

SPECIALIST CERTIFICATE IN BUILDING INSPECTION

Full-Time Schedule: 11 May – 6 Jul 10

SRP-REMMI

Skills Redevelopment Programme

Real Estate Management and Maintenance Industry



SRP-REMMI Training Course

SPECIALIST CERTIFICATE IN BUILDING INSPECTION

Full-Time Schedule: 11 May – 6 Jul '10

PE Board Accredited: 60 PDUs

COURSE BACKGROUND

The pre-condition of an effective maintenance system is reliable inspection data. The inevitable subjectivity of inspectors results in divergent maintenance recommendations; this is an undesirable situation since accommodation, maintenance and other facilities related policies are influenced by the existing condition of facilities. Variability in inspections if not addressed will lead to inefficient allocation of often-limited budgets for facility maintenance and upkeep.

The Rijksgebouwendienst (RGD) or Dutch Government Building Agency, which manages some 6-million m² GFA of Dutch Ministries and State properties, developed an inspection system and six-point condition scale to address the subjectivity problem and ensure consistency in condition assessment for its maintenance policy and planning. The inspection norms are based on defect parameters established from empirical research. Buildings/components are assigned a condition score ranging from 1-6 on inspection, **1** being '**As New**' and **6** being '**End of Service Life**'.

The RGD inspection system formed the base line of a new Dutch standard (NEN 2767) on Condition Assessment of Building Components and Services, believed to be a world first. This knowledge is being transferred to Singapore in this SRP & SDF funded Building Inspection course, and is referred to as the REMMI (Real Estate Management & Maintenance Industry) Inspection System.

Users of the NEN 2767 underpinned Inspection System in Singapore include the National University of Singapore, Republic Polytechnic, Singapore Prison Service, Singapore Police Force and the Home Team Academy. More agencies are in the process or considering implementation.

COURSE OBJECTIVES

The course will provide the knowledge and skills to conduct and reduce subjectivity in inspections through a system based on:

- Defects Parameters
- Inspection Points
- Defects Classification Framework
- Six-Point Condition Scale.

COURSE PROGRAMME

The course comprises four modules:

Module 1: Inspection Needs and Norms

- Need for Inspections and Legal Framework
- The Practice of Building Inspections and Inspection Methods
- Subjectivity Problems and the REMMI Condition Index

Module 2 & 3: Inspection of External and Internal Building Components

- Common Defects in Building Components
- Protocol for Inspection and Inspection Points
- Case Studies, Site Inspections and Practice in Using the REMMI Condition Index

Module 4: Inspection Aids, Documentation and Records

- Pre-Inspection Documents
- Inspection Instruments and Aids
- Inspection Records and Use of Data

ENTRY REQUIREMENTS

- Applicants are expected to have the following qualification:
 - **Diploma in a building-related field** from approved institutions with at least **two years work experience** in building operation and maintenance.
- Applicants with the following qualifications are required to complete a pre-requisite course in Building Technology and Services:
 - CITI National Certificate in Construction Supervision (NCCS) with at least five years work experience in building operation and maintenance
 - 'A'/'O' Levels (Credits in English and Mathematics) with at least ten years work experience in building operation and maintenance.

COURSE FACULTY

1. Mr Mathieu S. Meur

Mr Meur is the Director of Meinhardt Facade Technology (MFT) Singapore. Through his training as a multi-disciplinary engineer, he has developed a broad spectrum of knowledge, including structural engineering, material sciences, fluid mechanics, thermodynamics, acoustics and optics; competency in these various disciplines is especially useful for façade engineering. Mr Meur has worked in several major construction projects in Singapore and the region. At MFT, he provides façade engineering advice on design, repair and maintenance of external envelopes such as curtain walls, claddings and skylights and has extensive knowledge of Singapore regulations and codes of practice.

2. Dr Dien Pandiman

Dr Pandiman, a Chartered Chemist, is the Director of Pidilite Innovation Centre, where he conducts R&D and provides technical consultancy in paints, coatings and waterproofing materials. He was previously Head of the Chemical Department at Setsco Services where he specialised in failure analysis and defects investigations. He is a member of the Standards, Productivity and Innovation Board (SPRING), Technical Committee for Surface Coatings.

3. Dr Quah Lee Kiang

Dr Quah is the Director of the Real Estate and Construction Centre in Singapore and Malaysia. She has extensive regional and international experience in Project and Facilities Management & Maintenance research, advice and academia.

Dr Quah's professional and research affiliations include being Coordinator of the International Council for Research and Innovation in Building and Construction (CIB) Working Commission 70 on Facilities Management and Maintenance from 1990-2000 and past President of the Chartered Institute of Building Singapore Centre for two terms. She was conferred an Honorary Fellow by Oxford Brookes University for her work in real estate and construction education and the unusual impact her career has had on this particular academic field in Asia.

4. Er. Yong Shan Chi

Mr Yong, a Professional Engineer (Civil) has extensive design and construction management experience. He started in design work with the HDB, moving on to the private sector where he was involved in foundation engineering and precast concrete work. He was instrumental in introducing the Autoclaved Lightweight Masonry Wall system and was in the forefront of the UOB Tower project, the

first building with unitised Curtain Walls. He has been involved in D&B projects in Singapore and China providing project management and engineering design support. Mr Yong has developed learning material for CITI and lectures in modules such as Building Envelope and Precast Concrete Water-Tightness for them.

COURSE DURATION

60 hours

CERTIFICATION

A 'Specialist Certificate in Building Inspection', will be awarded to participants who have successfully completed the required assessments.

COURSE VENUE

Training Lab C.303, Block C Level 3, Employment & Employability Institute
141 Redhill Road, Singapore 158828

COURSE SCHEDULES

Full-Time

Duration: 11 May – 6 Jul

Time: 9.00 am – 6.00 pm

Session	Date	Day
Week 1		
1	11 May	Tuesday
Week 2		
2	18	Tuesday
Week 3		
3	25	Tuesday
Week 4		
4	1 Jun	Tuesday
Week 5		
5	8	Tuesday
Week 6		
6	15	Tuesday
Week 7		
7	22	Tuesday
Week 8		
8	29	Tuesday
Course Assessment	6 Jul	Tuesday

COURSE & EXAMINATION FEE

Course Fee: \$1,680/-

Examination Fee: \$100/-

COURSE REGISTRATION & FUNDING ENQUIRIES

Please contact Ken Chew at Tel: 64747442, Fax: 64747443 or e-mail: recc@pacific.net.sg