BLDG 4004 ESTIMATING 2

Credit Points 10

Legacy Code 300726

Coordinator Yingbin Feng (https://directory.westernsydney.edu.au/ search/name/Yingbin Feng/)

Description The aim of this unit is to give students a hands-on experience of the tendering process for construction professionals. Students undertake a team research project to determine the optimum parameters for a civil/building infrastructure estimation.

School Eng, Design & Built Env

Discipline Building Construction Economics

Student Contribution Band HECS Band 2 10cp

Check your HECS Band contribution amount via the Fees (https:// www.westernsydney.edu.au/currentstudents/current_students/fees/) page.

Level Undergraduate Level 4 subject

Equivalent Subjects LGYB 5406 - Estimating 2

Assumed Knowledge

Building construction including residential, light industrial and small commercial as covered in the subjects Building 1 and Building 2 and building measurement as covered in Building Quantities and Estimating as covered in Estimating 1.

Learning Outcomes

On successful completion of this subject, students should be able to:

- 1. Prepare a tender for a major infrastructure project;
- 2. Identify and discuss ethical issues relating to the tendering process
- 3. Demonstrate how document control is managed.
- 4. Price and code plant and material, labour, built-up and all-in unit rates.
- 5. Calculate the preliminaries including those for remote areas.
- 6. Produce a Bill of quantities documentation: extend and checks; making comparisons: net rates bill; and civil estimating.
- 7. Conduct statistical analyses, including: regression analysis and Monte Carlo simulation to achieve optimum project cost.

Subject Content

Tendering and estimating processes;

Estimating ethics;

Document control including receipt & send-out procedures;

Pricing and coding: all-in rates for plant and material, labour rates, build up unit rates;

Calculation of preliminaries including considerations for remote areas; Bill of quantities documentation: extend and checks; making

comparisons: net rates bill; civil estimating;

Statistical analysis, including: regression analysis and Monte Carlo simulation.

All in accordance with the current edition of the Australian Standard Method of Measurement of Building Works, and the Guide to Estimating Practice for Building Work.

Assessment

The following table summarises the standard assessment tasks for this subject. Please note this is a guide only. Assessment tasks are regularly updated, where there is a difference your Learning Guide takes precedence.

ltem	Length	Percent	Threshold	Individual/ Group Task
Online Quiz	20 minutes	10	Ν	Individual
Estimating Report	4000 word estimating team report	40	Ν	Both (Individual & Group)
Oral presentation	10 minutes for each group	10	Ν	Individual
Final Online Exam	2 hours	40	Ν	Individual

Teaching Periods