REGISTRATION FORM:

Name(s)	Membership No. / Grade	Fees (RM)
	Sub Total:	

Company					
Address					
Mobile		Tel(O)		Fax	
E-mail	(Please write clearly as the "Information Update will be sent via email)				
Contact Person		Designation			
Signature		Date			

TERMS & CONDITIONS:

- Payment via CASH / CHEQUE / BANK-IN TRANSMISSION /WALK -IN will be ACCEPTED
- **FULL PAYMENT** must be settled before commencement of the course, otherwise participants will not be allowed to enter the hall. If a place is reserved and the intended participants fail to attend the course, the fee is to be settled in full. If the participant failed to attend the course, the fee paid is non refundable. Registration fee includes lecture notes, refreshment.
- The Organising Committee reserves the right to cancel, alter, or change the program due to unforeseen circumstances. Every effort will be made to inform the registered participants of any changes. In view of the limited places available, intending participants are advised to send their registrations as early as possible so as to avoid disappointment.

PAYMENT METHOD:

- Local cheque made payable to "**THE INSTITUTION OF ENGINEERS MALAYSIA".**
- Directly bank in or online transfer to:- (Please forward soft copy of payment advice)

THE INSTITUTION OF ENGINEERS MALAYSIA
Maybank Account no. 553104558067

CANCELLATION POLICY:

- IEM Kelantan reserves the right to postpone, reschedule, allocate or cancel the course. **Full refund less is 30% if cancellation is received in writing more than 7 days before the start of the event. No cancellation will be accepted prior to the date of the event.** However, replacement or substitute may be made at any time with prior notification and substitute will be charged according to membership status.

THE INSTITUTION OF ENGINEERS, MALAYSIA (KELANTAN BRANCH)
C/O: ROLFOM CONSULT SDN BHD
LOT 5139, KOMPLEKS NIAGA INOTRUS, KAWASAN PERINDUSTRIAN PENGKALAN CHEPA II,
16100 KOTA BHARU, KELANTAN
TEL: 09-773 0899 **E-MAIL: iemkelantanbranch@gmail.com**

Course on: ***AN INTRODUCTION OF GEOSPATIAL ANALYTICS COMPUTER APPLICATION FOR PROFESSIONAL (QGIS & GEODA)***

Date	**:**	**10th November 2025 – 12nd Novcember 2025**
Time	**:**	**8.00 a.m. –5.00 pm**
Venue	**:**	**TBA**

Organized by:
The Institution of Engineers, Malaysia
KELANTAN BRANCH

REGISTRATION FEES

	Fee
IEM Member	RM450.00
Non IEM Member	RM600.00

Closing Date: 11th October 2025

BEM Approved CPD/PDP Hours:

To register, please click :
https://tinyurl.com/3ukpw32w
Limited to 40 participants.

SYNOPSIS

This three-day course will be focusing on essential geospatial analytics skills using QGIS and GEODA software. The first day of courses will begin with focusing on basic knowledge and method coverage. Include developing and managing online questionnaires, including data creation, transformation, and dashboard presentations. Subsequent sessions cover digital mapping processes, where participants learn to create polygons, lines, and points and transform data into spatial elements. Later on, it focuses on producing digital mappings using raster layering and Google Maps integration, concluding with georeferencing and practical analyses such as point pattern analysis and heat maps.

On the 2nd day, the workshop will focus on data manipulation and analysis. by introducing vector analysis, including overlay and buffering analysis, followed by network analysis covering network links and shortest path analysis. Terrain spatial analytics is explored with applications of SRTM, slope analysis, and TPI computation. Spatial statistics and an introduction to database management will be covered later on.

The last day starts with an introduction to Exploratory Spatial Data Analysis (ESDA) and statistical analyses, progressing to workshops that include Local Indicator of Spatial Association (LISA) and spatial distribution data analysis. The next topic covers the introduction of unsupervised spatial regression techniques and the application of Python in QGIS for automation.

FOR FURTHER DETAILS, PLEASE CONTACT:

Ir. Wan Muhammad Faisyal Bin Mohd Noor ((+60 17-9532518)
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Kawasan Perindustrian Pengkalan Chepa II,
16100 Kota Bharu, Kelantan.
TEL: 09-773 0899 E-MAIL: iemkelantanbranch@gmail.com

SPEAKER`S PROFILE

Ts. Dr. Syazwan Aizat bin Ismail , was a PhD holder in Mechanical Engineering focusing on Occupational Health and Safety, Industrial Hygiene of Occupational Exposure, Indoor Air Quality, Machine Learning, Artificial Intelligent and Internet of Things and master's degree holder in Environmental and Occupational Health. He has more than 17-year experience on site and research regarding occupational and environmental health specializing in air quality, water quality and human factors engineering. He published numbers of scientific articles in the field of occupational epidemiology and environmental health. He contributes significantly in numbers of curriculum development for environmental health especially in Advance Diploma Outbreak Management and Disease Control (specialized in spatial epidemiology and computer applications for outbreak management). Besides spatial epidemiology and health, he also involves in numbers of research projects and professional courses in the field of industrial hygiene, machine learning including artificial intelligent applications, electronics and Internet of Things (IoT). Currently he works as Senior Lecturer at Universiti Sains Malaysia (USM)

TENTATIVE PROGRAMME

TIME	ITEM
10th November 2025	
8:00 am	Registration
8:30 am	Introduction and Ice Breaking Session
9.00 am	Online questionnaire development and management -Creation, extraction, transformation and manipulation -Dashboard presentation (live feed) & software introduction
10.00 am	Spatial: • Digital mapping process • Making polygon, line and points • Transforming data into spatial elements • Import and Export data into spatial elements • Customize the digital map • Filtering spatial data
11.00 am	Production of Digital Mapping Raster/ layering ➢ Application of Google Map/ Google Earth ➢ Adjustment of spatial data and coordinate system Spatial mapping process
1.00 pm	Lunch Break
2.00 pm	Georeferencing Map production using Google Infrastructure o QGIS Integration/ Layer manipulation
3.00 pm	Handson • Practical analysis data ➢ Point Pattern Analysis ➢ Heat Map/ Statistical Distribution ➢ Point pattern data preparation as grid analysis
5.00 pm	End of Day 1
11st November 2025	
8:00 am	Registration
8:30 am	Introduction to Vector Analysis Overlay analysis • Buffering analysis
10:30am	Introduction to Network Analysis ➢ Network links, Turn, Vector-based network ➢ Shortest path analysis
11:30am	Terrain Spatial Analytics SRTM application, Slope Analysis, TPI
1.00 pm	Lunch Break
2.00 pm	Spatial Statistics ➢ Geospatial statistics, cluster analysis
3.30 pm	Introduction to Database Management • Example of Database management and map manipulation
5.00 pm	End of Day 2
12nd November 2025	
8:00 am	Registration
8:30 am	ESDA: • Introduction to Exploratory Spatial Data Analysis • Introduction to ESDA software
10:00am	Statistical analysis ➢ Point pattern statistical analysis ➢ Introduction of grid analysis (polygon-based data analysis)
11:30am	Workshop on Spatial Analytics ➢ Introduction to Local Indicator Spatial Association (LISA) ➢ Spatial distribution data analysis (Global and Local Moran's I)
1.00 pm	Lunch Break
2.00 pm	Introduction to Spatial Environmetric (unsupervised technique): • Example of spatial regression data analysis
3.30 pm	Introduction to Python application to QGIS • Programming QGIS automation and deployment
5.00 pm	End of Day 3

**** Bring your laptop and please make sure the laptop can support GIS software**