COST ENGINEERING – CORE COMPETENCIES 2018

The quantity surveying competencies are split into core and specialist competencies. **OPTIMUM STANDARDS**

Each of the activities under the competencies must be signed-off to a specific standard, indicated by one of the letters A, K, E or B. The definitions of these are given blow.

A	Appreciation	A general awareness of the activity is required. This could be acquired by reading a magazine article or attending a CPD event.
K	Knowledge	This standard requires a more detailed level of knowledge and understating of the activity. This could be acquired by undertaking a training course or other type of study but not necessarily have put into practice. e.g. a subject area on a degree course.
E	Experience	To reach this standard the activity must have been performed independently or under supervision. This may be achieved by undertaking the activity in a work context over a period of time. Experience of the activity or subject should follow on and be additional to appreciation and knowledge in that subject area.
B	Ability	To be able, without supervision, to perform relevant functions and be able to supervise other less experienced staff. This may be evidenced by the undertaking of management roles or experience gained over a period of time.

Technical Member level –the applicant must achieve standard K in all activities except that any 5 must be at E and any 5 may be at A amongst the core competencies and the same amongst the specialist competencies. There are no restrictions within this as to the particular choice of activities.

Member level – the optimum standard is given against each activity statement

Revisions 2018:

Security mindedness added to CM Core CE 06A and CM Core CE 06C
Risk added to CM Core CE 01A and CM Core CE 01D

CM CORE 1 Cost Engineering	Commercial Management Core Competency Cost Engineering Specialism	COMPETENCIES AND ASSESSMENT Financial and commercial processes in civil engineering				
Reference	Technical Member Optimum Standard– see covering sheet Member – Optimum Standard	Activity Details	Date of Assessment A	K	E	B
A	E	Management of budgets for civil engineering works. Cost forecasting, management and control processes including the use of contract programmes change and risk registers				
B	E	Profitability forecasts, cost/budget/value comparisons and cash flow.				
C	B	Value engineering techniques and their importance in achieving cost effective and safe design, construction and maintenance solutions				
D	B	Design / adaption and continual improvement of processes, procedures, and tools to enable the monitoring and management of key commercial drivers e.g. change, cost, risk, certification etc including a facility to check and audit.				

Name of Supervisor	Name of Applicant
Supervisor's signature	Date CM CORE CE 1

CM CORE 2 Cost Engineering	Commercial Management Core Competency Cost Engineering Specialism		COMPETENCIES AND ASSESSMENT Commercial management and contract administration on civil engineering projects				
	Technical Member Optimum Standard – see covering sheet		Activity Details	Date of Assessment			
Reference	Member - Optimum Standard			A	K	E	B
A		E	Supply chain procurement and management.				
B		E	Administration of contracts and / or subcontracts including payment mechanisms, change procedures, and resolution of contentious issues, final accounts agreement and management.				
C		K	The principles of insurance and the common types of insurance available for usage on civil engineering projects, including professional indemnity insurance and warranties.				
D		E	Identification, recording, notification and negotiation of change in accordance with the contract. Evaluation of change through analysis of rates or compensation methods, and agreement of the effects of change.				
E		K	Employment legislation and its applicability to civil engineering works (e.g. Working Rule Agreement)				

Name of Supervisor	Name of Applicant
Supervisor's signature	Date CM CORE CE 2

CM CORE 3 Cost Engineering	Commercial Management Core Competency Cost Engineering Specialism	COMPETENCIES AND ASSESSMENT Contract structure, documentation and the bid process in civil engineering				
Reference	Technical Member - Optimum Standard – see covering sheet Member - Optimum Standard	Activity Details	Date of Assessment			
			A	K	E	B
A	E	Standard forms of contract, how they deal with key provisions including the rights and obligations of the Parties				
B	E	Determination of the scope of the work through interpretation of the contract documents – contract provisions, specifications, drawing, schedules, technical etc.				
C	E	The purposes of and differences between Preambles, Bills of Quantities, Activity Schedules and Schedules of Rates				
D	K	Risk identification, analysis and management				
E	B	The preparation and interpretation of estimates and tender submissions.				

Name of Supervisor	Name of Applicant
Supervisor's signature	Date CM CORE CE 3

CM CORE 4 Cost Engineering	Commercial Management Core Competency Cost Engineering Specialism	COMPETENCIES AND ASSESSMENT The principles of contract law and their application within the context of civil engineering				
Reference	Technical Member - Optimum Standard – see sheet Member – Optimum Standard	Activity Details	Date of assessment			
			A	K	E	B
A	K	Contract and other civil law principles applicable to the jurisdiction				
B	K	Statute law relevant to civil engineering works				
C	E	Advice on contractual matters and formulating contractual / legal correspondence				
D	K	Dispute avoidance and resolution – processes available and procedures that apply.				

Name of Supervisor	Name of Applicant
Supervisor's signature	Date CM CORE CE 4

CM CORE 5 Cost Engineering	Commercial Management Core Competency Cost Engineering Specialism	COMPETENCIES AND ASSESSMENT Planning and programme in the management of civil engineering works				
	Technical Member – Optimum –Standard - see covering sheet	Activity Details	Date of Assessment			
Reference	Member – Optimum Standard		A	K	E	B
A	K	Various types of programmes used in civil engineering				
B	E	Use of the programmes for planning and monitoring the works				
C	K	Use of programmes for analysis and demonstration and delay and disruption and entitlement to extensions of time				
D	E	Use of programmes to support budget and risk management on a project				

Name of Supervisor	Name of Applicant
Supervisor's signature	Date CM CORE CE 5

CM CORE 6 Cost Engineering	Commercial Management Core Competency Cost Engineering Specialism	COMPETENCIES AND ASSESSMENT Techniques and technologies employed in civil engineering works				
	Technical Member – Optimum –Standard - see covering sheet	Activity Details	Date of Assessment			
			A	K	E	B
Reference	Member – Optimum Standard					
A	K	Techniques and technologies, their impact on sustainable, security minded and safe working practices with particular emphasis on stakeholder involvement in projects with which personally involved				
B	E	The utilisation of labour, plant, equipment, materials and sub contractors				
C	K	Building Information Modelling (BIM) including the security implication of this and similar management tools				

Name of Supervisor	Name of Applicant
Supervisor's signature	Date CM CORE CE 6