



# Introduction to Environmental Management & Monitoring Planning

(EMMP Module 23110)

Virtual (Zoom) | 27 October, 2023 | 09:00 – 12:00 pm SGT



## Course Overview

To achieve sustainable development of infrastructure, it is crucial to consider environmental and sustainability aspects early in the planning stage. As public awareness of environmental and climate change issues increases, development projects within and around environmentally and ecologically sensitive areas become highly scrutinised. As a result, the Singapore government continues to emphasise proper management of impacts on the natural environment through regulations such as the Environmental Protection and Management Act (2002) and require an increasing number of development projects to conduct Environmental Impact Assessment (EIA) and produce Environmental Management & Monitoring Plans (EMMP). As such, a thorough understanding and multi-stakeholder approach to infrastructure development planning is vital.

**Introduction to Environmental Management & Monitoring Planning** (EMMP Module 23110) touches on the key concepts of EIAs and EMMPs and how they are critical in managing the environmental impacts of infrastructure development. TEMBUSU's experienced in-house EMMP practitioners will share their expertise and incorporate engaging case studies and group discussions to enhance effective learning. The course covers the development of the EMMP document prior to the construction phase and its implementation during and after the construction phase.



## Course Objectives

- Introduce key EIA concepts, brief methodologies, and relevant legislations and guidelines
- Introduce the EMMP framework and the role of EMMP in EIA
- Introduce common EMMP reporting mechanisms
- Provide an overview of local implementation of EMMPs



## Learning Outcomes

Participants will be able to:

- Describe local legislations relevant to the EMMP process
- Describe processes and requirements in implementing an EMMP
- Identify sensitive receptors
- Propose mitigation measures based on environmental impacts
- Develop an EMMP incorporating best practices



## Who Should Attend\*

Professional Engineers, Civil Design Engineers, Government Officers, Sustainability Practitioners, Construction Professionals, Resident Engineers (RE), Resident Technical Officers (RTO), Environmental Control Officer (ECO), Health, Safety, and Environmental (HSE) Officers, and persons from non-governmental organisations (NGO).

\*There are no prerequisites for this course.

A certificate of completion from TEMBUSU Asia will be issued to participants who successfully complete the course.

## COURSE AGENDA

| Topic  | Sub-topic                           |
|--|-------------------------------------|
| Key Concepts in an EIA   | Basic EIA Concepts                  |
|  | Relevant Environmental Legislations |
|  | Brief Impact Assessment Methodology |
|  | Purpose of EMMP in EIA              |
| EMMP   | EMMP Framework                      |
|  | Biodiversity Management Plan        |
|  | Human-wildlife Conflict Management  |
|  | Environmental Monitoring Plan       |
|  | Reporting Mechanism                 |
|  | Environmental Audit                 |
| Case studies of local EMMPs (best practices and common issues) |                                     |
| Exercise on developing applicable measures                     |                                     |
| Q&A Session  |                                     |



## Why TEMBUSU Academy

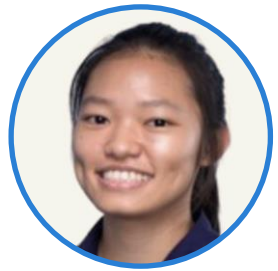
TEMBUSU Academy is the education division of TEMBUSU Asia Consulting, a leading environmental and sustainability consulting company that provides innovative solutions by combining science, engineering and management consulting expertise. As part of its efforts to support the UN's Sustainable Development Goals, TEMBUSU Academy develops training programmes designed to build regional capacity. Programmes are delivered by experienced environmental and sustainability professionals. TEMBUSU Asia has provided training for clients including government agencies, contractors and sustainability professionals in Singapore and Asia-Pacific.





**Sarah Pascoe**  
Trainer

Sarah is an ecologist and Senior Consultant at TEMBUSU with over eight years of professional experience with wildlife research and biodiversity conservation. She is an NParks' Certified Animal Management Specialist. She has conducted and reviewed Environmental Impact Assessment (EIA) studies, prepared Environmental Management & Monitoring Plans (EMMP), and assisted in obtaining statutory clearances from regulatory agencies. She has led EMMP projects in sensitive biodiversity areas across Singapore for several government agencies. Her experience as a conservation project officer for the National Parks Board (NParks) involved conducting ecological studies on various mammalian and avian species. Her research experience includes conducting an island-wide census on several wildlife populations in multiple habitat types including secondary forest, grasslands, urban parklands, mangrove forest and intertidal zones.



**Joanne Lim**  
Trainer

Joanne is an ecologist and Consultant at TEMBUSU with over five years of professional experience. She has conducted field research in natural habitats ranging from high-altitude forests to the open ocean. Her past work involved the monitoring of corals to track relative sea-level change in Southeast Asia. She has conducted coral surveys at islands such as Pulau Semakau, St John's Island, and Sentosa Island.

Joanne has been heavily involved in several EMMP projects in Singapore and has extensive experience liaising with stakeholders such as technical agencies, contractors, and nature groups. Her background in research has honed her skills in data collection, data mining and data analysis. She is skilled in creating Digital Elevation Models (DEMs) by Structure from Motion (SfM) photogrammetry. Her expertise in computer software such as GIS and R has enabled clients to streamline their EMMP reporting process.



## Course Fees

Full fee: SGD 300  
Early bird: SGD 240  
**(-20%** with code **<EBEM1023>**  
expires 13 Oct '23)



NOTE: All course fees are exclusive of GST (Singapore). Refunds are not allowed for this course. Overseas participants are welcome.



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Asia

For additional information or in-house training enquiries, please contact us at:

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