

# **QSM301 Construction Measurement (3 of 4) Advanced Civil & Structural Works**

**Level:** 3

**Credit Units:** 5 Credit Units

**Language:** ENGLISH

**Presentation Pattern:** EVERY JAN

## **Synopsis:**

Construction Measurement (3 of 4) Advanced Civil & Structural Works focuses on the measurement of more advanced Civil & Structural works in projects. It develops students' understanding and skills in the measurement of building works involving site preparation work, excavation of reinforced concrete framed & load-bearing structures and reinforced concrete super-structure works, including staircases and specialized piling in projects.

## **Topics:**

- Measurement of site preparation works involving over site excavation and tree cutting
- Measurement of excavation works below ground and associated reinforced concrete elements
- Measurement of rock excavation, concrete thickening, waterproofing and hardcore
- Measurement of reinforced concrete strip foundations with load bearing walls
- Measurement of reinforced concrete framed structures including columns, beams and slabs
- Measurement of roof structure including associated waterproofing works, formwork and reinforcement
- Measurement of reinforced concrete staircases, landings, balustrading and including associated formwork and reinforcement
- Measurement of metal and timber staircases with associated balustrading
- Measurement of brick and block walls including damp proof courses
- Measurement of glass walls and dry partition walls
- Measurement of reinforced concrete bored piles
- Measurement of steel piles

## **Textbooks:**

Standard Method of Measurement of Building Works 2nd SISV SISV  
ISBN-13: BSISVSMOMOBW2

QSM301 Study Guide (UDC - SUSS) SUSS  
ISBN-13: SG-1582

**Learning Outcome:**

- Apply the relevant SMM rules for measuring quantities.
- Identify scope and interpret drawings and specifications for measuring site preparation work, excavation of reinforced concrete framed & load-bearing structures, reinforced concrete super-structure works, including staircases and specialized piling in projects.
- Interpret the principles and rules of the Standard Method of Measurement for Building Works 2 (SMM2) relating to the measurement of site preparation work, excavation of reinforced concrete framed & load-bearing structures and reinforced concrete super-structure works, including staircases and specialized piling in projects.
- Prepare a list of items based on drawings and specifications for measuring quantities relating to the measurement of site preparation work, excavation of reinforced concrete framed & load-bearing structures and reinforced concrete super-structure works, including staircases and specialized piling in projects.
- Apply the principles and rules of SMM2 to measure site preparation work, excavation of reinforced concrete framed & load-bearing structures and reinforced concrete super-structure works, including staircases and specialized piling in projects.
- Demonstrate ability to ensure that quantities measured are accurate and consistent with SMM2 principles through bulk check.

**Assessment Strategies - Regular Semester (Evening Class):**

<b>Components</b>	<b>Description</b>	<b>Weightage Allocation (%)</b>
Overall Continuous Assessment	TUTOR-MARKED ASSIGNMENT 1	15
	TUTOR-MARKED ASSIGNMENT 2	15
Overall Examinable Components	ECA	70
<b>Total</b>		<b>100</b>

\*The information listed is subject to review and change.