List of Competencies for On-the-Job Training (OJT)
Work-Study Diploma in Cloud Management & Operations (Cloud Operations)

Note: LOC is subject to changes due to curriculum review/ development

S/N	List of Competencies (Standard)	Company to indicate '✓' for OJT competencies it can provide
1	Manage Operating System	
2	Set up Operating System Services	
3	Provide Operating System Maintenance	
4	Implement basic network infrastructure	
5	Configure Network	
6	Provide Network Maintenance	
7	Set Up Virtualisation Environment	
8	Deploy Virtual Machine	
9	Manage Resource Utilisation	
10	Set Up Virtual Machine	
11	Set Up Cloud Service	
12	Manage Cloud Service	
13	Develop Program for infrastructure operation	
14	Build automation frameworks to manage infrastructure operation	
15	Perform script maintenance	
16	Develop Application	
17	Deliver Application	
18	Manage Application Deployment	
19	Manage Infrastructure	
20	Deploy new modules, upgrades and fixes	
21	Manage Configuration Deployment	
22	Perform Threat Assessment	
23	Perform Security Vulnerability Testing	
24	Set Up Security Monitoring and Protection	
	Sub-total of Competencies (Standard)	
List of Competencies (Company-specific)		
1		
2		

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

_____

Designation

_____

Company

_____

Date

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

WORK-STUDY DIPLOMA IN CLOUD MANAGEMENT & OPERATIONS (CLOUD OPERATIONS SPECIALISATION)

MODULE OBJECTIVES

Module 1: Operating System
On completion of the module, trainees should be able to manage operating system, administer operating system services, as well as provide operating system maintenance.

Module 2: Network Programmability
On completion of the module, trainees should be able to design network infrastructure, configure network and provide network administration and maintenance.

Module 3: Virtualisation Infrastructure Management
On completion of the module, trainees should be able to set up on-premise virtualisation environment, deploy virtual machine instance, as well as to perform resource management and monitoring.

Module 4: Cloud Service Operation
On completion of the module, trainees should be able to provision virtual machine, as well as set up and manage cloud services.

Module 5: Scripting
On completion of the module, trainees should be able to develop system program, as well as deploy and monitor program to automate infrastructure operation.

Module 6: Development Operations (DevOps)
On completion of the module, trainees should be able to plan, develop and deliver application, as well as manage application deployment using the DevOps approach.

Module 7: DevOps Tools & Technology
On completion of the module, trainees should be able to manage infrastructure as code, container and at-scale configuration.

Module 8: Cloud Security
On completion of the module, trainees should be able to perform threat assessment, security testing and set up security monitoring and protection.

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 Cloud Management & Operations (Cloud Operations Specialisation)

Hybrid Release

- **9 weeks** of intense study for the first year followed by **Day Release (1-2 days per week in at ITE College East)** for the second year onwards to equip trainees with necessary Cloud Services and Operational Knowledge *

  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	On-the Job Training (OJT) Full-time in company
Block 1				
Year 2	On-the Job Training (OJT) Full-time in company	OJT in company 3-4 days per week	OJT in company 3-4 days per week	OJT in company 3-4 days per week
Block 2		Day Release Training 1-2 days per week in at ITE College East	Day Release Training 1-2 days per week in at ITE College East	Day Release Training 1-2 days per week in at ITE College East
Year 3	OJT in company 3-4 days per week	OJT in company 3-4 days per week	OJT in company 3-4 days per week	**Legend**: Company ▮ (green) ITE College East ▯ (yellow)
Block 3	Day Release Training 1-2 days per week in at ITE College East	Day Release Training 1-2 days per week in at ITE College East	Day Release Training 1-2 days per week in at ITE College East	