





BACHELOR OF COMPUTER SCIENCE (HONS) IN DATA SCIENCE

JPT/BPP (N/481/6/0812) (MQA/PA11408) 05/24
SCHOOL OF DATA SCIENCES



ABOUT PERDANA UNIVERSITY

Perdana University is envisioned to be an education-research hub for the region fulfilling the needs of the nation for competent health science graduates. It was established as a Public Private Partnership (PPP) initiative by Academic Medical Centre Sdn. Bhd., a subsidiary of Chase Perdana Sdn. Bhd. with the support of the Prime Minister's Department. The University is well equipped with leading edge teaching and learning facilities.

DEAN'S MESSAGE

Data Science is an interdisciplinary field that uses a combination of approaches to extract knowledge or insights from data. It is an exciting area with tremendous opportunities to improve the quality of life for people across the world. It is applicable to a broad range of fields such as life sciences, physical sciences, engineering and technology, and social sciences, among others. The School of Data Sciences aims to be on the vanguard for data science. It was set up to concurrently address the three interconnected facets of an academic endeavour—research, education and services—in order to effectively contribute to the advancement of data science in Malaysia and beyond.



Assoc. Prof. Dr. Yam Wai Keat
Acting Dean
BSc (Hons) (With Distinction) (UM), PhD (USM)

WHAT IS DATA SCIENCE?

The science and art of managing, merging, storing, analyzing large amounts of data and creating visualizations to help others understand them. It draws on techniques and theories from a wide range of disciplines including mathematics, statistics, computing, information science, etc. to make sense of data and make advances in the fields that are generating it





BIG BIG
DATA OPPORTUNITIES



Data that is too LARGE, COMPLEX and DYNAMIC for any conventional data tools to capture, store, manage and analyze.



This last decade has brought about such a **HUGE** explosion of data that people do not know what to do with it!

2.5 QUINTILLION bytes of data is produced every day!





But correctly working with the data can bring about **DEEP** insights and developments for the benefit of humanity.

Weather, Politics, Biology, Retail, eCommerce, Finance, Healthcare, Sports, Science and Research, Machine and Device, Automobile, Real Estate, Aviation, Entertainment, Telecom, Government, Social Media, Military, etc.

AREAS WITH BIG DATA

THE UNIQUENESS



CAREER OPPORTUNITIES



PROGRAMME DETAILS

AWARD TITLE	BACHELOR OF COMPUTER SCIENCE (HONS) IN DATA SCIENCE
DURATION OF STUDY	3 YEARS (FULL-TIME)
CREDIT HOURS	120
TEACHING & LEARNING METHOD	BLENDED LEARNING (LECTURES COMBINED WITH ONLINE LEARNING AND INDEPENDENT STUDY), PRACTICAL, TUTORIAL, INTERNSHIP, ASSIGMENT, PRESENTATION AND TEST

CURRICULUM STRUCTURE



Fundamentals of Software Development
Discrete Mathematics
Introduction to Computer Programming
Computer Organization & Operating System
Data Structures and Algorithm
Probability and Statistics

Calculus Linear Algebra Introduction to Database MPU Subjects

Seminar & Industry Talks
Applied Regression & Time-series Analysis
Web Programming & Scraping
Computer Network
Introduction to Data Science and its toolkits
Research Methodology, Critical Thinking &
Scientific Communication

Big Data Multivariate Analysis Introduction to Parallel Processing

Data Analytics Essentials MPU Subjects Elective* YEAR 2

YEAR 3

Business Intelligence & Entrepreneurship
Dimensionality Reduction
Machine Learning
Professional Ethics & Information Law
Visualization on Data & Communicating Results
Final Year Project

Internship Elective*

Electives*
(Choose any TWO only)

Digital Marketing Data Mining Application in Life Sciences Health Analytics & Data Mining Econometrics Data Driven Organisation

ENTRY REQUIREMENT

STPM OR EQUIVALENT (Science Stream)

Minimum Grade C (NGMP 2.00) in 1 Mathematics subject and 1 Science/ICT subject

STPM (Non-Science Stream)

Minimum Grade C (NGMP 2.00) in any 2 subjects and Credit in Additional Mathematics or Mathematics and any 1 Science, Technology or Engineering subject at SPM or equivalent.

FOUNDATION / MATRICULATION OR EQUIVALENT (Non-Science Stream)

Minimum CGPA of 2.00 and Credit in either Additional Mathematics or Mathematics and any 1 Science, Technology or Engineering subject at SPM or equivalent

OMA IN ICT / COIFNOT ANI

Minimum CGPA of 2.50 (Candidates with CGPA below 2.5 but above 2.0 may be admitted subject to rigorous internal assessment process).

DIPLOMA IN ICT / SCIENCE AND TECHNOLOGY RELATED FIELD

Other equivalent qualifications recognised by Perdana University's Senate

*ANY ONE OF THE ABOVE QUALIFICATION REQUIREMENTS WILL BE CONSIDERED









OTHERS

FIND US HERE

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