



## SYNOPSIS

There are three lessons in this module. The first is a lesson that introduces participants to a standard digital mapping process using import, manipulation and creation of digital map. The second lesson introduces participants to the scientific method of understanding spatial descriptive analysis. The last lesson focuses on the use of spatial data analysis .This program also design to help any technical personel in understanding the process of geospatial analysis using FREE software.

Relevant topics and key elements in workshop

- Production of digital map for spatial data analysis
- Manipulation of data, presentation and extraction of information from digital map
- Introduction to spatial data analysis

### **FOR FURTHER DETAILS, PLEASE CONTACT:**

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## **SPEAKER'S PROFILE**

**Syazwan Aizat bin Ismail** , , was a master degree holder in Occupational Health and Safety and degree holder in Environmental and Occupational Health. He has more than 15-year experience on site and research regarding occupational and environmental health specialized 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). Beside 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 Tutor at Institut Latihan Kementerian Kesihatan Malaysia (ILKKM) Sungai Buloh.

## **TENTATIVE PROGRAMME**

TIME	ITEM
13 <sup>th</sup> March 2023	
8:00 am	Registration
8:30 am	Session 1: Overview of Geographic Information System and Spatial Analysis
	Session 2: Principles of digital mapping and their functions & Production of digital map using free application.
10:30am	Tea- Break
11:00am	Session 3 : Application of polygon manipulation and data presentations Application of points data manipulation and data presentations
1.00 pm	Lunch
2.00 pm	Session 4: Introduction to Geoda and QGIS
	Session 5: Introduction to Point Pattern Analysis & Manipulations - Introduction to Polygon Base Analysis
5.00 pm	End of Day 1
14 <sup>th</sup> March 2023	
8:00 am	Registration
8:30 am	Session 6 : Output generation and exportation of data
	Session 7 : Local Indicator Spatial Autocorrelation (LISA) Application I and LISA Applications II
	Session 8: Cluster analysis and spatial
10:30am	Tea- Break
11:00am	Session 9: Regression analysis & Spatial – Temporal Analysis
	Session 10: Introduction to Principal Component Analysis in Spatial Elements
1.00 pm	Lunch
2.00 pm	Session 11 : Geospatial Statistics
	- Interpolation data analysis - Producing digital map and display
4.30 pm	Course evaluation
5.00 pm	End of Day 2

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