



# ENGINEERING SURVEY

## *Lecture 1:* *Briefing on Course Outline*

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## CONTACT INFORMATION

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## PROFESSIONAL AFFILIATION

**Member** - Royal Institution of Surveyors Malaysia (RISM - GLS)

**Professional Technologist** – M'sia Board of Technologist (MBOT - RB)

**Member** – Inst. of Electrical and Electronics Engineers (IEEE - GRSS)

**Professional Member** – Inst. of Geospatial & Remote Sensing M'sia (IGRSM)

**Individual Member** – Int. Society for Photogrammetry & RS (ISPRS)



# Course Information

<b>PROGRAMME:</b>	<b>LAND SURVEYING 2024 - CENTEXS - SECOND BATCH (2024)</b>
<b>MODULE:</b>	<b>3 : ENGINEERING SURVEYING</b>
<b>SUB-MODULE:</b>	<b>i. Principle of Engineering Survey ii. Understand the Levelling Survey, Cut &amp; Fill earth iii. Understand the Horizontal and vertical curve design iv. Introduction to survey plan(e.g. Setting-out, cut and fill and curve design. v. Field Practical</b>
<b>COURSE DURATION:</b>	<b>28 MARCH -19 APRIL 2024 (WEEK 5 - 9)</b>
<b>CREDIT HOURS:</b>	<b>4 WEEKS</b>

# Course Synopsis

This course introduces students to fundamental aspects of surveying and mapping. The basic levelling and engineering survey techniques are introduced and students will have the opportunity to conduct field work using the total station and levelling instrument.

# Programme Educational Objectives

The programme is the strategic collaboration between Land and Survey Department Sarawak (JTS), Land Surveyors Board Sarawak (LSB), Association of Consulting Licensed Land Surveyors Sarawak (ACLS) and Centre for Technology Excellence Sarawak (CENTEXS) with Universiti Teknologi Malaysia (UTM) to train Assistant Surveyor to meet the needs of skilled manpower in Land Surveying Industry in Sarawak.



# Programme Learning Outcomes



Ability to acquire knowledge of science and technology in Land Surveying.



Ability to plan and execute Land Surveying tasks systematically.



Ability to coordinate and manage Land Surveying projects professionally.



Ability to conduct levelling, setting out and process the collected data to feed the production of engineering maps.



Ability to apply and analyze information using appropriate Land Surveying techniques and tools.

# COURSE LEARNING OUTCOME (CLO)

At the end of this course, all of you will be able to:

1. Explain knowledge of science and technology in the field of Geomatics Engineering.
2. Perform basic surveying equipments and surveying works
3. Organize Levelling Survey and Engineering Survey tasks using available resources.
4. Work in a team and liaise at all levels.

# Course Content

Week	Topic
25-29 March 2024 (Week 5)	Briefing on Course Outline Introduction to Engineering Survey
1-5 April 2024 (Week 6)	Principle of Engineering Survey <ul style="list-style-type: none"><li>• Understand the Levelling Survey, Cut &amp; Fill earth</li><li>• Understand the horizontal and vertical curve design</li></ul>
8-12 April 2024 (Week 7)	Hari Raya Puasa Holiday
15-19 April 2024 (Week 8)	Introduction to survey plan (e.g. setting out, cut & full and curve design) Field Practical: <ul style="list-style-type: none"><li>i. Conducting setting out and pegging for construction project</li><li>ii. Conducting Levelling</li></ul>
22-26 April 2024 (Week 9)	Final Examination



# Course Assessment

LIST OF ASSESSMENTS		Marks (%)
1	Test	20
2	Quiz	10
3	Project: Field Work	30
4	Attendance	10
5	Final Examination	30
	<b>TOTAL MARKS</b>	<b>100</b>



**THANK YOU**



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