

**RESEARCH METHODOLOGY
SEMESTER 2 2023/2024
KFA 11003 / PFA 11003**

21 – 27 APRIL 2024

Note: Attendance is COMPULSORY

DATE	TIME	CONTENT	MODE	LOCATION / LINK
21 April 2024 Sunday	8:00 AM – 1:00 PM (5 hours)	Introduction to Research <i>Assoc. Prof. Ir. Dr. Shahrul Niza Bin Mokhatar</i>	Physical / Hybrid	Bilik Kuliah 1, BK 1 (Lecture Room 1), Faculty of Civil Engineering & Built Environment, UTHM <u>Join Teams meeting</u> (Microsoft Teams online:) Meeting ID: 425 297 871 286 Passcode: j2jnvk
	2:00 PM – 5:30 PM (3½ hours)	Literature Search <i>(PTTA Library)</i>	Physical / Hybrid	
22 April 2024 Monday	8:00 AM – 1:00 PM (5 hours)	Literature Review <i>Assoc. Prof. Ir. Dr. Shahrul Niza Bin Mokhatar</i>	Physical / Hybrid	
	2:00 PM – 5:30 PM (3½ hours)	Literature Review: How to Write Systematic Review Paper for High Impact Journal <i>TBC</i>	Physical / Hybrid	
23 April 2024 Tuesday	8:00 AM – 1:00 PM (5 hours)	Research Design and Methodology <i>Assoc. Prof. Ir. Dr. Shahrul Niza Bin Mokhatar</i>	Physical / Hybrid	
	2:00 PM – 5:30 PM (3½ hours)	Data Analysis <i>Assoc. Prof. Ir. Dr. Shahrul Niza Bin Mokhatar</i>	Physical / Hybrid	
24 April 2024 Wednesday	8:00 AM – 1:00 PM (5 hours)	Data Analysis: Data Analysis Using AI and Statistical Software <i>TBC</i>	Physical / Hybrid	
	2:00 PM – 5:30 PM (3½ hours)	Thesis Writing Guidelines <i>Assoc. Prof. Ir. Dr. Shahrul Niza Bin Mokhatar</i>	Physical / Hybrid	
25 April 2024 Thursday	8:00 AM – 1:00 PM (5 hours)	Discussion and Conclusion <i>Assoc. Prof. Ir. Dr. Shahrul Niza Bin Mokhatar</i>	Physical / Hybrid	
	2:00 PM – 5:00 PM (3 hours)	Innovation to Commercialisation <i>Assoc. Prof. Ir. Ts. Dr. Riduan Bin Yunus (ICC)</i>	Physical / Hybrid	

CONTENT

1.0 INTRODUCTION <ul style="list-style-type: none">1.1 Research background1.2 Problem statement1.3 Research aims and objectives1.4 Scopes and limitations1.5 Research gap and originality1.6 Abstract
2.0 LITERATURE REVIEW <ul style="list-style-type: none">2.1 Purpose of literature review2.2 Component of literature review2.3 Online information resources2.4 Systematic and retrospective search2.5 Preparation and techniques2.6 Citation in text and references2.7 Organization literature review
3.0 RESEARCH DESIGN AND METHODOLOGY <ul style="list-style-type: none">3.1 Problem Formulation3.2 Quantitative and qualitative methods3.3 Experimental, descriptive and exploratory3.4 Preparation for field works, model and interview3.5 Measurement and instrument3.6 Universe and population3.7 Sampling and data collection

4.0 DATA ANALYSIS <ul style="list-style-type: none">4.1 Qualitative analysis4.2 Descriptive analysis4.3 Data presentation4.4 Statistical test4.5 Correlational studies4.6 Experimental and ecological validity
5.0 DISCUSSION AND CONCLUSION <ul style="list-style-type: none">5.1 Results and findings5.2 Support data and collective arguments5.3 Conclusions5.4 Recommendation for further works
6.0 INNOVATION TO COMMERCIALIZATION <ul style="list-style-type: none">6.1 Product development6.2 Feasibility and demand study6.3 Trademark and patent6.4 Financial and grant6.5 Technology in commercialization