

**List of Competencies for On-the-Job Training (OJT)**  
**Work-Study Diploma in Mechanical & Electrical Services Supervision**

Applicants applying for this course must be free from colour appreciation deficiency.  
 A score of 100% from the Colour Blindness Test is mandatory for course admission.

<b>S/N</b>	<b>List of Competencies (Standard)</b>	<b>Company to indicate '✓' for OJT competencies it can provide</b>
1	Verify stakeholders for projects	
2	Verify project specifications and construction requirements	
3	Verify M&E systems for projects	
4	Extract information from construction drawings	
5	Manage BIM for collaboration with stakeholders	
6	Extract building and trade information from BIM	
7	Monitor implementation of WSH at work site	
8	Prepare project correspondences	
9	Maintain project documentation	
10	Inspect underground pipes layout and inspection chamber	
11	Inspect above ground sanitary & plumbing pipes installation	
12	Inspect gas pipes installation	
13	Inspect electrical system	
14	Inspect extra-low voltage system	
15	Inspect building management system	
16	Inspect water/air cooled central chilled water distribution system	
17	Inspect air distribution systems	
18	Inspect ACMV Electrical Control Panels	
19	Inspect fire detection and alarm systems	
20	Inspect fire protection and fire suppression systems	
21	Inspect emergency voice communication systems	
22	Inspect lifts and escalators installation	
23	Plan work schedule and resources for project works	
24	Supervise M&E project works	
25	Supervise readiness of M&E systems for Registered Inspector, Integrated System Tests & TOP inspection	
	<b>Sub-total of Competencies (Standard)</b>	

S/N	List of Competencies (Standard)	Company to indicate '✓' for OJT competencies it can provide
<b>List of Competencies (Company-specific)</b>		
1		
2		
3		
4		
5		
6		
7		
	<b>Sub-total of Competencies (Company-specific)</b>	

**Note:**

- a) Company must be able to provide OJT for at least **75%** of the List of Competencies (Standard).
- b) If company is unable to meet the 75%, please propose alternate **course-related** competencies which are unique to company operations. Alternate competencies are capped at 25%.  
*[i.e. 50% of the list of competencies (standard) + 25% alternate competencies (Company-specific)].*
- c) All alternate competencies (Company-specific) must be reviewed and endorsed by ITE.
- d) Trainees must receive OJT and be assessed for **All** competencies selected in this List.

Total no. of competencies selected by company for OJT

Total no. of competencies listed (*standard & company specific*)

Percentage of selected competencies

**Completed By:**

\_\_\_\_\_

**Name**

\_\_\_\_\_

**Company**

# MODULE SYNOPSIS – WSDip in Mechanical & Electrical Services Supervision

## Course Objective

This course equips trainees with the skills, knowledge and professional attributes to supervise, coordinate and inspect M&E services in construction projects to ensure M&E works, such as air-conditioning & mechanical ventilation, water, sanitary & gas, electrical, fire protection, and vertical transportation systems are executed in accordance with design intent, contractual specifications, regulatory standards, and safety requirements. In addition, trainees will also be equipped with the skills and knowledge in project management, Building Information Modelling (BIM), and project life cycle management to support the planning, execution, and operation of construction projects

## Modules Synopsis

### Building & Construction Technology

On completion of this module, trainees should be able to verify the scope of construction works and identify key stakeholders involved in construction projects, including determining various stages of construction projects and ensure project specifications are detailed and comply with all relevant standards and regulations.

### Building Information Modelling

On completion of this module, trainees should be able to set up BIM project worksets, using M&E BIM components, and develop integrated M&E BIM models that align with project specifications and coordination requirements.

### Site Operations & Management

On completion of this module, trainees should be able to support implementation of WSH at work site, prepare project correspondences and documentation, and verify risk assessment in accordance with statutory and regulatory requirements.

### Integrated Digital Delivery Application

On completion of this module, trainees should be able to support the implementation of digital technologies in M&E workflows, enhance collaboration through data integration, and monitor digital data management practices in alignment with regulatory compliance.

### Water, Sanitary & Gas System

On completion of this module, trainees should be able to review approved plans and design specifications, supervise the installation work, and oversee the testing and commissioning of water service installation works, sanitary works, and gas service works to ensure compliance with regulatory requirements and project standards.

### Water, Sanitary & Gas System

On completion of this module, trainees should be able to review approved plans and design specifications, supervise the installation work, and oversee the testing and commissioning of electrical systems to ensure compliance with regulatory requirements and project standards.

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## **Air-Conditioning & Mechanical Ventilation System**

On completion of this module, trainees should be able to review approved plans and design specifications, supervise the installation work, and oversee the testing and commissioning of air-conditioning & mechanical ventilation system system to ensure compliance with regulatory requirements and project standards

## **Fire Protection System**

On completion of this module, trainees should be able to review approved plans and design specifications, supervise the installation work, and oversee the testing and commissioning of fire protection system to ensure compliance with regulatory requirements and project standards.

## **Building Management System**

On completion of this module, trainees should be able to check BMS interfacing modules with M&E services, oversee installation and commissioning processes, and review BMS operating parameters and reports to ensure optimal system performance and compliance with regulatory and project requirements.

## **Vertical Transportation System**

On completion of this module, trainees should be able manage the installation of vertical transportation system based on approved plans and design specifications to ensure compliance with regulatory requirements and project standards.

## **Project Management**

On completion of this module, trainees should be able to manage work schedules to support timely project delivery, review as-built drawings for documentation and handover, and manage post-construction activities

## **On-the-Job Training**

On completion of the module, trainees should be able to apply the skills and knowledge acquired at ITE College and workplace to take on the full job scope, including supervisory function, where appropriate, at the company.

# TRAINING PATTERN SCHEDULE

## WSDip in Mechanical & Electrical Services Supervision

**Hybrid Release - Trainees attend daily lessons at ITE for a continuous period at the start, and after will attend lessons for one day per a week and spend the remainder of the work-week at the workplace for OJT.**

<b>April'26 Intake</b>	<b>April – June 2026</b>	ITE Vacation (June) 4 weeks	<b>July – September 2026</b>	ITE Vacation (Sept) 2 weeks	<b>October – December 2026</b>	ITE Vacation (Dec) 4 weeks	<b>January – March 2027</b>	ITE Vacation (March) 2 weeks
<b>1<sup>st</sup> Year Off-JT @ ITE</b>	<b>1 weeks block followed by 1 day / week</b>		<b>1 day/week</b>		<b>1 day/week</b>		<b>1 day/week</b>	
<b>April'26 Intake</b>	<b>April – June 2027</b>	ITE Vacation (June) 4 weeks	<b>July – September 2027</b>	ITE Vacation (Sept) 2 weeks	<b>October – December 2027</b>	ITE Vacation (Dec) 4 weeks	<b>October – December 2028</b>	ITE Vacation (March) 2 weeks
<b>2<sup>nd</sup> Year Off-JT @ ITE</b>	<b>1 day / week</b>		<b>1 day/week</b>		<b>1 day/week</b>		<b>1 day/week</b>	
<b>April'26 Intake</b>	<b>April – June 2028</b>	ITE Vacation (June) 4 weeks	<b>July – September 2028</b>	ITE Vacation (Sept) 2 weeks	<b>WSDip Programme 2026</b> <b>Start: 1 April 2026</b> <b>End: 30 September 2028</b> <b>Duration: 2.5 years</b>  <b>Final results release may be later than programme end date</b>			
<b>3<sup>rd</sup> Year Off-JT @ ITE</b>	<b>1 day / week</b>		<b>1 day/week</b>					