICS
- . INTERNET OF THINGS IN THE CLOUD
- . OPERATIONS RESEARCH
- . CLOUD COMPUTING
- . BUSINESS INTELLIGENCE & ANALYTICS
- . DATA ANALYTICS COMPUTING
- . COMPLEX NETWORK ANALYSIS
- . BIostatISTICS AND EPIDEMIOLOGY
- . BIOINFORMATICS AND COMPUTATIONAL BIOLOGY
- . ADVANCED RESAMPLING TECHNIQUES
- . TIME SERIES ANALYSIS & FORECASTING
- . DEMOGRAPHY & POPULATION DYNAMICS
- . INDUSTRIAL STATISTICS & QUALITY CONTROL

FACILITIES

SDA has well equipped modern Computer Lab with latest innovation and technology to impart practical training for students in all areas of Data Science & Data Analytics





INTERACTIVE SESSIONS

Asking doubts helps the tutor assess your level of understanding of a concept while it clarifies the concept for you. This habit of asking good questions and doubts helps you to develop the interpersonal skills.



TEACHING CORNER

Eminent teachers can mould and inspire students with a thirst for knowledge and make classrooms live with innovation and creativity to strengthen career opportunities and entrepreneurship.



SELF DEVELOPMENT

Students have the space to develop their own skill through presentations, seminars, group discussions. Effective communication skills are a valuable life skill, which will help you in your further education and in your future careers.





WORKSHOPS

- **Workshop on Statistical methods & R Programming, December 2021**
- **Orientation Programme in Mathematical Sciences, December 2021**
- **International Conference on Mathematics, Statistics & Data Science, February 2022**
- **Seminar on Recent Developments in Official Statistics & National Statistical System in India, August 2022**
- **Analytics & Data Summit, August 2022**
- **National Mathematics Day Celebration, December 2022**
- **International Workshop on Differential Equation & Applications, January 2023**
- **Industrial training by SMEC Lab, Info Park, Kakkanad, February 2023**
- **National Science Day Celebration & International Lecture Series, March 2023**
- **One Day Workshop on Data Science & Data Analytics, March 2023**
- **Workshop on High Dimensional Data & AI/ML Algorithms with Applications, Savitribai Phule Pune University, March 2023**
- **Workshop on Machine Learning Algorithms & Their Applications, CUSAT & Wells Fargo Bank, March 2023**



INTERNATIONAL COLLABORATIONS & LINKAGES



- International Skills Development Corporation (ISDC), U.K
- Institute of Analytics (IoA), U.K
- School of Informatics and Data Science, Hiroshima University, Japan
- Al. I. Cuza University of Iasi, Romania
- Technical University Gheorghe, Asachi of Iasi, Romania





- **The Workshop on Data Analytics and Machine for Clinical Research was conducted.**
- **International Seminar in Global Horizon: Exploring Research Opportunities**
- **International Lectures on Machine Learning Applications in Retail Banking by Dr. Lekshmi M. Nair, Vice President Citi Bank, Texas, USA and Senior Data Scientist, USAA, Texas**
- **International Lectures on Classification Problems with Applications in Medical Science by Dr. Kuldeep Kumar, Centre for Data Analytics, Bond University, Australia**





OUR OTHER COLLABORATIONS

- **IPSR Solutions, Kottayam, Kerala**
- **IBM India Software Solutions, Kochi, Kerala**
- **Phuket Rajabhat University, Thailand**
- **Basque Centre for Applied Mathematics, Spain**





CASE STUDIES & PROJECTS

- **School of Informatics and Data Science, Hiroshima University, Japan**
- **Techgentsia software technology pvt. Ltd, Cherthala Infopark, Pallippuram, Kerala**
- **SMEC Lab, Infopark, Kochi, Kerala**





CULTURAL PROGRAMMES & CELEBRATIONS





SOCIAL SERVICES & CAMPUS CLEANING





Nakul G Kumar

BATCH 2021-23

School of Data Analytics

- **Intern School of Informatics
and Data Science,
Hiroshima University, Japan**

- **Achieved 9 Rank in National Level
Essay Writing Competition By the
Ministry of Statistics**



Nihala R I
Batch 2021-23
School of Data Analytics
Won Top position in MOOC Course
by NPTEL . (91%)



Batch 2021-23
School of Data Analytics



"Data Is Powerful; Data Science And Analytics Are The Future Tools For Scientific Decision Making And Welfare."

**SCHOOL
OF**

DATA ANALYTICS

Contact Us

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