

# **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 SISV  
ISBN-13: SISV-AA

: Standard Method of Measurement of Building Works SISV  
ISBN-13: SISV

**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:**

<b>Continuous Assessment Component</b>	<b>Weightage (%)</b>
TUTOR-MARKED ASSIGNMENT	15
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<b>Sub-Total</b>	<b>30</b>

<b>Examinable Component</b>	<b>Weightage (%)</b>
ECA	70
<b>Sub-Total</b>	<b>70</b>

**Weightage Total** **100**