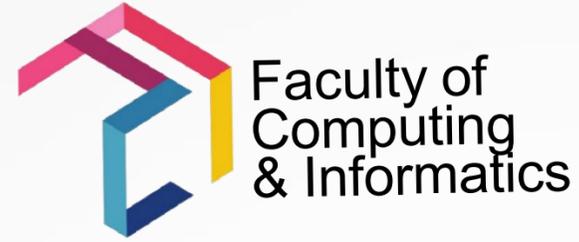




UMS
UNIVERSITI MALAYSIA SABAH



Faculty of
Computing
& Informatics

ICT TRAINING MODULES

2025



Overview

The Faculty of Computing and Informatics (FKI) at Universiti Malaysia Sabah (UMS) offers specialized corporate training programs aimed at enhancing professional skills in various computing and informatics domains. With a focus on practical and industry-relevant education, FKI provides tailored training solutions to meet corporate needs.



Training Programs

SOFTWARE ENGINEERING

- **Advanced Software Development:** Covers modern development practices and tools.
- **Agile Project Management:** Focuses on agile methodologies and project management.

NETWORK ENGINEERING

- **Network Design and Security:** Training on designing and securing networks.
- **Network Maintenance:** Courses on managing and maintaining network infrastructures.

DATA SCIENCE

- **Data Analysis and Visualization:** Techniques for analyzing and visualizing data.
- **Machine Learning:** Courses on implementing machine learning algorithms.

MULTIMEDIA TECHNOLOGY

Content Creation: Instruction on the latest multimedia production tools and techniques.

Digital Media Management: Training on effectively managing digital media assets.

BUSINESS COMPUTING

IT-Business Integration: Aligning IT solutions with business processes.

Enterprise Systems: Training on ERP systems and business analytics.

Facilities

Labuan Campus

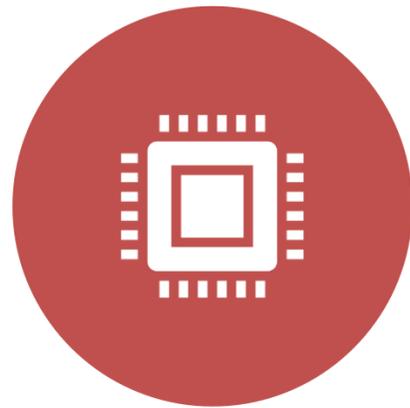
- **Advanced Laboratories:** State-of-the-art labs for hands-on training.

Kota Kinabalu Campus

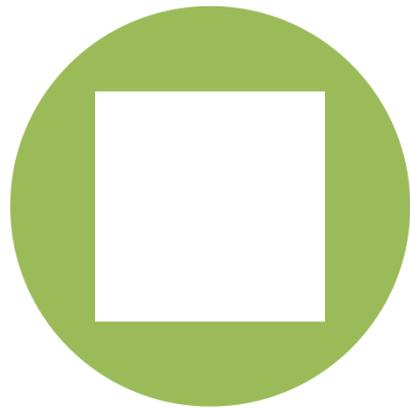
- **Modern Training Facilities:** Equipped spaces for effective learning.



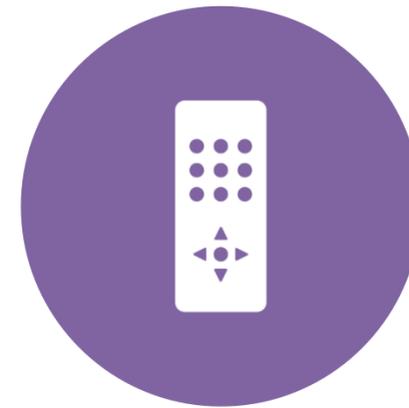
Training Delivery Methods



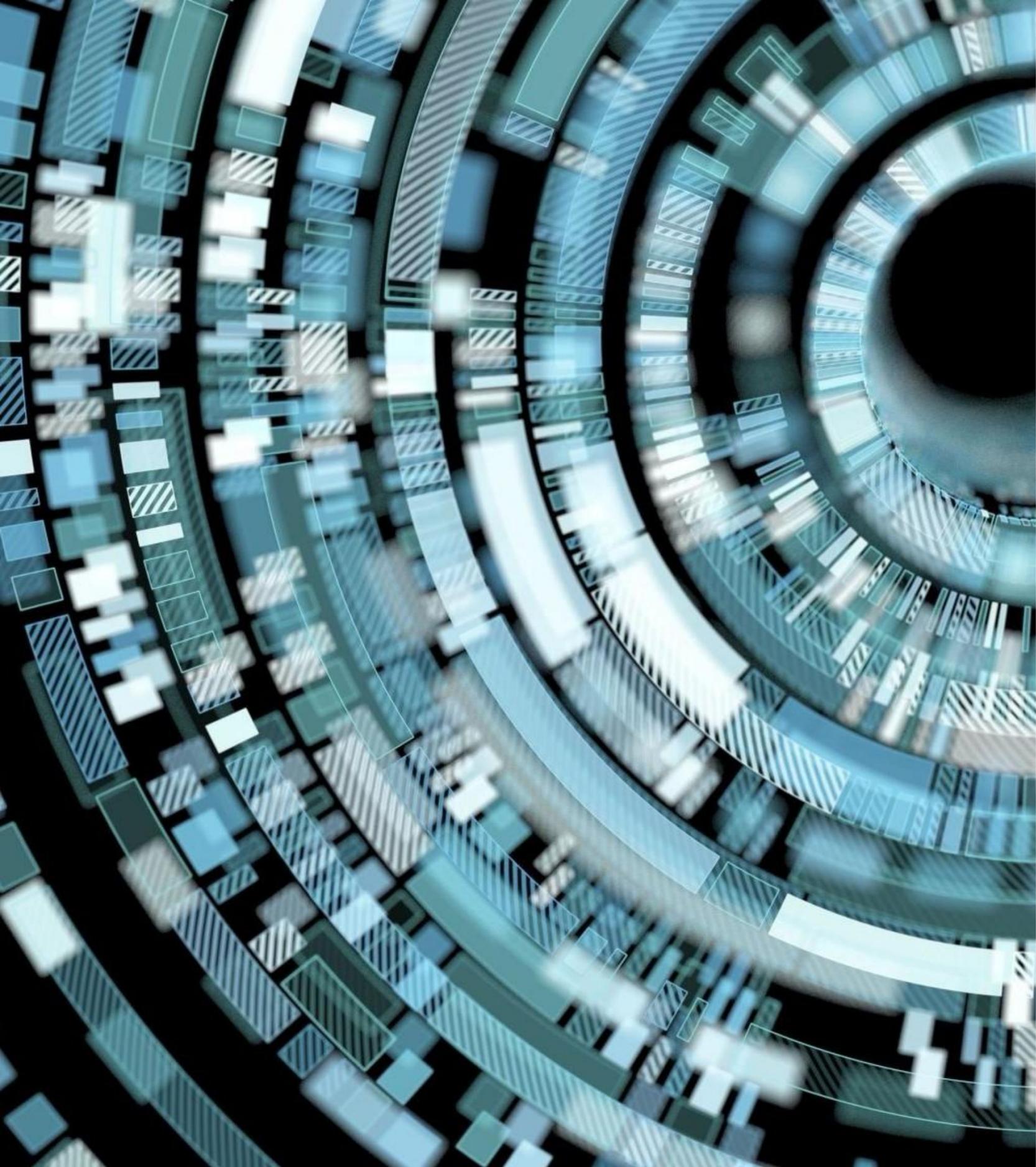
ON-SITE TRAINING: CUSTOMIZED PROGRAMS
DELIVERED AT CLIENT LOCATIONS.



CAMPUS-BASED TRAINING: INTENSIVE
COURSES CONDUCTED AT UMS CAMPUSES.



ONLINE TRAINING: FLEXIBLE REMOTE
LEARNING OPTIONS FOR PROFESSIONALS.



Certification

Professional Certifications: Recognized credentials that enhance career prospects in various IT and computing domains.

Conclusion

- The Faculty of Computing and Informatics at Universiti Malaysia Sabah provides high-quality, industry-relevant corporate training programs.
- These programs are designed to enhance professional skills, drive innovation, and improve organizational performance through advanced training solutions.



360° VIDEO VIRTUAL REALITY (VR)

COURSE DURATION

2 Days

TARGET PARTICIPANT

Generally, for all who are interested on VR.

Focus:

Staff for Sabahan agencies that involve with “Pendigitalan Sabah” for education and preservation document, tangible and intangible product.

COURSE OBJECTIVES

- To provide comprehensive understanding of 360° Video Virtual Reality technology, include, the need, key concept, benefits and application across various industry.
- To demonstrate knowledge, skill and utilization of 360° Video Virtual Reality hardware, software, camera, and tool.
- To offer hands-on experience in planning, shooting, editing, producing and deploying 360 ° Virtual Reality
- To familiarize participant with the use of latest VR application and device as well the platform for video deployment

METHODOLOGY

Talk, Hands-on, Group Practice and Presentation

LEARNING OUTCOME

At the end of the training, participant will be able to:

- Explain the fundamental of 360° Video Virtual Reality and differentiate it with normal type of video.
- Set up and operate the 360 ° Video Virtual Reality hardware, camera and device.
- Produce simple 360 ° Video Virtual Reality



Day 1

TIME	ACTIVITIES	DESCRIPTION
8.00am – 8.30.am	Course Overview	Explaining about the 2 days course includes the agenda and objectives of the course. The ice-breaking will take place and the beginning of course introduction.
8.30am – 10.30am	Module 1 Introduction 360 ° Video Virtual Realty Interactive Talk	Introducing participant to history and evaluation of VR, key concept, the need of VR as well as the application and benefits of VR across various industry.
10.30am - 11.00am	Refreshment	
11.00am – 1.00pm	Module 2 VR Hardware and Software Tools Demonstration	At the beginning, participant will be introduced to 360° Video VR hardware, software, camera, and device for development. How to utilize all the tools will be demonstrated so that participant can experience it at the first hand.
1.00pm – 2.00pm	Lunch	
2.00pm – 4.00pm	Module 3 Content Creation - Video Shooting Group Practice	Participant will be taught on planning the storyline of the video. Participant will be divided into small group and do the practice to take actual scenes. Camera setup and operation will be taught and tips for capturing high-quality 360° Video VR footage will be given.

Day 2

TIME	ACTIVITIES	DESCRIPTION
8.30am – 10.30am	Module 4 VR Video Production - Editing Group Practice	This module is about basic 360° Video VR production which include editing, importing and organizing the video. The use editing tool and basic editing technique will be demonstrated. In addition, participant also can add titles, transitions and effect to the video. Within the group, participant will practice video producing using footage taken from previous module.
10.30am - 11.00am	Refreshment	
11.00am – 1.00pm	Module 5 VR Video Post-Production Group Practice	This module will present the platform for sharing the 360 ° Video VR, preparing, and optimizing videos for different platforms. After the video deploy to the platform, participant is given opportunity to use current VR device to view their video. Therefore, participant is taught how to set and operate the VR device.
1.00pm – 2.00pm	Lunch	
2.00pm – 4.00pm	Module 6 Presentation & Conclusion Group Video Presentation	Before the recap of the course, the group need to present their video and trainer will give the comment. This can be considered as small competition, and the winner will be given small gift.
4.00pm – 4.30pm	Closing Remark & Group Photo	





Contact

+60 1981123431

dyg_ajor@ums.edu.my

Faculty of Computing and Informatics, UMS Labuan International Campus, 87000 Labuan, WP Labuan, Malaysia

Education

University of East Anglia (UEA)

2007 - 2008
MSc. in Knowledge Discovery and Data Mining

International Islamic University Malaysia (IIUM)

2000 - 2004
B. Management Information System

Expertise

Data Mining

Predictive Modelling Techniques

Digital Tourism

DG SENANDONG AJOR

LECTURER

About Me

I completed my master's degree at the University of East Anglia, UK, in 2008, and became a lecturer at the Faculty of Computing and Informatics, Universiti Malaysia Sabah, teaching courses such as Database Management Systems, Data Mining, and Big Data. My responsibilities include conducting lectures, developing teaching materials, engaging in research, and contributing to publications in my research area.

Experience

Lecturer

2009 - Current

- Faculty of Computing and Informatics (FCI)

Tutor

2006 - 2008

- Labuan School of Informatics Science (LSIS)

Consultation/Training/Short Course

- Bengkel Pembangunan Modul Latihan & Gamification
- Microsoft Power Bi Data Analyst Certification (PL-300)
- Computational Thinking For Problem-Solving
- Development Of Teaching Portfolio
- Program Kesedaran Pelaksanaan Pengurusan Bakat Berasaskan Kompetensi Siri 2/2023
- Bengkel Technology-Enabled Learning Champion PTG & iTel
- Webinar Integriti Tumbuk Rusuk : Systemic Corruption Penceramah: Tuan Mohd Firdaus Ramlan (Bekas Majistret) Penulis Buku "Tumbuk Rusuk"
- Qualitative Data Analysis Using Leximancer
- Peer Review And Writing A Research Paper (Science)



Dg. SENANDONG AJOR

dyg.ajor@ums.edu.my

ARTIFICIAL INTELLIGENCE EMPOWERMENT

COURSE DURATION

2 Days

TARGET PARTICIPANT

- Professionals looking to integrate AI into their workplace.
- Managers and decision-makers seeking to understand AI applications.
- Technologists and developers interested in AI tools and methodologies.
- Individuals with a basic understanding of technology and data science.

COURSE OBJECTIVES

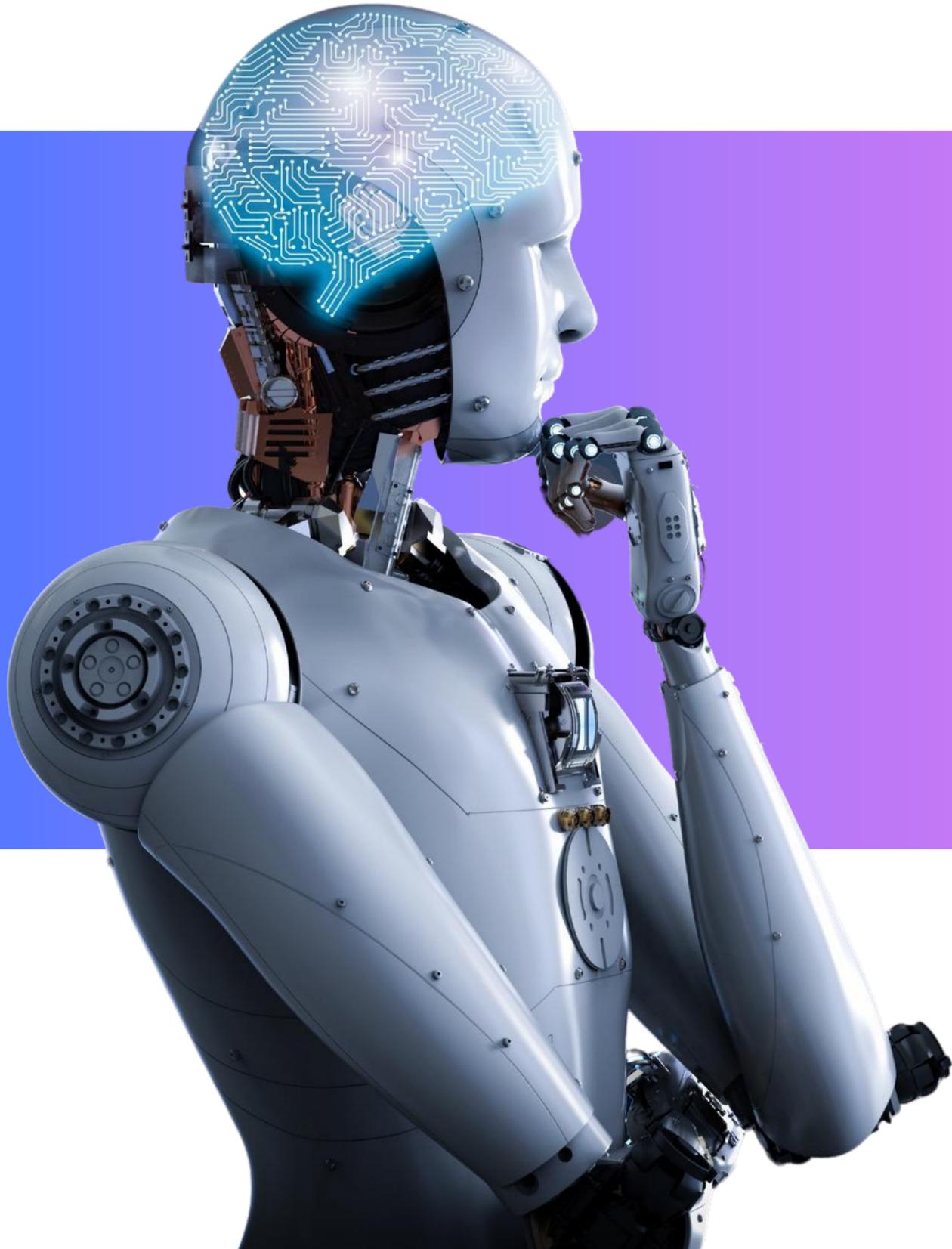
- To provide a comprehensive introduction to AI and its applications in the workplace.
- To equip participants with practical skills in machine learning and AI tools.
- To explore ethical considerations and responsible AI use.
- To demonstrate real-world applications and successful AI implementations.
- To enable participants to develop and evaluate AI projects relevant to their work.

METHODOLOGY

- Interactive lectures and presentations.
- Hands-on exercises and projects.
- Case studies and real-world examples.
- Group discussions and Q&A sessions.
- Final assessment and project presentations.

LEARNING OUTCOME

- Understand the fundamental concepts of AI and its types.
- Gain practical skills in machine learning, including data preparation, model training, and evaluation.
- Familiarize with popular AI frameworks, libraries, platforms, and development environments.
- Apply AI tools to automate tasks, analyze data, and enhance customer experience in the workplace.
- Recognize ethical and responsible AI practices and develop strategies for ethical AI governance.
- Analyze successful AI case studies and identify key factors for successful implementation.



Day 1

TIME	ACTIVITIES	DESCRIPTION
8.00am – 8.30.am	Course Overview	
8.30am – 10.30am	Module 1 Introduction to AI <i>Interactive lectures</i>	Introduction to AI, its history, and key concepts. Applications of AI across various industries. Differences between Narrow AI and General AI. Interactive session for clarifying doubts and discussions.
10.30am -11.00am	Refreshment	
11.00am – 1.00pm	Module 2 Understanding Machine Learning <i>Interactive lectures</i>	Basic principles of supervised, unsupervised, and reinforcement learning. Techniques for collecting, cleaning, and transforming data. Methods for training models and evaluating their performance. Interactive session for clarifying doubts and discussions.
1.00pm – 2.00pm	Lunch	
2.00pm – 4.00pm	Module 3 AI Tools and Technologies <i>Hands-on</i>	Overview of frameworks like TensorFlow, PyTorch, and Scikit-Learn. Introduction to AI services from Google, IBM, Microsoft, and Amazon. Tools and environments like Jupyter Notebooks and IDEs. Interactive session for clarifying doubts and discussions.
4.00pm – 4.30pm	Q&A and Day 1 Recap <i>Q&A Session</i>	Q&A Sessions. Summary of key concepts learned and discussion.

Day 2

TIME	ACTIVITIES	DESCRIPTION
8.30am – 10.30am	Module 4 VR Video Production - Editing <i>Group Practice</i>	Using AI for tasks automation, including RPA and chatbots. Applications of AI in predictive analytics and business intelligence. Utilizing AI for personalized recommendations and sentiment analysis. Interactive session for clarifying doubts and discussions.
10.30am -11.00am	Refreshment	
11.00am – 1.00pm	Module 5 Ethical and Responsible AI <i>Interactive lectures</i>	Discussion on AI ethics, bias, and fairness. Overview of current AI regulations and guidelines. Examining the environmental impact and societal effects of AI. Interactive session for clarifying doubts and discussions.
1.00pm – 2.00pm	Lunch	
2.00pm – 4.00pm	Module 6 Case Studies and Real-World Examples	Case studies of successful AI projects in various industries. Analysis of common pitfalls and how to avoid them. Insights into emerging AI technologies and trends. Interactive session for clarifying doubts and discussions.
4.00pm – 4.30pm	Q&A Session and Day 2 Recap Closing Remark & Group Photo	Summary of key concepts and collection of participant feedback.





Mohammed Saleh

SENIOR LECTURER

Professional Statement

My goal is to educate and mentor the next generation of computer scientists and engineers while conducting groundbreaking research in AI, computer vision, and image processing. I aim to contribute significantly to the advancement of technology and academic knowledge. I aspire to be a leading figure in the academic and research community, recognized for innovative contributions to AI and computer vision, and to inspire and guide students and researchers towards achieving excellence in their academic and professional endeavors.

Professional Experience

- **Senior Lecturer, UMS Sabah**
 - Teaching and mentoring undergraduate and postgraduate students.
 - Leading research projects and collaborating with fellow academicians and industry experts.
- **Postdoctoral Researcher, UITM Shah Alam**
 - Conducted in-depth AI, computer vision, and image processing research, contributing innovative findings.
 - **two** years.
- **Postdoctoral Researcher, UTS Sarawak**
 - Conducted in-depth AI, computer vision, and image processing research, contributing innovative findings.
 - **one** year.
-

Contact

- ☎ +60182772070
- ✉ mohammed.ahmed@ums.edu.my
- 🌐 www.linkedin.com/in/mohammed-saleh-9153997b
- 🏠 A-23A-03, tower A One Borneo, Jalan Sulaman, 88450 Kota Kinabalu, Sabah

Language

- ✓ English
- ✓ Arabic
- ✓ Malay (basic)

Education

- PhD in Electrical Engineering (Computer Engineering), Faculty of Electrical Engineering, University Technology MARA (UiTM), Malaysia
- MSC in Telecommunication and Information Engineering, Faculty of Electrical Engineering, University Technology MARA (UiTM), Malaysia
- BSE in Computer Engineering & Science (Hons), Faculty of Engineering, Aden University (ADU), Yemen



Dr. MOHAMMED AHMED
MOHAMMED SALEH
mohammed.ahmed@ums.edu.my

STUDIO

COURSE DURATION

3 Days

TARGET PARTICIPANT

This course is designed for individuals who want to enhance their skills in data visualization and dashboard creation using Looker Studio. It is ideal for business professionals and data analysts, marketing professionals, finance professionals, individuals or teams responsible for data analysis and reporting, and professionals who need to effectively communicate complex data insights to stakeholders through interactive and dynamic dashboards.

COURSE OBJECTIVES

The course objectives are as follow:

- Equip participants with foundational skills in using Looker Studio for data visualization.
- Learn how to connect various data sources.
- Create and customize dashboards.
- Use advanced features to enhance data presentation.
- Design interactive and visually appealing dashboards that effectively communicate data insights to stakeholders.

METHODOLOGY

Delivery method

- Interactive talk, Hands-on, and Case study with presentation.

LEARNING OUTCOME

his course will help participants to:

- Gain a foundational understanding of Looker Studio, navigate its interface, and utilize its features to create and manage data visualizations.
- Learn how to connect and integrate data from various sources such as Google Sheets, Google Analytics, and CSV files into Looker Studio.
- Develop the skills to design and enhance dashboards by creating, customizing, and styling them using filters, calculated fields, and interactive elements to make data insights more accessible and visually appealing.
- Acquire the ability to effectively present and share dashboards with stakeholders, ensuring clear communication of data insights and collaborative data analysis.



Day 1 : Introduction to Looker Studio

TIME	ACTIVITIES	DESCRIPTION
8.30am – 10.30am	Module 1	Welcome and Introduction, Getting Started with Looker Studio. Overview of Looker Studio, navigation, and basic features.
10.30am -11.00am	Refreshment	
11.00am – 1.00pm	Module 2 Interactive lectures	Connecting Data Sources. Types of data sources, connecting Google Sheets data source, example of connecting sales data.
1.00pm – 2.00pm	Lunch	
2.00pm – 4.00pm	Module 3 Hands-on	Creating Your First Dashboard. Adding a new report, understanding layout, creating a simple sales performance dashboard.

Day 2: Enhancing Your Dashboard

TIME	ACTIVITIES	DESCRIPTION
8.30am – 10.30am	Module 4 Interactive lectures	Using Filters, Calculated Fields. Adding filters, creating calculated fields, examples with sales data.
10.30am -11.00am	Refreshment	
11.00am – 1.00pm	Module 5 Interactive lectures and demonstration	Adding interactive elements like drop-down menus and clickable charts, example of interactive sales data.
1.00pm – 2.00pm	Lunch	
2.00pm – 4.00pm	Module 6 Hands-on	Styling and Formatting, Sharing and Collaboration. Customizing dashboard look, sharing dashboards, enhancing dashboards.

Day 3 : Advanced Techniques and Real-World Use Cases

TIME	ACTIVITIES	DESCRIPTION
8.30am – 10.30am	Module 7 Interactive lectures	Advanced Visualization Techniques. Combining data sources, using advanced chart types, example of performance dashboard.
10.30am -11.00am	Refreshment	
11.00am – 1.00pm	Module 8 Interactive lectures	Real-World Use Cases. Creating marketing and financial dashboards, step-by-step creation of dashboards.
1.00pm – 2.00pm	Lunch	
2.00pm – 4.00pm	Module 9 Hands-on	Finalizing and Presenting Dashboards. Reviewing and refining dashboards, best practices for presentation, participant presentations.

Note: This structure ensures a clear separation between lectures and hands-on sessions, providing a balanced learning experience each day.



**Working Experiences**

Universiti Malaysia Sabah (2019 - until now)
 Senior Lecturer
 Faculty of Computing and Informatics,
 Universiti Malaysia Sabah, Jalan UMS, 88400
 Kota Kinabalu, Sabah, Malaysia

Name: Dr. Ervin Gubin MOUNG
 Address: Faculty of Computing and Informatics, Universiti Malaysia Sabah, Jalan UMS, 88400 Kota Kinabalu, Sabah, Malaysia
 Phone: 016-8301621
 E-mail: ervin@ums.edu.my or menirva.com@gmail.com

Admin Position

- Deputy Director of Research Management Centre, Universiti Malaysia Sabah (2022 – until now)
- Faculty Postgraduate Coursework Coordinator (2019 – 2022)

Education:

Ph.D in Computer Engineering

 MSc in Computer Engineering, Universiti Malaysia Sabah (UMS)

 Bachelor Degree in Computer Engineering (Hons), Universiti Malaysia Sabah (UMS)

Research Interest

My research interest generally falls under the category of Computer Vision & Pattern Recognition. Such as;

- Image processing
- Object detection
- Image segmentation
- Big data and analytics
- Vision based learning
- Image classification

Currently, my domain of interest includes:

- Public Health & Smart Health
- Agriculture & Food

Professional Affiliations

- The Malaysian Board of Engineer (2017-Present)
- IEEE Member
Member No. 97720127
Malaysia Section

Public Talk

- Leverage ChatGPT, Elicit, and Perplexcity for Efficient and Innovative Publication
- The Fundamental of ChatGPT



Dr. ERVIN GUBIN MOUNG

ervin@ums.edu.my

COURSE OUTLINE

DATA ANALYSIS USING GOOGLE DATA STUDIO

COURSE DURATION

2 Days

TARGET PARTICIPANT

This course is designed for individuals who want to enhance their skills in data analysis and visualization using Google Data Studio. It is ideal for marketers, analysts, business professionals, educators, and anyone interested in transforming raw data into insightful, interactive dashboards.

COURSE OBJECTIVES

The course objectives are as follow:

- Master the Basics of Google Data Studio.
- Develop Data Preparation and Management Skills.
- Create and Customize Data Visualizations.
- Build Interactive and Dynamic Dashboards.

METHODOLOGY

Delivery method

- Interactive talk, Hands-on, and Case study with presentation.

LEARNING OUTCOME

This course will help participants to:

- Gain a foundational understanding of Google Data Studio and its interface and learn how to navigate and utilize the platform effectively.
- Learn how to import and clean data from various sources and understand how to manage and organize data within Google Data Studio.
- Develop the skills to create and customize various types of charts and graphs.
- Learn how to use filters and controls to interact with data dynamically and create user-friendly dashboards.
- Acquire the ability to connect Google Data Studio to multiple data sources using tools like Supermetrics.



Day 1

TIME	ACTIVITIES	DESCRIPTION
8.00am – 8.30am	Course Overview + Ice breaking	
8.30am – 10.30am	Module 1 Introduction to Google Data Studio Interactive lectures	A detailed presentation covering the course objectives, the importance of data visualization, and an introduction to the Google Data Studio interface. Hands-on navigation through the Google Data Studio interface, highlighting key features and tools.
10.30am -11.00am	Refreshment	
11.00am – 1.00pm	Module 2 Understanding and Preparing Data Hands-on	Participants will import data from various sources such as Google Sheets and CSV files, learning how to manage data connections. Practical session focused on cleaning and organizing data, including removing duplicates and handling missing values.
1.00pm – 2.00pm	Lunch	
2.00pm – 4.00pm	Module 3 Creating Basic Visualizations and Dashboard Hands-on	Step-by-step guide to creating basic charts such as bar, line, and pie charts, with hands-on practice. Participants will customize chart properties and styles, learning how to adjust colors, labels, and other visual elements. Lecture on effective dashboard design, focusing on layout, readability, and usability. Guided activity where participants create a simple dashboard with multiple visualizations, applying the design principles discussed.

Day 2

TIME	ACTIVITIES	DESCRIPTION
8.30am – 10.30am	Module 4 Advanced Visualization Techniques Hands-on	Participants will create advanced charts such as heat maps and scatter plots, learning about calculated fields for deeper analysis. Hands-on session where participants apply themes and templates to ensure consistent styling across their visualizations.
10.30am -11.00am	Refreshment	
11.00am – 1.00pm	Module 5 Implementing Filters and Controls + Connecting to Multiple Data Sources Hands-on	Participants will add and configure various filters to their dashboards, including date range controls and dropdown menus. Participants will integrate data from different sources into a single dashboard, learning how to synchronize and manage multiple data streams.
1.00pm – 2.00pm	Lunch	
2.00pm – 4.00pm	Module 6 Final Project and Review Case study with presentation	Participants will create a comprehensive dashboard using all the skills learned over the two days. This includes data import, visualization, filtering, and integration. Open session for questions and troubleshooting common issues encountered during the course.
4.00pm – 4.30pm	Closing Remark & Group Photo	





Working Experience

Universiti Malaysia Sabah
Senior Lecturer
Faculty of Computing and Informatics,
Universiti Malaysia Sabah, Jalan UMS, 88400
Kota Kinabalu, Sabah, Malaysia

HPA Industries Sdn Bhd
IT Executive

Professional Certificate:
Technologist Professional (Ts)
Professional Certificate for Entrepreneurial
Education@3EP

Name: Nordin Bin Saad
Address: Faculty of Computing and Informatics, Universiti Malaysia Sabah, Jalan UMS, 88400 Kota Kinabalu, Sabah, Malaysia
Phone: 0133779776
E-mail: nordin@ums.edu.my

Education:

B.IT (Hons) Universiti Utara Malaysia (UUM)
M.IT, Universiti Utara Malaysia (UUM)
Business Process Re-engineering in Software Development

Activities (Consultation/Training/Short Course)
PC Maintenance Modul for Sekolah Menengah Teknik Kota Kinabalu (Sponsored by Shell Timur Sdn Bhd)
ICT advisor to Sekolah Rendah Islam Al Hafiz
Instructor for UMS Cisco Networking Academy
Trainer for Peneraju Telecommunication Program (Fiber Optic)



NORDIN SAAD
nordin@ums.edu.my

COURSE OUTLINE

DATA ANALYSIS USING POWER BI: BEGINNERS



COURSE DURATION
2 Days

TARGET PARTICIPANT
Executive/Management/ICT/Data Analyst/Statistician

- COURSE OBJECTIVES**
- Understand the fundamental concepts of data analysis and visualization.
 - Learn how to navigate the Power BI interface and use its basic features.
 - Gain practical skills in importing, transforming, and cleaning data in Power BI.
 - Create basic visualizations and build interactive dashboards.
 - Share and publish reports and dashboards using Power BI Service.

- METHODOLOGY**
- Talk or lecture
 - Interactive talk
 - Hands-on
 - Group discussions
 - Q&A Session

- LEARNING OUTCOME**
- Foundational Knowledge: Participants will understand basic concepts of data analysis and the Power BI tool.
 - Practical Skills: Ability to import, transform, and clean data using Power BI.
 - Visualization Techniques: Competence in creating basic visualizations and interactive dashboards.
 - Data Modeling: Understanding and applying basic data modeling techniques.
 - Report Sharing: Skills to publish and share reports and dashboards via Power BI Service.

Day 1

TIME	ACTIVITIES	DESCRIPTION
8.00am – 8.30am	Course Overview	
8.30am – 10.30am	Module 1 Introduction to Power BI <i>Interactive talk</i>	<ul style="list-style-type: none"> • What is Power BI? • Overview of Power BI components: Power BI Desktop, Power BI Service, and Power BI Mobile. • Navigating the Power BI interface.
10.30am -11.00am	Refreshment	
11.00am – 1.00pm	Module 2 Get Started with Power BI <i>Interactive talk</i>	<ul style="list-style-type: none"> • Installing Power BI Desktop.
1.00pm – 2.00pm	Lunch	
2.00pm – 4.00pm	Module 3 Get Data in Power BI and Clean, transform, and Load data in Power BI <i>Interactive talk</i> <i>Hands-on</i> <i>Group Discussion</i>	<ul style="list-style-type: none"> • Connecting to various data sources (Excel, CSV, databases). • Importing and transforming data using Power Query Editor. • Basic data transformation techniques: filtering, sorting, and renaming columns. • Handling missing data and duplicates. • Creating simple calculated columns.
4.00pm-4.30pm	Q&A and Recap of Day 1 Q&A Session	<ul style="list-style-type: none"> • Open floor for questions and clarification of doubts. • Summary of key concepts learned.

Day 2

TIME	ACTIVITIES	DESCRIPTION
8.30am – 10.30am	Module 4 Data Modeling Basics <i>Interactive talk</i> <i>Hands-on</i>	<ul style="list-style-type: none"> • Introduction to data modeling. • Relationships between tables. • Creating and managing simple data models.
10.30am -11.00am	Refreshment	
11.00am – 1.00pm	Module 5 Basic Visualizations <i>Hands-on</i> <i>Group Discussion</i>	<ul style="list-style-type: none"> • Overview of visualization types in Power BI (charts, tables, maps). • Best practices for data visualization. • Creating and customizing visualizations.
1.00pm – 2.00pm	Lunch	
2.00pm – 4.00pm	Module 6 Building Interactive Dashboards and Sharing and Publishing Reports <i>Hands-on</i> <i>Group Discussion</i>	<ul style="list-style-type: none"> • Designing effective dashboards. • Adding interactivity with slicers, filters, and drill-throughs. • Hands-on exercise: creating a simple dashboard. • Introduction to Power BI Service. • Publishing and sharing dashboards and reports. • Collaborating on Power BI reports.
4.00pm – 4.30pm	Q&A, Feedback, and Course Conclusion Closing Remark & Group Photo	<ul style="list-style-type: none"> • Final Q&A session to address any remaining questions. • Collecting participant feedback. • Course conclusion and distribution of certificates





Contact

+60 1981123431

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Education

University of East Anglia (UEA)

2007 - 2008
MSc. in Knowledge Discovery and Data Mining

International Islamic University Malaysia (IIUM)

2000 - 2004
B. Management Information System

Expertise

Data Mining

Predictive Modelling Techniques

Digital Tourism

DG SENANDONG AJOR

LECTURER

About Me

I completed my master's degree at the University of East Anglia, UK, in 2008, and became a lecturer at the Faculty of Computing and Informatics, Universiti Malaysia Sabah, teaching courses such as Database Management Systems, Data Mining, and Big Data. My responsibilities include conducting lectures, developing teaching materials, engaging in research, and contributing to publications in my research area.

Experience

Lecturer

2009 - Current

- Faculty of Computing and Informatics (FCI)

Tutor

2006 - 2008

- Labuan School of Informatics Science (LSIS)

Consultation/Training/Short Course

- Bengkel Pembangunan Modul Latihan & Gamification
- Microsoft Power Bi Data Analyst Certification (PL-300)
- Computational Thinking For Problem-Solving
- Development Of Teaching Portfolio
- Program Kesedaran Pelaksanaan Pengurusan Bakat Berasaskan Kompetensi Siri 2/2023
- Bengkel Technology-Enabled Learning Champion PTG & iTel
- Webinar Integriti Tumbuk Rusuk : Systemic Corruption Penceramah: Tuan Mohd Firdaus Ramlan (Bekas Majistret) Penulis Buku "Tumbuk Rusuk"
- Qualitative Data Analysis Using Leximancer
- Peer Review And Writing A Research Paper (Science)



Dg. SENANDONG AJOR

dyg.ajor@ums.edu.my

COURSE OUTLINE

DATA ANALYSIS USING

POWER BI: INTERMEDIATE



COURSE DURATION
3 Days

TARGET PARTICIPANT
Executive/Management/ICT/Data Analyst/Statistician

- COURSE OBJECTIVES**
- Deepen understanding of data modeling and transformation techniques.
 - Enhance skills in creating advanced visualizations and interactive dashboards.
 - Master the use of advanced DAX (Data Analysis Expressions) functions.
 - Learn performance optimization techniques for Power BI reports.
 - Gain proficiency in sharing and collaborating on Power BI reports and dashboards.

- METHODOLOGY**
- Talk or lecture
 - Interactive talk
 - Hands-on
 - Group discussions
 - Q&A Session

- LEARNING OUTCOME**
- Enhanced Data Modeling Skills: Participants will be able to create and manage advanced data models.
 - Advanced Transformation Techniques: Proficiency in using Power Query for complex data transformations.
 - Advanced DAX Proficiency: Mastery of advanced DAX functions and their applications.
 - Sophisticated Visualizations: Ability to create custom and advanced visualizations.
 - Optimized Reports: Skills to optimize performance and manage large datasets in Power BI.

Day 1

TIME	ACTIVITIES	DESCRIPTION
8.00am – 8.30.am	Course Overview	
8.30am – 10.30am	Module 1 Review of Power BI Basics and Intermediate Features	<ul style="list-style-type: none"> • Quick recap of Power BI basics. • Introduction to intermediate features and functionalities. • Discussion of participants' experience and learning goals.
10.30am - 11.00am	Refreshment	
11.00am – 1.00pm	Module 2 Advanced Data Modeling) Interactive talk Hands-on Group Discussion	<ul style="list-style-type: none"> • Importance of a well-structured data model. • Understanding star schema and snowflake schema. • Creating and managing complex relationships between tables. • Implementing calculated tables and measures. • Creating relationships, hierarchies, and calculated tables
1.00pm – 2.00pm	Lunch	
2.00pm – 4.00pm	Module 3 Advanced Data Transformation Interactive talk Hands-on Group Discussion	<ul style="list-style-type: none"> • Using Power Query for complex data transformations. • Techniques for data merging and appending. • Handling complex data cleansing scenarios.
4.00pm – 4.30pm	Q&A and Recap of Day 1 Q&A Session	<ul style="list-style-type: none"> • Open floor for questions and clarification of doubts. • Summary of key concepts learned.

Day 2

TIME	ACTIVITIES	DESCRIPTION
8.30am – 10.30am	Module 4 Advanced DAX - Data Analysis Expressions) Interactive talk Hands-on	<ul style="list-style-type: none"> • Recap of basic DAX concepts. • Advanced DAX functions and their applications. • Understanding context and filter propagation in DAX.
10.30am - 11.00am	Refreshment	
11.00am – 1.00pm	Module 5 Advanced Visualizations Hands-on Group Discussion	<ul style="list-style-type: none"> • Custom visuals in Power BI. • Best practices for designing complex visualizations. • Creating and customizing visualizations.
1.00pm – 2.00pm	Lunch	
2.00pm – 4.00pm	Module 6 Building Interactive Dashboards Hands-on Group Discussion	<ul style="list-style-type: none"> • Designing interactive and dynamic dashboards. • Incorporating advanced features: bookmarks, drill-throughs, and tooltips. • Hands-on exercises: creating and customizing advanced dashboards.
4.00pm – 4.30pm	Q&A and Recap of Day 2 Q&A Session	

MODULE SUMMARY

Day 3

TIME	ACTIVITIES	DESCRIPTION
8.30am – 10.30am	Module 7 Performance Optimization Interactive talk Hands-on	<ul style="list-style-type: none"> • Importance of performance tuning in Power BI. • Techniques to optimize data models and DAX queries. • Managing large datasets and improving report performance.
10.30am - 11.00am	Refreshment	
11.00am – 1.00pm	Module 8 Design Power BI Reports Hands-on Group Discussion	<ul style="list-style-type: none"> • Creating and selecting the most appropriate visual type to meet report design and layout requirements. • Design the analytical report layout. • Select report visuals • Format and configure visualizations • Work with key performance indicators
1.00pm – 2.00pm	Lunch	
2.00pm – 4.00pm	Module 9 Enhance Power BI report designs for the user experience Hands-on Group Discussion	<ul style="list-style-type: none"> • Creating an analytical report. • Design reports that behave like apps • Work with bookmarks • Design reports for navigation • Work with visual headers • Design reports with built-in assistance • Tune report performance
4.00pm – 4.30pm	Q&A, Feedback, and Course Conclusion Closing Remark & Group Photo	<ul style="list-style-type: none"> • Final Q&A session to address any remaining questions. • Collecting participant feedback. • Course conclusion and distribution of certificates





SUAINI BINTI SURA

SENIOR LECTURER

About Me

I completed my master's degree at Universiti Putra Malaysia (UPM) and PhD in Information System at Hanyang University South Korea. I am a member of Creative Computing Research Group (CCRG) Faculty of Computing and Informatics. Currently, doing research on AR and VR technology adoption.

Experience

Senior Lecturer

2017 - Current

- Faculty of Computing & Informatics (FCI), UMS

Lecturer

2008 - 2016

- Faculty of Computing & Informatics (FCI), UMS

Tutor

2003-2007

- School of Science and Informatics Labuan (SSIL), UMS

Certification/Training

- e-Usahawan Trainer (MDEC)
- TOT - Implementation of credited co-curriculum course
- NLP (Neuro-Linguistic Programming)
- Pembangunan Module Latihan dan Gamification

Contact

 +6 0198145122

 su_sura@ums.edu.my

 Faculty of Computing & Informatics, UMS, 88400 Kota Kinabalu, Sabah

Education

Hanyang Universiti

2012 - 2017

PhD in Information System

Universiti Putra Malaysia (UPM)

2006 - 2007

Master Computer Science

Universiti Teknologi Mara (UiTM)

2000-2002

Bachelor of Science Information Studies (Hons)
(Information System Management)

Expertise

Social & Electronic Commerce

Data Mining

Technology Adoption



Dr. SUAINI SURA

su_sura@ums.edu.my

COURSE OUTLINE

DATA ANALYSIS USING POWER BI: **ADVANCED**



COURSE DURATION
3 Days

TARGET PARTICIPANT
Executive/Management/ICT/Data Analyst/Statistician

COURSE OBJECTIVES

- Master advanced data modeling and complex data transformations.
- Develop expertise in using advanced DAX functions for sophisticated calculations.
- Create complex, dynamic, and interactive visualizations and dashboards.
- Optimize Power BI reports for performance and efficiency.
- Implement best practices for Power BI deployment, sharing, and collaboration.

METHODOLOGY

- Talk or lecture
- Interactive talk
- Hands-on
- Group discussions
- Q&A Session

LEARNING OUTCOME

- Participants will be able to implement and manage complex data models.
- Participants will master the use of advanced DAX functions for sophisticated data analysis.
- Participants will be capable of creating advanced, dynamic, and interactive visualizations.
- Participants will learn techniques to optimize Power BI reports for performance and efficiency.
- Participants will be proficient in deploying, sharing, and managing Power BI reports and dashboards in a collaborative environment.

Day 1

TIME	ACTIVITIES	DESCRIPTION
8.00am – 8.30.am	Course Overview	
8.30am – 10.30am	Module 1 Advanced Data Modeling Techniques Interactive talk	<ul style="list-style-type: none"> In-depth understanding of star and snowflake schemas. Advanced relationships: many-to-many, bi-directional cross-filtering. Using composite models and aggregations.
10.30am - 11.00am	Refreshment	
11.00am – 1.00pm	Module 2 Advanced Data Transformation Techniques Interactive talk Hands-on Group Discussion	<ul style="list-style-type: none"> Complex data transformation in Power Query. Using M language for custom transformations. Implementing dataflows for reusable data transformation.
1.00pm – 2.00pm	Lunch	
2.00pm – 4.00pm	Module 3 Practical Data Modeling and Transformation Interactive talk Hands-on Group Discussion	<ul style="list-style-type: none"> Creating complex data models and transformations. Implementing advanced relationships and calculated tables. Advanced data cleaning and transformation scenarios. Using Power Query to merge and append data. Custom functions in Power Query.
4.00pm – 4.30pm	Q&A and Recap of Day 1 Q&A Session	<ul style="list-style-type: none"> Open floor for questions and clarification of doubts. Summary of key concepts learned.

Day 2

TIME	ACTIVITIES	DESCRIPTION
8.30am – 10.30am	Module 4 Advanced DAX and Visualization Techniques Interactive talk Hands-on	<ul style="list-style-type: none"> Review of basic DAX concepts. Advanced DAX functions and scenarios. Using variables and iterators in DAX.
10.30am -11.00am	Refreshment	
11.00am – 1.00pm	Module 5 Time Intelligence and Advanced Calculations Hands-on Group Discussion	<ul style="list-style-type: none"> Time intelligence functions in DAX. Creating complex calculated columns and measures. Dynamic time-based calculations.
1.00pm – 2.00pm	Lunch	
2.00pm – 4.00pm	Module 6 Advanced DAX and Visualization Practices Hands-on Group Discussion	<ul style="list-style-type: none"> Complex DAX calculations and scenarios. Using DAX to solve real-world business problems. Custom visuals and visualizations with R and Python. Dynamic and conditional formatting in visuals. Using themes and templates for consistent styling.
4.00pm – 4.30pm	Q&A and Recap of Day 2 Q&A Session	

MODULE SUMMARY

Day 3

TIME	ACTIVITIES	DESCRIPTION
8.30am – 10.30am	Module 7 Performance Optimization Techniques Interactive talk Hands-on	<ul style="list-style-type: none"> Techniques for optimizing Power BI performance. Managing large datasets and improving load times. Best practices for DAX optimization.
10.30am -11.00am	Refreshment	
11.00am – 1.00pm	Module 8 Designing Efficient Reports and Dashboards Hands-on Group Discussion	<ul style="list-style-type: none"> Principles of efficient dashboard design. Using bookmarks, what-if parameters, and custom tooltips. Interactive and dynamic dashboard features. creating and customizing complex dashboards. Implementing performance optimization techniques.
1.00pm – 2.00pm	Lunch	
2.00pm – 4.00pm	Module 9 Deployment and Collaboration	<ul style="list-style-type: none"> Sharing and collaboration using Power BI Service. Best practices for deployment and governance. Security considerations and role management in Power BI.
4.00pm – 4.30pm	Q&A, Feedback, and Course Conclusion Closing Remark & Group photo	<ul style="list-style-type: none"> Final Q&A session to address any remaining questions. Collecting participant feedback. Course conclusion and distribution of certificates





DG SENANDONG AJOR

LECTURER

About Me

I completed my master's degree at the University of East Anglia, UK, in 2008, and became a lecturer at the Faculty of Computing and Informatics, Universiti Malaysia Sabah, teaching courses such as Database Management Systems, Data Mining, and Big Data. My responsibilities include conducting lectures, developing teaching materials, engaging in research, and contributing to publications in my research area.

Experience

Lecturer

2009 - Current

- Faculty of Computing and Informatics (FCI)

Tutor

2006 - 2008

- Labuan School of Informatics Science (LSIS)

Consultation/Training/Short Course

- Bengkel Pembangunan Modul Latihan & Gamification
- Microsoft Power Bi Data Analyst Certification (PL-300)
- Computational Thinking For Problem-Solving
- Development Of Teaching Portfolio
- Program Kesedaran Pelaksanaan Pengurusan Bakat Berasaskan Kompetensi Siri 2/2023
- Bengkel Technology-Enabled Learning Champion PTG & iTel
- Webinar Integriti Tumbuk Rusuk : Systemic Corruption Penceramah: Tuan Mohd Firdaus Ramlan (Bekas Majistret) Penulis Buku "Tumbuk Rusuk"
- Qualitative Data Analysis Using Leximancer
- Peer Review And Writing A Research Paper (Science)

Contact

+60 1981123431

dyg_ajor@ums.edu.my

Faculty of Computing and Informatics, UMS Labuan International Campus, 87000 Labuan, WP Labuan, Malaysia

Education

University of East Anglia (UEA)

2007 - 2008

MSc. in Knowledge Discovery and Data Mining

International Islamic University Malaysia (IIUM)

2000 - 2004

B. Management Information System

Expertise

Data Mining

Predictive Modelling Techniques

Digital Tourism



Dg. SENANDONG AJOR
dyg.ajor@ums.edu.my

COURSE OUTLINE

DISCOVERING THE PYTHON ESSENTIAL



COURSE DURATION

2 Days

TARGET PARTICIPANT

Executive/Management/ICT/Data Analyst/Statistician/Data Scientist/ Web Developer

COURSE OBJECTIVES

- Understand the Python language fundamental.
- Learn how to use 50 essential commands of Python.
- Use those essential commands into practical use by coding your first three games using python.
- Learn how to create graphical interface by bringing graphics to games using Python.
- Learn how to transfer those programs to Web Development using Python.
- Enhancing further Python knowledge, by solving several business problems with Machine Learning applications using Python.

METHODOLOGY

- Talk or lecture
- Interactive talk
- Hands-on
- Group discussions
- Q&A Session

LEARNING OUTCOME

- Foundational Knowledge: Participants will understand the important concepts of Python and its 50 important commands.
- Practical Skills: Ability to use those commands in their coding.
- Visualization Techniques: Learn how to create graphical interface by bringing graphics to games using Python.
- Further Application: Understanding and applying basic Web Development techniques with Python.
- Enhancing Python Skills: Enhancing participants' skill by solving several of today's business problems with Machine Learning applications using Python.

Day 1

TIME	ACTIVITIES	DESCRIPTION
8.00am – 8.30am	Course Overview	
8.30am – 10.30am	Module 1 Introduction to Python <i>Interactive talk</i>	<ul style="list-style-type: none"> The Basic: Hello World! List Data: Working with ordered Data Structured Data: Working with Structured Data Code Reuse: Functions and Modules Knowing 50 essential tips and commands of Python
10.30am -11.00am	Refreshment	
11.00am – 1.00pm	Module 2 Getting Real with Python by building your first level games <i>Interactive talk and Hands-on</i>	<ul style="list-style-type: none"> Coding and Understanding the First Python Games Program line by line. Coding and Understanding the Second Python Games Program line by line. Coding and Understanding the Third Python Games Program line by line.
1.00pm – 2.00pm	Lunch	
2.00pm – 4.00pm	Module 3 Let the Participants Design their own games <i>Interactive talk</i> <i>Hands-on</i> <i>Group Discussion</i>	<ul style="list-style-type: none"> Understand the stages of designing a python project. Participants design and construct their own Game from the suggested game list. Evaluate participants' progress by analyzing their work.
4.00pm-4.30pm	Q&A and Recap of Day 1 Q&A Session	<ul style="list-style-type: none"> Open floor for questions and clarification of doubts. Summary of key concepts learned.

Day 2

TIME	ACTIVITIES	DESCRIPTION
8.30am – 10.30am	Module 4 Let us Turn those games into GUI <i>Interactive talk</i> <i>Hands-on</i>	<ul style="list-style-type: none"> Understand the concept of Graphical User Interface (GUI). Hands-on exercise: Participants require to incorporate their previous three game projects with GUI (At least one game).
10.30am -11.00am	Refreshment	
11.00am – 1.00pm	Module 5 Transfer Existing Projects to Android Apps and Web Apps <i>Hands-on</i> <i>Group Discussion</i>	<ul style="list-style-type: none"> Overview of type of OS used by Python. Hands-on exercise: Transfer existing apps to Android apps. Introducing Web Development using Python. Hands-on exercise: Transfer existing apps to Web based apps.
1.00pm – 2.00pm	Lunch	
2.00pm – 4.00pm	Module 6 Machine Learning using Python <i>Hands-on</i> <i>Group Discussion</i>	<ul style="list-style-type: none"> Introducing a Machine Learning application using Python to solve several of today's business problems. Examples of Machine Learning applications using Python. Hands-on exercise: coding a simple Machine Learning application using Python.
4.00pm – 4.30pm	Q&A, Feedback, and Course Conclusion Closing Remark & Group Photo	<ul style="list-style-type: none"> Final Q&A session to address any remaining questions. Collecting participant feedback. Course conclusion and distribution of certificates





Name: Dr. Rayner @ Henry Pailus
Address: Faculty of Computing and Informatics, Universiti Malaysia Sabah, Jalan UMS, 88400 Kota Kinabalu, Sabah, Malaysia
Phone: 012-3099372
E-mail: rayner.pailus@ums.edu.my or rayner.pailus@gmail.com

Education:

2022: Doctor of Philosophy (Ph.D.) (Computer Science) at Universiti Malaysia Sabah, Kota Kinabalu, Sabah.
2017: Master of Philosophy (MPhil) (Computer Science) at Universiti Malaysia Sabah, Kota Kinabalu, Sabah.
1995: Bachelor of Science (Computer Science) at Temple University, Philadelphia, Pennsylvania, USA, Graduated with Summa Cum Laude Honors. (MARA Scholarship Recipient for Computer Science)
1991: American Associate Degree (Computer Science) at MARA Community College Kuantan, Kuantan, Malaysia.

International Award:

- Gold Medal of International Invention Innovation Canada Competition (iCAN) 2018 and 2020 Toronto, Canada.
- Gold Medal and Silver Medal of Internationale Fachmesse Ideen Erfindungen Neuheiten (iENA) 2019 and 2018 at Nuremberg, Germany.
- Gold Medal of International Invention, Innovation & Technology and Exhibition (ITEX) 2018 and 2019, Kuala Lumpur, Malaysia
- Gold Medal of International Conference and Exposition on Invention by Institutions of Higher Learning 2019 PECIPTA at, Universiti Tun Hussein Onn Malaysia (UTHM), Johor.
- Special Award 2018 and 2020 from Korea Invention Academy (KIA) presented by President Hong, Soung-Mo.
- Gold Medal Award of International Invention Innovation Canada Competition (iCAN) 2022, Toronto, Canada.
- Represented Malaysia in the 40th Elvis Tribute Artist Celebration in Texas, Dallas, USA, in 2017, and won an Elvis Tribute Artist (ETA) subsidiary award: a 2-day VIP Tour in Graceland, the Home of Elvis, and a 2-night in Guesthouse Graceland Resort, Memphis, Tennessee, USA.

Working Experiences:

Oct 2023 – Present: Universiti Malaysia Sabah as

- **Senior Lecturer**
 - Working as a Senior Lecturer for Data Science Course in Fakulti Komputer and Informasi (FKI).

Nov 2017 – Dec 2022: Komiso Sdn Bhd as Data Science/

- **Software Development Consultant**
 - Developed a model repository system using TensorFlow machine learning models for online apps platforms from Snowflake data warehouse.

Jan 2013 – Oct 2017: Softnet Solutions Com Sdn Bhd as

- **Data Science Engineer**
 - Developed biometric system based on faced recognition for attendance and access control.
 - Developed Real-Time Multiple Face Recognition Deep Learning algorithm for Cyber Security Malaysia (CSM) Cyberjaya, Selangor providing solution for surveillance detection under very low light.

Oct 2008 – Dec 2012: The W Group as

- **Software Development Manager**
 - Designed, developed or purchased the W Group's Centralized Application Systems Enterprise Resource Planning (ERP) Management Systems entailing: HR, Asset, Document, Logistic, Accounts, Property and Construction.

Aug 1995 – Sep 2008: Alliance Bank Malaysia Berhad as

- **Senior Executive - Hire Purchase System**
- **e-Banking Head Programmer for alliance online**
- **Cash Management Regional Manager East Malaysia.**

Admin Position:

- Publication Cordinator for Faculti Komputeran dan Informatik, UMS (2024 – 2026)

Professional Affiliations:

- Sabah West Coast Smart Consumer Association Deputy President (NGO)(2017 – 2023)
- Official Deputy Panel Advisor for BIMP EAGA Business Council in ICT & Industry 5.0 (Mar 2024-June 2025)

Training:

- TensorFlow: Building Artificial Neural Network using Python
- Machine Learning in Python: Predictive Analysis Techniques
- Python for Students
- Face Recognition Technique: A Literature Survey
- Face Detection and Recognition: Theory and Practice
- Artificial Intelligence for Students
- Artificial Intelligence for Data Science
- Machine Learning Using R.
- Intelligent Surveillance : Data Capture, Transmission and Analytics.



Dr. RAYNER @ HENRY PAILUS
 rayner.pailus@ums.edu.my

COURSE OUTLINE

INTRODUCTION TO MS POWER APPS

COURSE DURATION

2 Days

TARGET PARTICIPANT

This course empowers individuals across various fields, including government staff, marketers, analysts, business professionals, and educators, to create canvas and model-driven apps.

COURSE OBJECTIVES

- The course objectives are as follow:
- Understand power apps basics.
- Build basic canvas apps and implement basic data operations.
- Navigate app design and layout and utilize advanced controls and functions.
- deploy and test apps, manage app lifecycle, and integrate with Microsoft 365 services.

METHODOLOGY

Delivery method

- Hands-on, and Case study + presentation.

LEARNING OUTCOME

- This course will help participants to:
- Build custom canvas and model-driven apps to tackle your business/management challenges with confidence.
- Seamlessly integrate and manipulate data from diverse sources to craft dynamic, data-driven applications.
- Gain the know-how to deploy, test, and manage your Power Apps across different environments for flawless application implementation and maintenance.
- Explore seamless integration with Power Automate and Power BI, creating streamlined workflows and unlocking deeper insights from your data.



Day 1

TIME	ACTIVITIES	DESCRIPTION
8.00am – 8.30am	Course Overview + Ice breaking	
8.30am – 10.30am	Module 1 Introduction to Google Power Apps <i>Interactive talk</i>	Overview of Power Apps and its capabilities. Understanding the Power Apps interface and components.
10.30am -11.00am	Refreshment	
11.00am – 1.00pm	Module 2 Building Canvas Apps (Part 1) <i>Hands-on</i>	Creating a new canvas app from a template. Exploring basic app layout and design options. Adding and formatting controls such as buttons, labels, and text inputs.
1.00pm – 2.00pm	Lunch	
2.00pm – 4.00pm	Module 3 Building Canvas Apps (Part 2) <i>Hands-on</i>	Implementing basic data connections to Excel, SharePoint, or other data sources. Configuring data forms for data entry and editing. Implementing basic navigation and screen transitions.

Day 2

TIME	ACTIVITIES	DESCRIPTION
8.30am – 10.30am	Module 4 Advanced App Design Techniques <i>Hands-on</i>	Implementing conditional formatting and visibility rules. Working with collections and variables for data manipulation. Utilizing advanced controls such as galleries, forms, and data tables.
10.30am -11.00am	Refreshment	
11.00am – 1.00pm	Module 5 Introduction to Model-Driven Apps <i>Hands-on</i>	Understanding the concept of model-driven apps. Exploring the Power Apps data model and entity relationships. Creating a simple model-driven app from scratch.
1.00pm – 2.00pm	Lunch	
2.00pm – 4.00pm	Module 6 App Deployment and Administration <i>Hands-on</i>	Testing and debugging apps using the Power Apps Studio. Publishing apps to the Power Apps environment. Managing app versions, permissions, and security settings. Integrating Power Apps with other Microsoft 365 services such as Power Automate and Power BI.
4.00pm – 4.30pm	Closing Remark & Group Photo	





Ts. Dr. Chin Pei Yee @Christie

Profile

I am an IT Senior Lecturer in the Faculty of Computing and Informatics at the Universiti Malaysia Sabah with more than 10 years of experience delivering engaging IT training programs such as Computational Thinking, Object-Oriented Programming and Web Programming. I am committed to fostering a positive learning environment and staying current with industry IT trends.

Education

- 2017
PhD in Information Systems
University of South Australia
- 2005
MSc. in Information Technology (Software)
University of Glasgow, UK
- 2003
BSc. (First Class Hons) in Electronic Commerce
Universiti Malaysia Sabah

Experience

- 2023 till now
Deputy Director
Center for Industrial Collaboration and Engagement
Universiti Malaysia Sabah
- 2017 till now
Senior Lecturer
Faculty of Computing and Informatics, UMS
- 2003-2004
Tutor
Faculty of Computing and Informatics, UMS

Recognition

- Malaysia Board of Technologist (MBOT)**
Professional Technologist
- Malaysia Association of Information Systems**
Senior Member

Contact

peiyee@ums.edu.my

010 9826559

Faculty Computing and Informatics,
Universiti Malaysia Sabah
Jalan UMS, 88400 Kota Kinabalu, Sabah

Professional Certificate

- Master Trainer of Computational Thinking

Training

- Programming Language
- Microsoft 365 Apps
- Database
- Technopreneurship



Ts. Dr. CHIN PEI YEE
peiyee@ums.edu.my

COURSE OUTLINE

MICROSOFT EXCEL FOR BEGINNERS



COURSE DURATION 2 - 3 Days

TARGET PARTICIPANT All grades

COURSE OBJECTIVES

- To equip participants with foundational skills and knowledge necessary to effectively use Microsoft Excel for various tasks.
- Participants will be able to navigate the Excel interface with confidence, enter and manage data efficiently, utilize basic formulas and functions for data analysis, and create simple yet informative charts.
- This includes navigating the interface, entering and formatting data.
- This course also aims to provide a solid grounding in Excel, enabling participants to apply these skills in personal, academic, and professional contexts by using the basic formulas, and creating simple charts from the data provide.

METHODOLOGY

Interactive talk, Hands-on, Case study & Assessment

LEARNING OUTCOME

- Understand the basic of Excel
- Manage workbook & worksheets
- Enter & edit data
- Format cells & data
- Use basic formulas & functions
- Organise & update data
- Create & customise charts
- Utilise basic data analysis tools
- Apply practical skills
- Access further learning resources

Day 1

TIME	ACTIVITIES	DESCRIPTION
8.30am – 10.30am	Module 1 Introduction and Interface Overview Interactive talk Hands-on Activity: <ul style="list-style-type: none"> Open Excel and explore the interface Identify key components (ribbon, tabs, cells, etc.) 	What is Excel? <ul style="list-style-type: none"> Brief introduction to Excel Common uses of Excel (e.g., data analysis, budgeting, record-keeping) Excel Interface : <ul style="list-style-type: none"> Ribbon and tabs Quick Access Toolbar Worksheet and workbook structure Cells, rows, and columns Status bar
10.30am -11.00am	Refreshment	
11.00am – 1.00pm	Module 2 Basic Operations Interactive talk Hands-on Activity: <ul style="list-style-type: none"> Create a simple worksheet with sample data Practice formatting cells 	Creating and Saving Workbooks <ul style="list-style-type: none"> How to create a new workbook Saving workbooks (Save vs. Save As) Entering Data <ul style="list-style-type: none"> Entering text, numbers, and dates Editing cell contents AutoFill feature Basic Formatting <ul style="list-style-type: none"> Formatting text (font, size, colour, bold, italic, underline) Cell alignment (left, centre, right, top, middle, bottom) Number formatting (currency, percentage, date)
1.00pm – 2.00pm	Lunch	
2.00pm – 4.00pm	Module 3 Building Canvas Apps (Part 2) Hands-on Activity: Calculate totals, averages, minimums, and maximums using sample data Practice using cell references in formulas	Introduction to Formulas <ul style="list-style-type: none"> Basic arithmetic operations (+, -, *, /) Using parentheses in formulas Common Functions SUM, AVERAGE, MIN, MAX, COUNT Using the Formula Bar <ul style="list-style-type: none"> Entering and editing formulas Understanding cell references (relative, absolute)

MODULE SUMMARY

Day 2

TIME	ACTIVITIES	DESCRIPTION
8.30am – 10.30am	Module 4 Organizing and Analysing Data Interactive talk Hands-on Activity: <ul style="list-style-type: none"> Sort and filter sample data Apply conditional formatting Create and customize a chart based on sample data 	Sorting and Filtering <ul style="list-style-type: none"> Sorting data (ascending, descending) Using filters to display specific data Basic Data Analysis Tools <ul style="list-style-type: none"> Conditional formatting Using the Quick Analysis tool Creating Simple Charts <ul style="list-style-type: none"> Types of charts (bar, column, line, pie) Creating and formatting a chart Customizing chart elements (titles, labels, legends)
10.30am -11.00am	Refreshment	
11.00am – 1.00pm	Module 5 Practical Exercises and Q&A Interactive talk Hands-on	Practical Exercises <ul style="list-style-type: none"> Provide additional exercises for participants to practice the skills learned Monitor and assist as needed Edit Q&A Session <ul style="list-style-type: none"> Open the floor for questions and clarifications Provide additional tips and resources for learning Excel
1.00pm – 2.00pm	Lunch	
2.00pm – 4.00pm	Module 6 Assessment Case study	Participants will complete a final practical exercise where they will create a simple Excel workbook, enter and format data, use basic formulas, and create a chart. Feedback and additional guidance will be provided based on the assessment.





IZA AZURA A. BAHAR

Lecturer

Profile

I am enthusiastic, self-motivated, reliable, responsible and hard working person. I am a mature team worker and adaptable to all challenging situations. I am also able to work well both in a team environment as well as using own initiatives. Able to work under pressure and on strict deadlines.

0198416974

izabahar@ums.edu.my

Iza Bahar

48 Lazenda Villa 5,
Jalan Pohon Batu
87000 Labuan

Education

Ph.D in Computer Science
Universiti Malaysia Sabah
2019-ongoing

Masters in Information System
Brunel University, UK
2002-2004

Bachelor of Management
Universiti Malaysia Sabah
1994-1998

Expertise

Business Management
Digital Marketing
Decision Support System
Task Scheduling
Excel

Language

English
Malay

Work Experience

- 2015 - Present** **Universiti Malaysia Sabah**
Lecturer
 - Planning, organising and teaching undergraduate students
 - Contribute to the on-going development of final year project
 - Provide feedback & support to the students' learning
 - Participate in research & develop output for research publications
- 2013 - 2015** **Universiti Malaysia Sabah**
Assistant Registrar
 - Working with the wider development team.
 - Assist Promotion of Knowledge and Language Learning Department in day-to-day operational and strategic long-term decisions.
- April 2012 - July 2012** **Labuan Financial Services Authority**
External Relations Executive
 - Managing day-to-day operational and strategic long-term authority
 - Dealing with external authority parties such as International Advisory Panel (IAP) members, Bank Negara, etc.
- 2017 - 2019** **Her Majesty's Department of Work & Pension (DWP), Birmingham, UK**
Administrative Officer
 - Identifying & evaluating applicants for UK government benefits
 - Handling annoyed publics who may be distressed when their applications were turned down by the government

References

Prof. Madya Dr. Azali Saudi
Ph.D Supervisor

Phone: 016-9211176

Email: azali@ums.edu.my

IZA AZURA A. BAHAR

izabahar@ums.edu.my

COURSE OUTLINE

MICROSOFT EXCEL

INTERMEDIATE

COURSE DURATION

2 - 3 Days

TARGET PARTICIPANT

- **Business Professionals:** Individuals who regularly work with data in spreadsheets for tasks like budgeting, sales analysis, or project management.
- **Analysts:** This course is valuable for analysts of all levels who want to improve their ability to clean, organize, and analyse data using advanced Excel techniques.
- **Entrepreneurs and Small Business Owners:** For entrepreneurs and small business owners managing their own data, this course equips them with the skills to gain deeper insights from their information.
- **Anyone who wants to take their Excel skills to the next level:** This course is open to anyone who has a basic understanding of Excel and wants to become more proficient in data manipulation, analysis, and presentation using the software.

COURSE OBJECTIVES

- Master intermediate referencing techniques for complex calculations.
- Leverage advanced functions for data analysis and manipulation.
- Effectively organize and structure data using tables and subtotals.
- Create impactful data visualizations with charts and formatting.
- Enhance workflow efficiency through automation techniques.

METHODOLOGY

- **Instructor-Led Presentations:** The instructor will introduce key concepts, demonstrate techniques, and provide real-world examples to illustrate their application.
- **Hands-on Exercises:** Participants will actively engage with the material through a series of individual exercises designed to reinforce their understanding of the presented concepts.
- **Labs:** Dedicated lab sessions will provide participants with a guided practice environment to solidify their skills through more complex exercises and real-world data scenarios.
- **Class Discussions:** Interactive discussions will foster knowledge sharing, address participant questions, and encourage critical thinking about the covered material.

LEARNING OUTCOME

Upon successful completion of this course, you will be able to:

Enhance proficiency in formula construction and manipulation:

- Confidently create and edit formulas using advanced functions like VLOOKUP, INDEX MATCH, and XLOOKUP.
- Master the use of logical functions (AND, OR, NOT) and nesting functions for complex calculations.
- Implement error handling functions to ensure formulas work without errors.

Become an expert in data analysis:

- Clean and organize data effectively using advanced filtering techniques.
- Utilize PivotTables and PivotCharts to create interactive data summaries and visualizations.
- Leverage conditional formatting to highlight data patterns and improve readability.
- Employ data validation to ensure data accuracy and consistency.

Master data visualization techniques:

- Select the most appropriate chart type for your data and customize its appearance for impactful presentations.
- Create informative sparklines and charts for dashboards to provide quick insights.
- Apply statistical and financial formulas to analyze data for informed decision-making.



Day 1

TIME	ACTIVITIES	DESCRIPTION
8.00am – 8.30.am	Course Overview	
8.30am – 10.30am	Module 1 1. Review of core Excel concepts. 2. Deep dive into intermediate referencing: relative, absolute, and mixed references. 3. Mastering formula construction and troubleshooting common errors.	Participants will be working with worksheets, workbooks, cells, ranges, navigation, and shortcuts. Hands-on practice.
10.30am -11.00am	Refreshment	
11.00am – 1.00pm	Module 2 1. Introduction to advanced functions. 2. Working with dynamic data ranges: tables and named ranges for efficient data management.	Participants will explore functions such as logical (IF, AND, OR), lookup (VLOOKUP, INDEX MATCH), and text manipulation functions (CLEAN, CONCATENATE). Hands-on practice with advanced functions: applying scenarios to real-world examples.
1.00pm – 2.00pm	Lunch	
2.00pm – 4.00pm	Module 3 1. Leveraging data validation to ensure data accuracy and consistency. 2. Introduction to data consolidation.	Participants will be exposed with process in data accuracy and consistency, combining data from multiple sheets and/or workbooks.

Day 2

TIME	ACTIVITIES	DESCRIPTION
8.30am – 10.30am	Module 4 1. Creating effective data visualizations 2. Formatting charts for clarity and visual appeal. 3. Advanced chart techniques.	Participants will learn on choosing the right chart type for your data, customizing colors, labels, and legends, and exploring advanced chart techniques such as Sparklines, combo charts, and data tables.
10.30am -11.00am	Refreshment	
11.00am – 1.00pm	Module 5 Introduction to PivotTables	Creating pivot tables to summarize and analyse data. Hands-on practice with PivotTables: exploring pivot table functionalities and customization options.
1.00pm – 2.00pm	Lunch	
2.00pm – 4.00pm	Modul 6 1. Introduction to macros: recording simple macros to automate repetitive tasks. 2. Exploring conditional formatting: applying formatting rules based on specific data criteria.	In the last session, discuss on course review and Q&A: addressing any remaining questions and finalizing key learnings.
4.00pm – 4.30pm	Closing Remark & Group photo	





Hadzariah Ismail

Lecturer

Contact

- +60196013994
- had@ums.edu.my
- www.ums.edu.my
- Universiti Malaysia Sabah,
Labuan International
Campus, Jalan Sg Pagar,
87000 LABUAN

Education

- Universiti Malaya**
2000
Master in Computer Science
- London South Bank University**
1995-1997
BSc Computing Studies
- EDP- MARA**
1990 -1992
Diploma in Computing Studies

Expertise

- Requirements Engineering
- Data Retrieval Process
- Software Development framework

Working Experiences

- Universiti Malaysia Sabah**
2004 - current
 - Lecturer
- Mejati HyperSis Sdn Bhd**
2002 - 2004
 - Application Consultant
- Gestalt Sdn Bhd**
2000 - 2002
 - Systems Consultant

Recognition/Certification

- SCRUM Fundamentals Certification
- Malaysia Board of Technologist (MBOT) -
Professional Technologist

Activities

- Object Oriented Modeling Design
- DFD Modeling and Design course
- SQL Basics Bootcamp
- Microsoft Power BI Data Analyst Certification



HADZARIAH ISMAIL
had@ums.edu.my

COURSE OUTLINE

MICROSOFT EXCEL:

ADVANCED

COURSE DURATION 3 Days

TARGET PARTICIPANT

This course empowers individuals across various fields, including government staff, marketers, analysts, business professionals, and educators, to transform raw data into impactful, interactive dashboards using Microsoft Excel.

COURSE OBJECTIVES

- The course objectives are as follow:
- Harness the Power of Formulas and Functions.
- Become a Data Cleaning Pro.
- Craft Compelling Visualizations.
- Build Dynamic and Interactive Dashboards.

METHODOLOGY

- Talk or lecture
- Interactive talk
- Hands-on
- Group discussions
- Q&A Session

LEARNING OUTCOME

- Participants will be able to implement and manage complex data models.
- Participants will master the use of advanced DAX functions for sophisticated data analysis.
- Participants will be capable of creating advanced, dynamic, and interactive visualizations.
- Participants will learn techniques to optimize Power BI reports for performance and efficiency.
- Participants will be proficient in deploying, sharing, and managing Power BI reports and dashboards in a collaborative environment.



MODULE SUMMARY

Day 1

TIME	ACTIVITIES	DESCRIPTION
8.00am – 8.30am	Course Overview + Ice breaking	
8.30am – 10.30am	Module 1 Advanced Formulas and Functions <i>Interactive talk</i>	Learn to use complex formulas, including array formulas, dynamic arrays, and advanced lookup functions, to perform sophisticated data analysis and calculations.
10.30am - 11.00am	Refreshment	
11.00am – 1.00pm	Module 2 Data Analysis <i>Hands-on</i>	Master techniques for creating and manipulating PivotTables and PivotCharts, and leverage Power Query for data transformation and cleaning.
1.00pm – 2.00pm	Lunch	
2.00pm – 4.00pm	Module 3 Data Visualization <i>Hands-on</i>	Explore the capabilities of Power Pivot to create data models, use DAX for advanced calculations, and build relationships between tables.

Day 2

TIME	ACTIVITIES	DESCRIPTION
8.30am – 10.30am	Module 4 Automation and Efficiency <i>Hands-on</i>	Develop skills in creating advanced charts, applying conditional formatting, and designing interactive dashboards to effectively visualize and interpret data.
10.30am - 11.00am	Refreshment	
11.00am – 1.00pm	Module 5 Data Security and Protection <i>Hands-on</i>	Learn to automate tasks by writing and recording macros with VBA, enhance data validation, and audit formulas for accuracy.
1.00pm – 2.00pm	Lunch	
2.00pm – 4.00pm	Module 6 Advanced Filtering and Sorting <i>Hands-on</i>	Apply techniques to protect workbooks and worksheets with passwords, encrypt files, and remove hidden data to secure sensitive information.

Day 3

TIME	ACTIVITIES	DESCRIPTION
8.30am – 10.30am	Module 7 Collaborative Features <i>Hands-on</i>	Utilize custom filter criteria and multi-level sorting to manage and analyze large datasets effectively.
10.30am - 11.00am	Refreshment	
11.00am – 1.00pm	Module 8 Working with External Data <i>Hands-on</i>	Understand how to use Excel's collaborative tools for real-time co-authoring, manage shared workbooks, and integrate comments and notes for teamwork.
1.00pm – 2.00pm	Lunch	
2.00pm – 4.00pm	Module 9 Presentation <i>Case study + presentation</i>	Gain expertise in importing data from various sources, setting up and managing data connections, and using SQL queries within Excel for comprehensive data analysis.
4.00pm – 4.30pm	Closing Remark & Group Photo	



	<p>Working Experiences</p> <p>Universiti Malaysia Sabah (Till now) Associate Professor Faculty of Computing and Informatics, Universiti Malaysia Sabah, Jalan UMS, 88400 Kota Kinabalu, Sabah, Malaysia</p> <p>Universiti Malaysia Sabah (2009-2014) Senior Lecturer School of Engineering and Information Technology, Universiti Malaysia Sabah, Jalan UMS, 88400 Kota Kinabalu, Sabah, Malaysia</p>
<p>Name: Chin Kim On Address: Faculty of Computing and Informatics, Universiti Malaysia Sabah, Jalan UMS, 88400 Kota Kinabalu, Sabah, Malaysia Phone: 016-8301621 E-mail: kimonchin@ums.edu.my or kimonchin@gmail.com</p>	<p>Admin Position</p> <ul style="list-style-type: none"> • E-Learning Coordinator (2023 – till now) • Deputy Dean of Academic (2021-2023) • Deputy Director of Centre of Data and Information Management (2018-2021) • Head of Program for Software Engineering Programme (2015-2017)
<p>Education:</p> <p>Phd in Artificial Intelligence Universiti Malaysia Sabah (UMS)</p> <p>MSc in Software Engineering by research, Universiti Malaysia Sabah (UMS)</p> <p>Bachelor Degree in information Technology (Hons), Universiti Malaysia Sabah (UMS)</p>	<p>Professional Certificate</p> <ul style="list-style-type: none"> • Master Trainer of Computational Thinking • Master Trainer of Arduino - IOT <p>Training Activities</p> <ul style="list-style-type: none"> • Computational Thinking • Python Programming • Arduino and IoT • 3D Modelling and Printing • RBT Design • Scratch Programming
<p>Recognition</p> <ul style="list-style-type: none"> • IEEE Senior Member • Malaysia Quality Assurance (MQA) - Auditor • Malaysia Board of Technologist (MBOT) - Professional Technologist and Auditor 	<p>Public Talk</p> <ul style="list-style-type: none"> • Fundamental IoT • Google Data Studio • Problem Solving using Computational Thinking • Revolutionary Industry of 4.0 • Teaching Methodology for IKKM • Teaching and Learning using Generative AI Tools



Assoc. Prof. CHIN KIM ON
kimonchin@ums.edu.my

COURSE OUTLINE

INTERNET OF THINGS: BEGINNERS

COURSE DURATION

3 days, 2 Series

TARGET PARTICIPANT

- Mid-level management, N41 and above (govt. sector)
- IT-based companies or govt. agencies

COURSE OBJECTIVES

- Understand the role of data management, analytics, and security in IoT applications.
- Design and implement IoT applications using appropriate communication protocols and data storage techniques.
- Collaborate with peers to brainstorm ideas, solve problems, and develop creative IoT solutions

METHODOLOGY

- Suggestion method
- Lecture
 - Interactive talk
 - Case study (LDK)

LEARNING OUTCOME

- Identify and describe the key components of IoT systems, including sensors, actuators, communication protocols, and cloud platforms.
- Explore various IoT devices, platforms, and technologies available in the market.
- Analyze the potential impact of IoT on different industry verticals and society as a whole.
- Critically assess the ethical and privacy implications of collecting and analysing data in IoT.



Day 1

TIME	ACTIVITIES	DESCRIPTION
8.00am – 8.30.am	Course Overview	Ice-breaking session.
8.30am – 10.30am	Module 1 Understanding IoT Fundamentals <i>Interactive lectures</i>	<ul style="list-style-type: none"> • Introduction to IoT • Key Components of IoT
10.30am - 11.00am	Refreshment	
11.00am – 1.00pm	Module 2 IoT Architecture <i>Interactive lectures</i>	<ul style="list-style-type: none"> • Architectural Layers • Communication Protocols
1.00pm – 2.00pm	Lunch	
2.00pm – 4.00pm	Module 3 IoT Devices and Platforms <i>Interactive lectures</i>	<ul style="list-style-type: none"> • Hardware for IoT • IoT Platforms <ul style="list-style-type: none"> ◦ Raspberry Pi ◦ Arduino

Day 2

TIME	ACTIVITIES	DESCRIPTION
8.30am – 10.30am	Module 4 IoT Data Management and Analytics <i>Interactive lectures</i>	<ul style="list-style-type: none"> • Data Collection • Data Storage • Data Analytics
10.30am - 11.00am	Refreshment	
11.00am – 1.00pm	Module 5 IoT Security and Privacy	<ul style="list-style-type: none"> • Security Challenges in IoT • Privacy Concerns
1.00pm – 2.00pm	Lunch	
2.00pm – 5.00pm	Module 6 IoT Applications and <i>Case Studies</i>	<ul style="list-style-type: none"> • Industry Verticals

Day 3

TIME	ACTIVITIES	DESCRIPTION
8.30am – 10.30am	Module 7 Smart Office Automation Project <i>Interactive lectures & Hands-on</i>	<ul style="list-style-type: none"> • Introduction (10 minutes) • Setup Raspberry Pi and Arduino (20 minutes) • Sensor Integration (30 minutes) • Actuator Control (30 minutes) • Raspberry Pi Integration (30 minutes)
10.30am - 11.00am	Refreshment	
11.00am – 1.00pm	Module 8	Understand how to use Excel's collaborative tools for real-time co-authoring, manage shared workbooks, and integrate comments and notes for teamwork.
1.00pm – 2.00pm	Lunch	
2.00pm – 4.00pm	Module 9 Future Trends in IoT <i>Interactive lectures</i>	<ul style="list-style-type: none"> • Emerging Technologies • Challenges and Opportunities
4.00pm – 4.30pm	Closing Remark & Group Photo	





Professional Experience

Lecturer (2008 – present)

Faculty of Computing and Informatics
Universiti Malaysia Sabah

e-Usahawan Master Trainer (2018 – present)

Trainer Code: VB428
Malaysia Digital Economy Corporation (MDEC)

System Development Consultant (2014 – present)

Forten Energy Services,
Malaysia

Employment Consultant

The Salvation Army - Employment Plus,
Australia

Expertise

- E-Commerce Business Model
- Digital Marketing
- Digital Entrepreneurship
- Fintech Security
- Internet of Things

Research Interest

- Digital Entrepreneurship
- Social Informatics
- Cryptocurrency
- Internet of Things

Current Research

1. Cryptocurrency security mitigation
2. Digital entrepreneurship's socio-economic impacts
3. IoT in rural aquaculture

Courses Involved

1. Undergraduate Courses
 - a. Electronic Commerce Business Model
 - b. Management Information System
 - c. Digital Marketing
 - d. Business Management
 - e. Digital Workforce
 - f. Fintech
2. Community
 - a. Digital Entrepreneurship

Academic Qualification

- Professional Diploma in Digital Entrepreneurship, LRN (2019)
- ME-Com, Deakin University (2005)
- BCom – ECom & Mgt, Deakin University (2000)

Professional Certification

- e-Usahawan Trainer, Malaysia Digital Economy Corporation (MDEC) Sdn Bhd, 2018
- Microsoft Certified System Engineer (MCSE), 2003

NONA MASNIE BINTI MOHD. NISTAH

Faculty of Computing and Informatics,
Universiti Malaysia Sabah

 : +6087-460 447

 : nona@ums.edu.my

 : Nona Masnie Mnk

 : Nona Masnie Mnk

NONA MASNIE MOHD NISTAH

nona@ums.edu.my



COURSE OUTLINE

INTERNET OF THINGS INTERMEDIATE

COURSE DURATION 2 days

TARGET PARTICIPANT Primary and high school students, graduates, educators

COURSE OBJECTIVES

- Expose participants to the development of IoT-based projects using Arduino (Beginner, day 1)
- Develop IoT-based projects using Raspberry Pi (Advanced, day 2)
- Understand the basic principles and components of IoT technology
- Enhance problem-solving skills through hands-on projects and real-world applications
- Foster creativity and innovation by designing and implementing unique IoT solutions
- Improve teamwork and collaboration skills through group activities and projects

METHODOLOGY

- Interactive lectures
- Case study

LEARNING OUTCOME

- Demonstrate the ability to develop and implement basic IoT projects using Arduino
- Apply advanced IoT concepts and techniques using Raspberry Pi to create functional projects
- Explain the fundamental components and architecture of IoT systems
- Solve practical problems by designing and executing IoT solutions
- Collaborate effectively in teams to complete IoT-based projects



Day 1

TIME	ACTIVITIES	DESCRIPTION
8.00am – 8.30.am	Course Overview (Beginner)	Introduction to the workshop objectives, schedule, and the importance of IoT technology for various applications.
8.30am – 10.30am	Module 1 Introduction to Hardware <i>Interactive lectures</i>	Overview of Arduino ESP32 microcontroller, actuators, sensors, and other hardware components involved in IoT projects.
10.30am -11.00am	Refreshment	Break for refreshments and networking.
11.00am – 1.00pm	Module 2 Introduction to IoT Hardware (Arduino) <i>Interactive lectures</i>	Hands-on session introducing participants to Arduino IDE, basic coding, and simple IoT project setup.
1.00pm – 2.00pm	Lunch	
2.00pm – 4.00pm	Module 3 Developing Small IoT Project using Arduino <i>Case study</i>	Practical session where participants develop a small IoT project using Arduino ESP32 and Arduino IDE.

Day 2

TIME	ACTIVITIES	DESCRIPTION
8.30am – 10.30am	Module 4 Introduction to Hardware (Raspberry Pi) <i>Interactive lectures</i>	Overview of Raspberry Pi microcontroller, actuators, sensors, and other hardware components involved in IoT projects.
10.30am -11.00am	Refreshment	
11.00am – 1.00pm	Module 5 Introduction to IoT Hardware (Raspberry Pi) <i>Interactive lectures</i>	Hands-on session introducing participants to Python coding for IoT projects using Raspberry Pi.
1.00pm – 2.00pm	Lunch	
2.00pm – 4.00pm	Modul 6 Developing Small IoT Project using Raspberry Pi <i>Case study</i>	Practical session where participants develop a small IoT project using Raspberry Pi and Python programming.
4.00pm – 4.30pm	Closing Remark & Group Photo	





Ts. Dr. Khalifa Chekima

Senior Lecturer

Education

- 2015-2017
PhD Computer Science (Artificial Intelligence)
- 2009-2011
Master of Computer Science (Software Engineering)

Work Experience

- Senior Lecturer
| 2023-present
 - create more than 100 graphic designs for big companies
 - complete a lot of complicated work
- Consultant at Cybersecurity Malaysia
| 2019-2022
 - Consultation on Cybersecurity Projects
 - Provide trainings on Machine Learning
- IT Manager at ICloud Sdn Bhd
| 2019-2023
 - Managing IT department
 - Securing IT projects within organization

About Me

Khalifa Chekima is a Senior Lecturer of Computer Science at the Faculty of Computing and Informatics, Universiti Malaysia Sabah, with a focus on Data Science and Software Engineering programs. khalifa is a Certified Data Science Specialist (Itrain Asia), and a consultant at Cyber Security Malaysia

Expertise Skill

- Machine learning
- Artificial Intelligence
- Big Data Analytics
- Medical Image Processing
- Natural Language processing

Contact Me

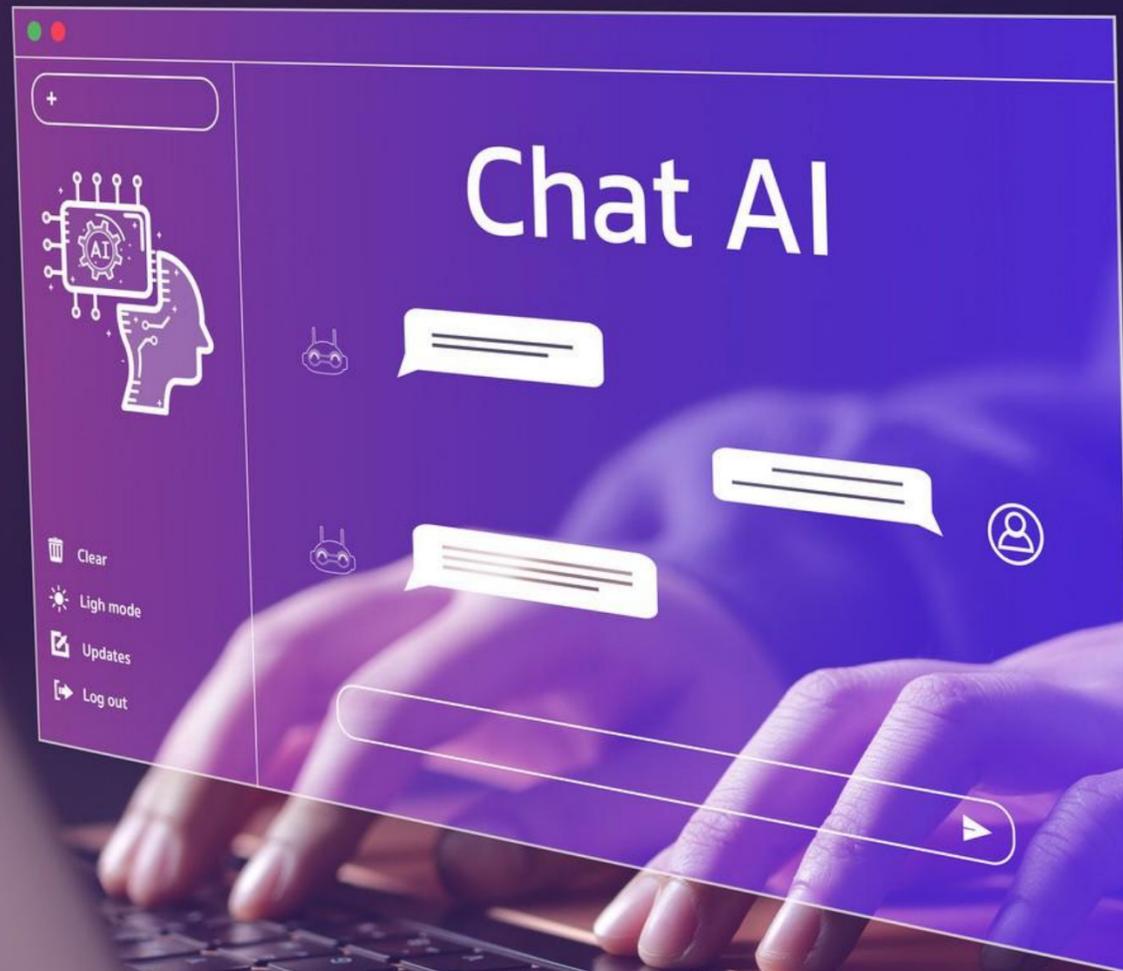
- ☎ +6 016 847 2388
- ✉ kchekima@ums.edu.my
- 🌐 www.ums.edu.com.my/fki
- 🏠 Faculty of Computing and Informatics, Universiti Malaysia Sabah.



Ts. Dr. KHALIFA CHEKIMA
kchekima@ums.edu.my

COURSE OUTLINE

ARTIFICIAL INTELLIGENCE: WORK PRODUCTIVITY WITH CHAT GPT



COURSE DURATION

2 Days

TARGET PARTICIPANT

Civil Servants and Private Company

COURSE OBJECTIVES

1. To gain a comprehensive understanding of Chat GPT's functionalities and potential applications in their work settings.
2. To learn on how to utilize Chat GPT to streamline communication and automate documentation processes.
3. To explore how Chat GPT can assist in data analysis and provide decision support.
4. To design and implement AI-driven workflow solutions tailored to their specific job functions.

METHODOLOGY

1. Interactive Lectures
2. Hands-On Workshops.
3. Q&A Sessions

LEARNING OUTCOME

At the end of this course, participant should be able to;

1. Demonstrate improved efficiency in completing routine tasks, resulting in increased overall productivity.
2. Show proficiency in using Chat GPT to enhance the quality and speed of their communication and documentation efforts.
3. Effectively use Chat GPT for data analysis, leading to more accurate and timely decision-making.
4. Implement AI-driven solutions in their workflows, tailored to their specific roles and organizational needs.

Day 1

TIME	ACTIVITIES	DESCRIPTION
8.00am – 8.30.am	Course Overview	Ice breaking
8.30am – 10.30am	Module 1 Introduction to AI and Chat GPT <i>Interactive lectures</i>	This module will provide an overview of artificial intelligence, with a focus on natural language processing and the capabilities of Chat GPT. Participants will learn about the history, development, and potential applications of AI in various industries. The session includes a mix of theory and interactive demonstrations.
10.30am -11.00am	Refreshment	
11.00am – 1.00pm	Module 2 Practical Applications of Chat GPT in the Workplace <i>Interactive lectures</i> <i>Hands-on</i>	This module explores specific use cases of Chat GPT in civil service and private sector roles. Participants will engage in hands-on exercises to identify and implement AI solutions for tasks such as drafting emails, generating reports, and automating routine inquiries.
1.00pm – 2.00pm	Lunch	
2.00pm – 4.00pm	Module 3 Streamlining Communication and Documentation with Chat GPT <i>Interactive lectures</i> <i>Hands-on</i>	Participants will dive deeper into using Chat GPT for enhancing communication and documentation. The session includes practical activities where participants will practice creating templates, automating responses, and generating comprehensive documents efficiently.

Day 2

TIME	ACTIVITIES	DESCRIPTION
8.30am – 10.30am	Module 4 Leveraging Chat GPT for Data Analysis and Insights <i>Interactive lectures</i> <i>Hands-on</i>	This module focuses on using Chat GPT for data analysis and generating insights. Participants will engage in hands-on exercises to learn how to input data, request analyses, and interpret AI-generated reports, aiding in better decision-making processes.
10.30am -11.00am	Refreshment	
11.00am – 1.00pm	Module 5 Developing Customized AI Solutions for Workflow Enhancement <i>Interactive lectures</i> <i>Hands-on</i>	Participants will work on designing and implementing customized AI-driven workflow solutions. Through guided exercises, they will identify areas for automation and create specific Chat GPT applications tailored to their job functions to enhance productivity.
1.00pm – 2.00pm	Lunch	
2.00pm – 4.00pm	Modul 6 Integration and Implementation Strategies <i>Interactive lectures</i> <i>Hands-on</i>	The final module will cover strategies for integrating Chat GPT solutions into existing workflows and ensuring seamless implementation. Participants will develop action plans, discuss potential challenges, and explore best practices for continuous improvement and scaling AI applications in their work environments.
4.00pm – 4.30pm	Closing Remark & Group Photo	





AG ASRI AG IBRAHIM

 awgasri@ums.edu.my

 0146778784

 www.ums.edu.my

CONTACT

Address: Faculty of Computing and Informatics, Universiti Malaysia Sabah, Jalan UMS, 88400 Kota Kinabalu, Sabah, Malaysia

Phone: 0146778784

E-mail: awgasri@ums.edu.my

WORK EXPERIENCE

- **Professor - Universiti Malaysia Sabah (1999-present)**
- **Tutor – Universiti Malaya(1998-1999)**

ADMIN POSITION

- **Chief Digital Officer (CDO) (2020-present)**
- **Director, Digital Department UMS (2019-2024)**
- **Dean, Faculty of Computing and Informatics (2014-2019)**
- **Dean, School of Informatics Science (2009-2013)**
- **Acting Dean, School of Informatics Science (2000-2004).**

CERTIFIED TRAINER

Certified Trainer HRD-Corp
eUsahawan Certified Trainer



Subject Matter Expert (SME) eUsahawan MDEC

TRAINING

- **AI Tools for productivity**
- **eUsahawan (Digital Marketing)**
- **Kansei Engineering Technique**
- **Programming Language**
- **Digital Strategic Plan**
- **ChatGPT**
- **Microsoft 365 Apps (Bookings, Calendars etc.)**
- **ICT Project Management**



Prof. Dr. AG. ASRI AG. IBRAHIM

awgasri@ums.edu.my

Course Fees and Descriptions

Descriptions	Remarks
Training Period	2 - 3 days
Number of Participants	15 - 20 participants
Consultation Fees	RM4,000 per day
Participant Meals	To be provided by the organizer
Course Venue	To be provided by the organizer



For more information

<https://fki.ums.edu.my/> 🔍

WhatsApp +60193973356

(Dr Muzaffar Hamzah)