

MANAGE CONSTRUCTION PROJECT

UNIT CODE: ENG/OS/QS/CR/08/6/A

UNIT DESCRIPTION

This unit describes the competencies required to manage construction project. It involves conducting feasibility study, preparing construction cost budgets, preparing materials, plant and labour schedule, preparing work program, managing construction site, managing construction plant and equipment, preparing project progress report, carrying out project evaluation and participating in site/project handing over.

ELEMENTS AND PERFORMANCE CRITERIA

ELEMENT	PERFORMANCE CRITERIA <i>(Bold and italicized terms are elaborated in the Range)</i>
1 Conduct feasibility study	1.1 Site visit is conducted as per SOPs 1.2 Investment cost is determined based on the project 1.3 PESTEL analysis is conducted as per SOPs 1.4 Feasibility study report is prepared based on PESTEL analysis
2 Prepare construction cost budgets	2.1 Preliminary costs are determined based on the project 2.2 Plant, labour and material costs are determined based on the project 2.3 Profits, overhead and tax costs are determined based on the project 2.4 Statutory authority fees are determined as per SOPs 2.5 Consultancy fees are determined based on the project 2.6 Cash flow statement is prepared based on the project
3 Prepare materials, plant and labour schedule	3.1 Project activities are determined based on the project scope 3.2 Material requirements are determined based on the project activities 3.3 Labour requirements are determined based on the project activities 3.4 Plant requirements are determined based on the project activities
4 Prepare work program	4.1 Project activities are identified based on the project scope 4.2 Time for each activity is estimated based on the project scope 4.3 Resources are allocated for each activity based on the project scope 4.4 Activities are arranged logically as per SOPs 4.5 Start and finish times are determined as per SOPs 4.6 Critical activities are determined as per SOPs 4.7 Float times are determined as per SOPs 4.8 Project duration is determined based on the start and finish time
5 Manage construction site	5.1 Site layout plan is implemented as per SOPs 5.2 Materials, plant and labour are procured based on schedules

ELEMENT	PERFORMANCE CRITERIA <i>(Bold and italicized terms are elaborated in the Range)</i>
	5.3 Safety and security measures are implemented as per site requirements and SOPs 5.4 Site records are maintained based on project activities
6 Manage construction plant and equipment	6.1 Plant and equipment requirement are determined based on the project scope 6.2 Plant and equipment are acquired based on the requirement 6.3 Safety and security requirements are determined as per SOPs 6.4 Maintenance schedule is prepared as per SOPs 6.5 Plant and equipment disposal procedures are determined as per SOPs
7 Prepare project progress report	7.1 Key performance indicators are determined based on the work program 7.2 Site visit is conducted based on the work program 7.3 Site meetings are conducted based on the work program 7.4 Project progress report is prepared as per SOPs
8 Participate in site/project handing over	8.1 Site inspection is carried out based on the project scope 8.2 Defects made good are ascertained as per SOPs 8.3 Invoices and claims are ascertained to be settled as per SOPs 8.4 Operator's manual and maintenance plan are prepared as per SOPs 8.5 Project/site is handed over as per SOPs
9 Carry out project evaluation	9.1 Project evaluation criteria is determined as per SOPs 9.2 Financial evaluation is carried out based on the project budget 1.1 Performance standards are evaluated as per SOPs 1.2 Project evaluation report is prepared as per SOPs 1.3 Site inspection is carried out based on the project scope
10 Manage conflicts and disputes	10.1 Types of conflicts and disputes are determined based on SOPs. 10.2 Sources of construction disputes and conflicts are determined as per SOPs 10.3 Methods of conflicts and disputes resolutions are determined as per SOPs 10.4 Conflicts and disputes resolutions procedure is determined as per SOPs
11 Carry out post construction management	11.1 Maintenance schedule is prepared as per SOPs 11.2 Maintenance budget is prepared based on maintenance schedule 11.3 Maintenance activities are carried out as per maintenance schedule

RANGE

Variable	Range
	<i>May include but is not limited to:</i>

1. PESTEL analysis	1.1 Political 1.2 economical 1.3 social 1.4 technological 1.5 environmental 1.6 legal
2. Cash flow statement	2.1 Incomes 2.2 Expenses
3. Start and finish times	3.1 Earliest start time 3.2 Latest start time 3.3 Earliest finish time 3.4 Latest finish time
4. Site layout plan	4.1 Access roads 4.2 Stores and offices 4.3 Equipment 4.4 Materials 4.5 Project layout
5. Performance standards	5.1 Workmanship 5.2 Project duration 5.3 Financial estimates/targets

REQUIRED KNOWLEDGE

- Construction technology
- Construction law
- Arbitration
- Building economics
- Computer literacy
- Planning
- Management
- Report writing
- Book keeping and accounting
- Work program
- Procurement
- Construction plant
- Occupational Safety and Health
- Scheduling
- Plant and materials
- Procurement
- Record keeping
- Accounting
- Mathematics
- Statutory requirements

- Environmental Impact Assessment
- Economics
- Construction technology
- Construction Materials, plant and labour
- Estimation
- Construction
- Materials

SKILLS

- Planning
- Management
- Digital
- Analytical
- Report writing
- Drawing
- Coordination

EVIDENCE GUIDE

This provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge and range.

<p>1. Critical Aspects of Competency</p>	<p>Assessment requires evidence that the candidate:</p> <ul style="list-style-type: none"> 1.1 Conducted feasibility study 1.2 Determined preliminary costs 1.3 Determined profits, overhead and tax costs 1.4 Prepared cash flow statement 1.5 Determined project activities 1.6 Determined materials, labour and plant requirements 1.7 Prepared work program 1.8 Managed construction site 1.9 Determined plant and equipment requirements 1.10 Acquired plant and equipment 1.11 Prepared maintenance schedule 1.12 Prepared project progress reports 1.13 Carried out project evaluation 1.14 Carried out site inspection 1.15 Ascertained defects made good 1.16 Ascertained invoices and claims to be settled 1.17 Handed over project
<p>2. Resource Implications</p>	<p>The following resources should be provided:</p> <ul style="list-style-type: none"> 2.1 Fully functional office 2.2 Office stationery and equipment

	2.3 Computers
3. Methods of Assessment	Competency may be assessed through: 3.1 Written text 3.2 Interview 3.3 Observation
4. Context of Assessment	Competency may be assessed on the job, off the job or a combination of these. Off the job assessment must be undertaken in a closely simulated workplace environment.
5. Guidance information for assessment	Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended.

easytvvet.com