



Executive Programme:  
**PRACTICAL BUILDING CONSERVATION SKILLS**  
**Diagnostics and repair of old buildings**

10 January – 12 January 2024

**Title:** Diagnostics and repair of old buildings

**Synopsis:**

Working with experienced practitioners and researchers, this programme aims to provide practical advice based on understanding established principles and good practices in conserving old buildings and materials in Singapore through lectures, discussions, demonstrations and site visits.

This programme is based on the principle of “maximising preservation and minimising cost” and adopting cautious approaches and solutions to heritage conservation on a case-by-case basis. The topics covered include understanding building materials, their deterioration and potential remedies.

The following common traditional building materials will be included:

- Roofing (clay tiles and copper)
- Timber
- Brick
- Lime plaster
- Shanghai plaster

**Learning Outcomes:**

- Develop familiarity with the functions of traditional building elements/materials.
- Systematic understanding of the possible causes and consequences/effects of deterioration.
- Assessment of the building condition using diagnostic evaluations.
- Awareness of the various treatments and repair techniques available.
- Understanding of the significance of care and maintenance.

**Venue:**

ArClab, 141 Neil Road, Singapore 088870 and other locations

**Fees:**

SGD 2,750 (excluding prevailing GST rate) per participant

**Wednesday (10 January 2024)**

<b>Topic</b>	<b>Time</b>	<b>Activity</b>
Roofing <ul style="list-style-type: none"><li>- A brief introduction to roofing</li><li>- How roofs work</li><li>- Deterioration</li><li>- Assessment</li><li>- Treatment and repair</li><li>- Care and maintenance</li></ul>	09:00 hr - 09:40 hr	Lecture
	09:40 hr - 10:00 hr	Case Study
	10:00 hr - 10:20 hr	Case Study
	10:20 hr - 10:40 hr	Case Study
	10:40 hr - 11:00 hr	Discussion
	11:00 hr - 11:20 hr	Tea Break
	11:20 hr - 12:00 hr	Lecture
Timber <ul style="list-style-type: none"><li>- A brief introduction to timber</li><li>- Uses of timber</li><li>- Deterioration</li><li>- Assessment</li><li>- Treatment and repair</li><li>- Care and maintenance</li></ul>	12:00 hr - 12:20 hr	Case Study
	12:20 hr - 12:40 hr	Case Study
	12:40 hr - 13:00 hr	Discussion
	13:00 hr - 14:00 hr	Lunch
	14:00 hr - 14:40 hr	Lecture
	14:40 hr - 15:00 hr	Case Study
	15:00 hr - 15:20 hr	Discussion
	15:20 hr - 16:00 hr	Practical Demonstration
Dialogue with experienced local and international guest professionals and contractors involved in heritage conservation (Roofing and Timber)	16:00 hr - 17:30 hr	Wrap-up dialogue

<b>Thursday (11 January 2024)</b>		
<b>Topic</b>	<b>Time</b>	<b>Activity</b>
Brick <ul style="list-style-type: none"> <li>- A brief history of bricks</li> <li>- How bricks work</li> <li>- Deterioration</li> <li>- Assessment</li> <li>- Treatment and repair</li> <li>- Care and maintenance</li> </ul>	09:00 hr - 09:40 hr	Lecture
	09:40 hr - 10:00 hr	Case study
	10:00 hr - 10:20 hr	Case Study
	10:20 hr - 10:40 hr	Case Study
	10:40 hr - 11:00 hr	Discussion
	11:00 hr - 11:20 hr	Tea Break
Lime Plaster <ul style="list-style-type: none"> <li>- A brief introduction to lime plaster</li> <li>- Deterioration</li> <li>- Assessment</li> <li>- Treatment and repair</li> <li>- Care and maintenance</li> </ul>	11:20 hr - 12:00 hr	Lecture
	12:00 hr - 12:20 hr	Case Study
	12:20 hr - 12:40 hr	Case Study
	12:40 hr - 13:00 hr	Discussion
	13:00 hr - 14:00 hr	Lunch
Shanghai Plaster <ul style="list-style-type: none"> <li>- A brief introduction to Shanghai plaster</li> <li>- Deterioration</li> <li>- Assessment</li> <li>- Treatment and repair</li> <li>- Care and maintenance</li> </ul>	14:00 hr - 14:40 hr	Lecture
	14:40 hr - 15:00 hr	Case Study
	15:00 hr - 15:20 hr	Discussion
Brick, Lime Plaster and Shanghai Plaster	15:20 hr - 16:00 hr	Practical demonstration
Dialogue with experienced local and international guest professionals and contractors involved in heritage conservation (Brick, Lime Plaster and Shanghai Plaster)	16:00 hr - 17:30 hr	Wrap-up dialogue

<b>Friday (12 January 2024)</b>		
<b>Topic</b>	<b>Time</b>	<b>Activity</b>
Visits to 4-5 sites with lime plaster, Shanghai plaster, timber, brick and tiles. <ul style="list-style-type: none"> <li>- Neil Road</li> <li>- Maxwell Road</li> <li>- Middle Road/Dhoby Ghaut</li> <li>- Element</li> </ul>	09:00 hr - 14:00 hr	Site visit