

## Liverpool John Moores University

Title: ESTIMATION FOR CONSTRUCTION (EFC)  
Status: Definitive  
Code: **5509ICPDQS** (128377)  
Version Start Date: 01-08-2021

Owning School/Faculty: Civil Engineering and Built Environment  
Teaching School/Faculty: ICBT, Colombo

Team	Leader
Alison Cotgrave	Y

**Academic Level:** FHEQ5      **Credit Value:** 15      **Total Delivered Hours:** 15  
**Total Learning Hours:** 150      **Private Study:** 135

### Delivery Options

Course typically offered: Semester 1

Component	Contact Hours
Lecture	15

**Grading Basis:** 40 %

### Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Report	AS1	Coursework (3500 words)	100	

### Aims

*Aims of the module are to demonstrate an understanding about tendering process of various construction contracts and to apply methods & techniques of construction estimation to produce estimates in different phases of a building and civil engineering construction contracts.*

### Learning Outcomes

After completing the module the student should be able to:

- 1 Identify traditional & modern types, processes of tendering in building and civil engineering construction contracts.
- 2 Assess and apply various standards code of practice & rules of tendering in building and civil engineering construction contracts.
- 3 Apply estimation techniques to produce estimates in various type of building and civil engineering construction contracts.
- 4 Appraise computer based tools and applications of estimation & future dimensions of Quantity Surveying practice with advance IT applications for estimation works.

## Learning Outcomes of Assessments

The assessment item list is assessed via the learning outcomes listed:

Coursework (3500 words)    1       2       3       4

## Outline Syllabus

- *Methods of Tendering & procurement routs: Open, selective, negotiated, competitive, serial, framework, Single-stage and two-stage, Tender evaluation and Tender report*
- *Form of bids (Standard Bidding Documents) and tendering documentation:*
- *Introduction to FIDIC/ CIDA & compilation of tender documents using standard formats*
- *"Tender documentation: Advertisement for Bids,*
- *Information for Bidders, Bid Bond, Bidder qualifications, Invitation, Offer, Acceptance, Award, Securities & Bonds"*
- *Schedule of rates and its application to calculate unit rates: labour/ plants & machinery of civil & building works.*
- *Unit rate preparation for BOQ: Use of BSR/ NRM 2*
- *Operational & commercial factors to produce estimates*
- *Mark-ups: Profits & overheads*
- *Provisional & Prime cost sum*
- *Introduction to RIBA Plan of work 2013 and stages of tendering Introduction to e-tendering*
- *Software packages for estimation work: MS Excel*

## Learning Activities

Students will be supported in their learning, to achieve the above learning outcomes, in the following ways:

By a series of lectures and theoretical approach together with numerous tutorials to identify & assess standard methods of tendering in building & civil engineering works and various standards rules & code of practice in tendering.

- In-class practical sessions and activities to apply rules/ codes of tendering to

produce estimates related of building & civil engineering works in different forms & phases.

- Self-managed studies to familiarize methods of computer based tools and applications of estimation & future dimensions of quantity surveying practice with advance IT applications for estimation works.
- Tendering process & commercial management, Standard rules & Code of Procedure of tendering, tendering documentation and cost estimation are key features of this module.

## **Notes**

A recommended resource list - indicating key reading, virtual and physical learning assistance, is provided to help enable students to undertake self-directed study.