

BOARD OF QUANTITY SURVEYORS MALAYSIA

GUIDELINE TIER II EXAMINATION

TIER II – CONSULTANT QUANTITY SURVEYORS (CQS)

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Board of Quantity Surveyors Malaysia Registration Criteria for Consultant Quantity Surveyors (CQS)

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1. General Introductions

The 2nd Tier Assessment is the key route to registration as Consultant Quantity Surveyor (CQS) with the Board of Quantity Surveyors Malaysia (the Board).

- 1.1 The qualifying criteria for admission are based on the candidates' level of experience and competency to ensure the candidates are equipped with the necessary attributes to carry out practice as a Consultant Quantity Surveyor.
- 1.2 The Board will be the sole and final authority in the implementation of the 2^{nd} Tier Assessment.

2. Registration and Eligibility

- 2.1 Pre-requisites:
 - a) PQS with one (1) year supervised local experience with a Consulting Quantity Surveying Practice (CQSP) and Public Agencies (excluding academic institutions), or
 - b) PQS registered under the Academic Route with at least two (2) years of relevant working experience with a Consulting Quantity Surveying Practice (CQSP) or Public Agencies.
- 2.2 Successfully complete the 2nd Tier Assessment comprising paper of Professional Practice I, Professional Practice II (a), Professional Practice II (b), and Professional Interview.
- 2.3 Candidates undertaking the 2nd Tier Assessment must be a Professional Quantity Surveyor (PQS) registered with the Board of Quantity Surveyors Malaysia
- 2.4 Candidates must also be suitably employed in public and private establishment principally engaged in quantity surveying services or in public service, excluding academic institution. It is extremely important for the candidate's Employer to provide the opportunities as to acquire the appropriate training.

3. Approach

The 2nd Tier Assessment process will gauge and signify the levels of competencies of the practitioners in their skills and abilities.

- 3.1 There are 3 basic levels of attainment which are progressive in terms of skills and abilities.
 - a) Level 1: Knowledge and understanding
 - b) Level 2: Application of knowledge and understanding Conflict management, Data management Communication and Negotiation
 - c) Level 3: Reasoned analytical advice and Depth of technical knowledge Leadership, Management of resources and people Client care, Ethics and Professional practice
- 3.2 The 2nd Tier assumes candidates have acquired the necessary technical competencies of a professional quantity surveyor and ready to step a level higher in skills and abilities as a Consultant Quantity Surveyor.
- 3.3 Candidates are expected to exhibit all 3 Levels in skills and abilities in the Final Assessment.

4. Assessment Method

- 4.1 The 2nd Tier Assessment process will establish that the candidates:
 - a) are aware of the professional and commercial implications of their works,
 - b) understand their clients' and employers' thinking and objectives,
 - c) are up-to-date and well-equipped with the knowledge base on all matters relevant to the work of quantity surveyors,
 - d) have ample experience in client contact,
 - e) have the confidence to work independently and unsupervised; and
 - f) demonstrate motivation, initiative, administrative ability, and leadership potential.
- 4.2 The 2nd Tier Assessment has two (2) mandatory requirements:
 - a) Assessment Papers (Written Test):
 - i) Professional Practice I Business Management, Law & Accounts
 - ii) Professional Practice II (a) Professional Services
 - iii) Professional Practice II (b) Ethics
 - b) Professional Interview
- 4.3 Assessment Papers
 - a) The Assessment Papers (Written Test) are designed to give candidates an opportunity to demonstrate their knowledge and foundations in the relevant subjects related to the work of a practicing Quantity Surveyor.
 - b) Candidates are recommended to attend the 'Essential for Directors' Course, at their own cost to prepare them for Paper I. Registration to attend this course must be made through BQSM.

'Essential for Directors' is mandatory for all new Directors of companies and firms registered with BQSM. Those who have attended this course will be exempted from attending the course again.

- c) Candidates must sit for all papers at first sitting.
- d) Candidates will be given the date and location for the Assessment Papers (Written Test) upon their registration for the 2nd Tier. Candidates are also expected to conduct their own studies of the relevant subjects.
- 4.4 On the designated day, the respective candidate will proceed to the center on their own arrangement. It is important that candidates treat this exercise seriously and honestly.

4.5 The Assessment Papers cover the following:

a) Professional Practice I - Business Management, Law & Accounts

- i) Business Management
- ii) Business Law
- iii) Basic Business Accounting

b) Professional Practice II (a) - Professional Services

- i) International Construction Contracts (Mandatory)
- ii) Procurement of Services OR
- iii) Health, Safety and Environmental issues in Construction

c) Professional Practice II (b) - Professional Services

i) Business Ethics

4.6 Professional Interview

The 2nd Tier Professional Interview will provide an assessment of the candidates' competencies as a Consultant Quantity Surveyor. Candidates are assumed to have a good working and all-round knowledge of the quantity surveying practice as well as the construction industry as a whole.

- 4.7 The Interview will be conducted by a panel of assessors who will be looking for the following attributes:
 - a) Breadth and in depth of the candidate's professional experience.
 - b) Actual evidence of work produced and involvement, completed, planned and ongoing
 - c) Ability to handle normal work pressure including interruptions and tight deadlines
 - d) People and client interpersonal skills
 - e) Leadership acumen and skills
 - f) Adequacy and relevance of the candidate's professional development and training.
 - g) General knowledge of professional quantity surveying practices.
 - h) Professional ethics and legal liabilities of Quantity Surveyors.
 - i) General presentation skills.

- 4.8 During the interview, the candidates will testify their professional knowledge and experience as a PQS. They are expected to answer questions on their professional experience, relevant professional development and training experience, general quantity surveying practice and current issues as well as professional ethics and Rules of Conduct.
- 4.9 A briefing to all candidates on the syllabus of papers Professional Practice I, Professional Practice II(a) and Professional Practice II(b) will be held before the examination date. Candidates who attend the briefing will be given marks to be added to paper PP-I and PP-II (a) only. The value of marks shall be determined by the committee of Quantity Surveying Examination Council (QSEC).

5. Results and Appeals

5.1 Notification of Results

a) Marks awarded will not be disclosed.

- b) Results of the Written Test will be published 'on line' within three (3) months of the test date. All papers are carefully marked by examiners and the results are duly approved by the Board.
- c) Appeals to the Examination Council on Results of the Written Test must be done in writing within one (1) month of the Results being published.
- d) All decision by the Board of Quantity Surveyor Malaysia (BQSM) on appeal result of Tier-II Exam is Final.
- 5.2 Candidates who fail the Assessment Papers can re-sit the respective papers which they did not achieve the passing mark. Papers Professional Practice I, Professional Practice II(a) and Professional Practice II(b) are considered as separate papers. Candidates can re-sit for one or all the above Assessment Papers.
- 5.3 There are no limits to the number of times a paper / papers can be re-sit.
- 5.4 Results of the Professional Interview
 - a) Marks awarded will not be disclosed.
 - b) Results of the Professional Interview will be published 'on line' upon approval by the Board not later than one month from the date of professional interview.
 - c) All decisions on the Professional Interviews are final and not subject to appeal.
 - d) Candidates who fail the Professional Interview can apply for re-interview to be conducted within 3 (three) months of the results being informed to the candidates.

- 5.5 Special Assessment Interview
 - a) Candidates are only allowed to re-sit any failed Assessment Papers within two (2) years period from the date of first sitting.
 - b) In the event the candidates still failed to pass the re-sit paper attempted within the two (2) years allowed, the candidates may apply to the Board for consideration to sit for a Special Assessment Interview which will be conducted by the committee of Quantity Surveying Examination Council (QSEC). It is a pre-requisite that the candidates must re-sit the failed paper in all continuous examination after the first sitting within the allowed period. The Board has a final decision on the candidate entitlement to sit for the Special Assessment Interview
 - c) The result of the Special Assessment Interview will be recommended to the Board by Quantity Surveyor Examination Council (QSEC). Upon approval of the Board, successful candidates may be considered to be upgraded to Consultant Quantity Surveyor (CQS) subject to the result of Professional Interview.

6. Examination Fees

EXAMINATION	BRIEFING	APPEAL	RE-SIT	
*RM500	RM300 per session	RM150 per paper	PP-I : RM250	
			PP-II (a) : RM 150	
			PP-II (b) : RM100	

The Examination fees as per following: -

*First time candidate must sit for Paper I, Paper II (a) and Paper II (b).

Details are correct at the time of publication. BQSM reserves the right to change these at any time.

Appendix

- A: Routes to Registration
- B: Professional Practice I, II(a) and II(b) : Syllabus
 - i) Business Management, Law & Accounts
 - ii) Professional Services
 - iii) Business Ethics

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Qualification	Provisional Quantity Surveyor	1 st Tier – PQS			2 nd Tier - CQS		
obtained		Duration of certified local	Assessment of Professional Competence		Duration of certified local experience with	Sit for assessment/exam	
		experience by a PQS or CQS before been eligible to apply for Professional QS	Part 1 Logbook & Diary and Practical Task	Part 2 Structured Professional Interview and Critical Analysis / Submission	CQS firm/approved government department/organizatio n/institution approved by Board before eligible to apply for Consulting QS	 Professional Practice I & Professional Practice 2 + Interview 	
GRADUATE ROUTE	Accredited QS Degree	✓ Two (2) years					
		or ✓ Three (3) years (External Supervisor)		V	One (1) year	N	
	Accredited Masters with cognate degree	 ✓ Two (2) years or ✓ Three (3) years (External 	V	V	One (1) year	V	
		Supervisor)					
experience Route	Accredited QS Degree with minimum 5 years* working experience	 ✓ One (1) year or ✓ Two (2) years ** External Supervisor) 	x	\checkmark	One (1) year***	\checkmark	
	Non Accredited QS and related Degree or membership of approved professional institution with minimum 10 years* working experience	 ✓ One (1) year or ✓ Two (2) years (External Supervisor) 	х	V	One (1) year***	V	
ACADEMIC ROUTE	QS and related Degree with at least a Master's degree and minimum 3 years academic experience	 ✓ One (1) year or ✓ Two (2) years (External Supervisor Direct or Indirect) 	Х	V	Two (2) years***	V	

Routes to Registration

Revision 2.0 : 1 November 2020

Business Management, Law & Accounts

Subject: Business Management

Module Objectives:

- Fundamentals of management concepts and skills
- Identification of the internal and external factors and forces of the organization that managers must confront in their daily work
- Examination of the functions of management such as planning, organizing, leading, controlling, and decision making
- Identification the key competencies needed to be an effective manager
- Understanding the historical development of management theories and the implication for management or organizations
- Critical thinking on managerial problems
- The importance of social responsibility and managerial ethics in management operation

Syllabus Content:

1.0 Effective Management for Managers Today

- Introduction to management and organisations
- Management Yesterday and today
- Organisational culture and environment: The constraints
- Social responsibility and managerial ethics

2.0 Management Functions and Techniques

- Decision-Making: The essence of a manager's job
- Foundation of planning, planning tools and techniques
- Organisational structure and design
- Human resource management
- Managing change and innovation
- Understanding group and teams
- Leadership skills
- Foundation of control
- Operations and supply chain management

3.0 Contemporary Management and Competencies

- Time management skills
- Effective communication skills
- Problem solving skills
- Crisis management

Assessments:

Written Test

- Robbins, Stephen P, and Coulter, Mary. (2007) Management, 9th Edition. Prentice Hall
- George, Jennifer M. & Jones, Gareth R (2007) Contemporary Management, 5th Edition, McGraw-Hill / Irwin
- Whetten, David A. & Cameron, Kim S. (2007) Developing Management Skills, 7th Ed. Pearson Prentice Hall

Subject: Business Law

Module Objectives:

- Identification of the essential elements of the Malaysian legal systems including the main sources of law
- Application of the appropriate legal rules relating to the law of obligations
- Application of the law relating to employment relationships
- Alternative forms and constitution of business organizations
- Description on how companies are managed, administered and regulated
- Governance and ethical issues relating to business

Syllabus Content:

1.0 Essential Element of the Malaysian Legal System

- Court structure
- Sources of Law
- Human rights

2.0 The Law of Obligations

- Formation contracts
- Contents of contracts
- Breach of contract and remedies
- The law of Torts
- Professional negligence

3.0 Employment Law

- Contract of employment
- Dismissal and redundancy

4.0 Formation and Constitution of Business Organisation

- Law of agency
- Partnership
- Corporation and legal personality
- Company formation
- The company constitution

5.0 Management, Administration and Regulation of Companies

- Company Directors
- Other company officers
- Company meetings and resolutions

6.0 Governance and Ethical Issues relating to Business

- Corporate governance
- Fraudulent behavior

Assessments:

Written Test

- Wu Min Aun (2007), The Malaysian Legal System, 3rd Ed. Pearson Malaysia
- Lee Mei Pheng (2005), General Principles of Malaysian Law, 5th Ed. Penerbit Fajar Bakti
- Samsar Kamar Latif (2008), Partnership Law in Malaysia, ILBS
- Abdul Majid bin Nabi Baksh, Krishnan Arjunan (2005) Business Law in Malaysia, MLJ
- Wu Min Aun (2006), The Industrial Relations Law in Malaysia, Pearson

Subject: Basic Business Accounting

Module Objectives:

- Discussing the functions and roles of accounting in business
- Principles and concepts of accounting in preparing financial statements
- Identification of the basic steps in systematic recording process
- Understanding the language and mechanics of cost and management accounting
- Understanding and application of basic time value methodology to general valuation and integrated cash flow applications
- Understanding and application of conceptual relationship between expected return and relevant risks of individual and portfolio assets
- Understanding of the financial environment in which business decisions are made

Syllabus Content:

1.0 Nature and Objectives of Financial Accounting

- Types of business entities sole traders, partnerships and companies
- Nature, purpose and scope of accounting
- Main user groups of financial statements
- Differences between financial and management accounting
- Accounting principles and the Regulatory framework
- Accounting concepts, conventions and principles
- Introduction to the standard setting process

2.0 Accounting Cycle

- The basic accounting equation and its effect on the accounting process
- Classification of accounts
- The double entry system
- Introduction to prime books of entry
- Ledgers
- Cash book and bank reconciliation
- Preparing the trial balance
- Adjustment for accruals and prepayments including accounting for depreciation and bad debts

3.0 Non-current Assets

- Defining non-current tangible and intangible assets
- Distinguishing between capital and revenue expenditure items
- Concept of depreciation (and amortization)
- Methods of depreciation (and amortization)
- Accounting entries to record appreciation
- Presentation of depreciation in the income statement and balance sheet

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3.0 Non-current Assets (Cont'd)

- Preparing financial statements
- Preparing the income statement and balance sheet for sole traders

4.0 Introduction to Company Accounts

- Capital structure of companies
- Types of shares and debentures
- Issue of shares
- Types of reserves, capital and revenue, share premium
- Appropriation of profits
- Preparing simple income statements and balance sheet for internal use
- Interpretation of Financial Statements
- Accounting ratios for profitability, liquidity and assets utilization
- Significance of the ratios

5.0 Introduction to Cost and Management Accounting

- Fundamentals of costing
- Elements and classification of costs
- Marginal and absorption costing
- Cost-volume-profit-analysis
- Budgeting

6.0 Introduction to Financial Management

- An overview of Financial Management
- Financial statements, cash flow, and taxes
- Analysis of Financial Statements
- The Financial Environment: Market, institution and interest rates

7.0 Working Capital Management

- Managing current assets
- Financial current assets

Assessments:

Written Test

- Thomas, A. (2009) An Introduction to Financial Accounting, 6th Ed. McGraw-Hill
- Gillespie, Lewis and Hamilton (2004), Principles of Financial Accounting, 3rd Ed. Prentice Hall
- Wong S.V and Leong A.F.C (2005) Business Accounting, 2nd Ed. Prentice Hall.
- Brigham, E.F and Houston, J.F. (2009) Fundamentals of Financial Management, 12th Ed. South-Western, Thomson.
- Securities Industry Development Centre (2002) The Malaysian Capital Market: Examination Study Guide, Module 12, Investment Management and Corporate Finance, Securities Commission, Malaysia.

Professional Services

Subject: Construction Contracts

Module Objectives:

- Identification and explanation of the fundamentals of construction contracts
- Discussion of the appropriate types of contracts that apply in different construction projects
- Identification and explanation of key elements of construction contract forms
- Discussion of the provisions for claims, payments and dispute resolution in construction contracts
- Suggestion and appraisal on the suitability of construction contracts in selected case studies of construction projects

Module description:

This module requires basic knowledge and understanding of contracts in construction projects. It requires the candidates to appreciate, differentiate and apply the key elements of the provisions contained within the various forms of construction contracts

Syllabus Content:

1.0 Sources of Construction Law

- Sources and Origin
- Regulation affecting construction design and operations
- Elements of Construction Law and Contracts

2.0 Forms of Contract

- Elements of construction contracts Contract Sums, Claims and Payments, Variations subcontracting and Project close-out
- Alternative of contracts from within the Malaysian Construction Industry: FIDIC, JCT, ICE and others
- Analysis of contract provision within the different types of construction contracts
- Significance of types of construction contracts to the project contractual arrangement and project strategy.

3.0 Dispute, Avoidance and Resolution

- Disputes and their avoidance
- Types of disputes in construction contracts
- Alternative approaches in dispute resolution
- Statutory adjudication and construction contracts

Assessments:

Written Test

- Uff, J (2009) Construction Law, 10th Ed. Sweet and Maxwell
- Pena-Mora, F. Sosa, C.E, McCone, D.S (2006) Introduction to Construction Dispute Resolution, Prentice Hall, New Jersey
- Chow K.F. (2004) Law and Practise of Construction Contracts, 3rd Ed, Sweet and Maxwell
- Powell, V.S. Sims, J & Chappel, D (2005) Building Contract Claims, 4th Ed., Blackwell Publishing
- Furmston, M.P & Powell, V.S (2006) Building Contract Casebook, 4th Ed. Blackwell Publishing

Subject: Procurement of Services

Module Objectives:

- Introduce the theory and practice relating to contract and procurement of services in construction
- Discuss the appropriate procurement paths and strategies vis-à-vis the range of contract forms for construction projects and their impact of the project process and teams
- Discuss on emerging methods, principles and practices covering infrastructure project procurement including Public-Private Partnerships.
- Discuss the multiple aspects of the role of the government and promoters of private financing initiatives (PFI) within the prevailing political and economic climate

Module description:

This module presents the fundamental concepts and techniques involved in project acquisition and procurement. It requires the learning of the strategic importance of procurement strategy in the procurement of construction projects. It highlights the importance of appreciating the implication of procurement strategy on the roles and responsibilities to the promoters of the project, the project team and processes, and its implication on project viability. This module provides an in-depth knowledge and understanding of concept, scope, works, financing and roles of government in privatized infrastructure procurement.

Syllabus Content:

1.0 Procurement strategies

- Theory and practice of procurement, and their operation to clients' expectations, needs and legal framework
- Procurement paths and their difference
- Critical analysis of the impact of procurement strategy within the Malaysian construction industry

2.0 Evaluation

- Project evaluation process analysis and planning
- Identifying project options
- Identifying attributes / criteria of evaluation
- Methods of engineering of evaluation
- Legislative consideration in construction project evaluations
- Implication of project viability, cost-benefit analysis within the project life cycle.

3.0 Non Traditional Procurement Routes

- Procurement for design and build, PPP and PFI covering different sets of preliminaries
- Specialist agreements requiring conditions and subcontracts
- Separate preparation of the preliminaries and the technical specification
- Protection of design quality and the management of changes
- Turnkey, Private Financing initiatives(PFIs), Partnering, Joint Ventures and other variations to procurement variations

4.0 Public and Private funded projects

- Role of the government in the promotion and development of major infrastructure projects. Consideration in multinational projects, and project teams and strategies for overcoming problems.
- Privatized infrastructure procurement: background development of infrastructure, reason for use of private capital and historical lessons for the future
- Range of scope of privately funded infrastructure: organization arrangements, legal framework, the role function and objectives of the principal parties
- Project financing: Typical financing arrangements for infrastructure procurement, financing options and appraisal techniques, the roles of the risk analysis and whole life cycle cost predictions, strength and pitfalls, critical success factors

5.0 CQSP Fee Calculation for Basic QS Scope of Services abased on Scale of Fee in Memorandum of Agreement

Assessments:

Written Test

- Khairuddin A.R. (2003) Construction Procurement in Malaysia, IIUM Mastermas
- Akintoye, Akintola, Mathias Beck and Clift Hardcastle (2003) Public Private Partneship Managing Risks and Opportunities, Blackwell Publishings (London UK)
- Esty, Benjamin C (2003) Modern Project Finance: A Casebook, John Wiley & Sons Inc (New York NY)
- Keith Potts Construction Cost Management: Learning from Case Studies (2008) Routledge

Subject: Health, Safety and Environmental issues in Construction

Module Objectives:

- Understanding the concepts of environmentalism and environmental management, and health and safety in construction procurement and implementation
- Discussion on the appropriateness and adequacy of environment, health and safety considerations in the construction procurement provisions

Module description:

This module requires the learning of the fundamentals of environment, and health and safety in the procurement of construction projects. Central to this curriculum is developing the need to be able to appreciate, consider and apply environmental, and health and safety consideration in the procurement of construction projects.

Syllabus Content:

1.0 Environmental issues and sustainability

- Environmental policy and strategy in business
- Agenda for sustainable construction: sustainable development, regulations, policies and guidelines
- Government environment, health and safety policies

2.0 Environmental Management in Construction Procurement

- Environmental Impact Assessment (EIA) and Environmental Impact Management (EIM), environmental audits and statutory frameworks
- Environmental Management Systems (EMS), Environmental Management, Quality Management System (QMS) in development, construction and facilities management

3.0 Health and Safety and Construction Procurement

- Health and safety policy and strategy in construction business
- Legislative framework for health and safety in construction
- Health and safety management system in the construction business

Assessments:

Written Test

- Griffith A, (2011) Integrated Management System for Construction Quality, Environment and Safety, Prentice Hall
- Hassan, A. S, (2009) Contextual Issues of the Built Environment in Malaysia, Penerbit Universiti Sains Malaysia
- McEvoy M, Dye A, (2008) Environmental Construction Handbook, RIBA Publishing.
- Cunningham, W.P. & Saigo, B.W. (2007), Environmental Science: A global Concern, 10th Ed. WCB, McGraw-Hill, London

Subject: Business Ethics

Objectives:

 To identify strong attitudinal and affective skills and professionalism in managing contracts and businesses.

Syllabus Content:

1.0 Philosophical concepts and view on ethics

- Utilitarian view
- Right ethics and Duty ethics
- Accepting and Sharing responsibilities

2.0 Ethics and Laws (in Construction and Business)

- Corruptions
- Bribery
- Misconducts
- Violations and abuse
- Conflicts of interest

3.0 Ethical Principals and Ethical issues

- Codes of Practices in Industry
- Integrity
- Sustainable development
- Professional competence

Assessments:

Written Test

- Harris J, C.E, Pritchard M.S, Rabins M.J. (2000) Engineering Ethics Concepts and Cases (2nd Ed), Ontario: Wadesworth
- Martin M.W. Schinzinger R, (2005), Ethics in Engineering (4th Ed), New York: McGraw-Hill
- John Fraedrisch, Linda Ferrel and OC. Ferrel; (2006) Business Ethics Ethical Decision Making and Cases, Houton Mifflin College Division, USA
- Christopher Coton and Michaela Haase (2008) Trend in Business and Economic Ethics
- Transparency Malaysia in "Budi Disemai, Jasa dituai" (2009), EUMCCI CSR Committee