

**List of Competencies for On-the-Job Training (OJT)  
Work-Study Diploma in Data Centre Infrastructure & Operation**

<b>S/N</b>	<b>List of Competencies (Standard)</b>	<b>Company to indicate '✓' for OJT competencies it can provide</b>
1	Identify data centre infrastructure	
2	Perform data centre operation	
3	Identify data centre workplace safety and health (WSH)	
4	Manage operating system	
5	Set up operating system services	
6	Provide operating system maintenance	
7	Design network infrastructure	
8	Configure network	
9	Provide network maintenance	
10	Manage energy supply	
11	Monitor power infrastructure installation and performance level	
12	Localise power infrastructure fault	
13	Monitor temperature and humidity	
14	Maintain data centre hot and cold aisles	
15	Monitor air-conditioning for cooling tower / Air Handling Unit	
16	Prepare for fire protection system inspection	
17	Monitor fire protection system installations	
18	Maintain fire suppression system	
19	Perform IT service lifecycle management	
20	Perform incident management	
21	Perform vendor relationship management	
22	Manage server system	
23	Perform server administration	
24	Perform server and storage management	
	<b>Sub-total of Competencies (Standard)</b>	
<b>List of Competencies (Company-specific)</b>		
1		
2		

S/N	List of Competencies (Standard)	Company to indicate '✓' for OJT competencies it can provide
3		
4		
5		
6		
	<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**

\_\_\_\_\_  
**Designation**

\_\_\_\_\_  
**Date**

For ITE's Completion			
Reviewed by CED / College <i>(For Company-specific Competencies)</i>			Verified by IBT Officer
Name:			Name & Date:
Designation:	Date:		

## **Course Objective**

This course equips trainees with the skills, knowledge and professional attributes to manage data centre information/network system, monitor data centre operation and services, maintain internal documentation and perform independent first-level troubleshooting of recurrent issues to ensure smooth data centre operations.

## **Module Synopsis**

### **Module 1: Data Centre Infrastructure & Operation**

On completion of the module, trainees should be able to identify data centre infrastructure, perform data centre operation, as well as to identify data centre workplace safety and health.

### **Module 2: Operating System (common module)**

On completion of the module, trainees should be able to manage operating system, set up operating system services, as well as provide operating system maintenance.

### **Module 3: Network Programmability (common module)**

On completion of the module, trainees should be able to design network infrastructure, configure network and provide network maintenance.

### **Module 4: Electrical System**

On completion of the module, trainees should be able to manage energy supply, monitor power infrastructure installation and performance level, as well as localise power infrastructure fault.

### **Module 5: Air-Conditioning & Mechanical Ventilation System**

On completion of the module, trainees should be able to monitor temperature and humidity, maintain data centre hot and cold aisles and monitor air-conditioning for cooling tower / Air Handling Unit.

### **Module 6: Fire Protection System**

On completion of the module, trainees should be able to prepare for fire protection system inspection, monitor fire protection system installations and fire suppression system.

### **Module 7: Service Operation Management**

On completion of the module, trainees should be able to perform IT service lifecycle management, incident management and vendor relationship management.

### **Module 8: Server & Storage Administration**

On completion of the module, trainees should be able to manage server system, perform server administration and server/storage management.

### **Module 9: 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.

**Module 10: 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 for WSDip in Data Centre Infrastructure & Operation

### Block Release

- Scheduled blocks of continuous Off-Job-Training (Off-JT) Lessons, 9 weeks annually, in ITE College East

*\*Off-JT day must be a paid working day, included in employment contract.*

Year	January to March	April to June	July to September	October to December
Year 1		Block Release Training 9 weeks, 5 days/week at ITE College East	On-the Job Training (OJT) Full-time in company	
Block 1				
Year 2	On-the Job Training (OJT) Full-time in company		Block Release Training 9 weeks, 5 days/week at ITE College East	On-the Job Training (OJT) Full-time in company
Block 2				
Year 3	Block Release Training 9 weeks, 5 days/week at ITE College East	On-the Job Training (OJT) Full-time in company		Trainee in Company Trainee in ITE College East
Block 3				

**Legend:**