List of Competencies for On-the-Job Training (OJT)
Work-Study Diploma in Land Transport Engineering (Operations Management)
Note: LOC is subject to changes due to curriculum review/ development

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.

S/N	List of Competencies (Standard)	Company to indicate '✓' for OJT competencies it can provide
1	Conduct toolbox meeting	
2	Conduct workplace safety and health (WSH) checks	
3	Conduct diagnostic consultations	
4	Write technical report	
5	Liaise with OEM on technical matters	
6	Develop customer-centric mindset	
7	Manage customer interactions	
8	Manage incidents and conflicts	
9	Manage digital equipment and/or automation systems	
10	Manage integrated supervisory control systems	
11	Manage facilities' operational performance and efficiency	
12	Install sensors and actuators	
13	Inspect sensors and actuators serviceability	
14	Troubleshoot sensor and actuator circuits	
15	Install motor and control system	
16	Troubleshoot motor control system	
17	Inspect motor serviceability	
18	Plan workshops operations	
19	Prepare maintenance schedule	
20	Prepare operational budget	
21	Establish maintenance and data requirements	
22	Perform data analysis	
23	Propose work improvements	
24	Perform operational resource planning	
25	Manage operational resources for service reliability	
26	Perform control in daily and ad-hoc operations	
27	Manage security screenings and operations	
28	Manage commuters with abusive behaviour & disorderly conduct	

S/N	List of Competencies (Standard)	Company to indicate '✓' for OJT competencies it can provide
29	Manage and monitor access and surveillance systems	
30	Manage crowd control	
31	Perform communication during exceptional situations	
32	Coordinate with external key stakeholders	
33	Interpret contingency and business continuity plans	
34	Allocate resources during contingencies	
35	Coordinate procedures during contingencies	
	Sub-total of Competencies (Standard)	
List of Competencies (Company-specific)		
1		
2		
3		
4		
5		
6		
7		
8		
9		
	Sub-total of Competencies (Company-specific)	

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 SYPNOSIS – WSDip in Land Transport Engineering (Operations Management Specialization)

Course Objective

This course equips trainees with the essential knowledge, skills and competencies required to excel as Operations Specialist in bus and rail operations. Trainees will gain practical insights and hands-on expertise in managing transport operations, handling real-world challenges, and contributing to the seamless operation of Singapore's public transport network.

Modules Synopsis

Workplace Safety & Health

On completion of the module, trainees should be able to implement relevant workplace safety and health regulations and carry out risk assessment and inspection.

Technical Communication

On completion of the module, trainees should be able to effectively communicate and document technical specifications and requirements with stakeholders (both internal and external) in both verbal and written forms.

Sensors & Actuators

On completion of the module, trainees should be able to install and inspect sensors and actuators, as well as perform circuit troubleshooting.

Electrical Machines

On completion of the module, trainees should be able to install and maintain electrical motors and drive systems.

Workshop Operations

On completion of the module, trainees should be able to plan corrective, preventive and predictive maintenance activities that ensure equipment and systems are fully functional and in optimal operating condition.

Data Analytics for Predictive Maintenance

On completion of the module, trainees should be able to perform data cleaning, transformation and analysis for predictive maintenance.

Company Project

On completion of the module, trainees should have applied their acquired competencies in an authentic project that would value-add to the company.

Customer Service Management

On completion of the module, trainees should be able to deliver exceptional and inclusive customer service in both routine and challenging situations. Trainees will gain insights into managing customer interactions during typical public transport operations as well as navigating disruptions/ evacuations and handling difficult scenarios effectively.

MODULE SYPNOSIS – WSDip in Land Transport Engineering (Operations Management Specialization)

Integrated Facilities Management

On completion of the module, trainees should be able to manage typical Public Transport Operators' facilities through the integration of various related systems, processes and technologies. They should also be able to assess a facility's operational performance and implement sustainable solutions to upkeep the facilities effectively and efficiently.

Operations Control Management

On completion of this module, trainees will understand operational control principles, strategies, and best practices for daily and ad-hoc scenarios in typical public transport operations. They will acquire skills in communication, resource management, and operational analysis.

Security Services Management

On completion of the module, trainees should be able to perform security operations, manage disorderly conduct, handle threatening and abusive/suspicious behaviours, enforce security legislations in typical public transport operations. Trainees will also be equipped with the knowledge of the digitalisation aspects of security and safety as required at the workplace.

Situational Management

On completion of the module, trainees should be able to coordinate with external stakeholders, manage communications and document complex incidents in typical public transport operations using effective incident management techniques and processes.

Contingency Management

On completion of this module, trainees should be able to interpret and implement effective contingency plans to address unforeseen events and unexpected emergencies which may be typical in public transport operations. They will understand the differences between degraded and suspended operations, and effective coordination procedures.

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 Land Transport Engineering (Operations Management Specialization)

Day Release - Trainees attend 1 to 2 days of lessons per week at ITE, with the remaining work-week spent at the workplace for On-the-Job Training.

April'26 Intake	April – June 2026		July – September 2026		October – December 2026		January – March 2027	
1st Year Off-JT @ ITE	**1- 2 days/week**	ITE Vacation (June) 4 weeks	**1- 2 days/week**	ITE Vacation (Sept) 2 weeks	**1- 2 days/week**	ITE Vacation (Dec) 4 weeks	**1- 2 days/week**	ITE Vacation (March) 2 weeks

April'26 Intake	April – June 2027		July – September 2027		October – December 2027		October – December 2028	
2nd Year Off-JT @ ITE	**1- 2 days/week**	ITE Vacation (June) 4 weeks	**1- 2 days/week**	ITE Vacation (Sept) 2 weeks	**1- 2 days/week**	ITE Vacation (Dec) 4 weeks	**1- 2 days/week**	ITE Vacation (March) 2 weeks

April'26 Intake	April – June 2028		July – September 2028					
3rd Year Off-JT @ ITE	**1- 2 days/week**	ITE Vacation (June) 4 weeks	**1- 2 days/week**	ITE Vacation (Sept) 2 weeks	**WSDip Programme 2026** **Start: 1 April 2026** **End: 30 September 2028** **Duration: 2.5 years** ⚠️ **Final results release may be later than programme end date**			