JAMES COOK INSTITUTE

DIGITAL & IT

BASIC

SkillsFuture for Digital Workplace 2.0 Transportation

(Classroom + Asynchronous E-learning)



Description

This course is targeted at those in the transportation sector. We will cover all the technological advances in IT that are impacting or will impact the sector. Learners will be able to understand and apply digital tools to provide innovative services for managing different modes of transport and traffic. They will also be able to perform analytics to create actionable insights from large volumes of data, better manage route planning and traffic flow.

Learners will be able to apply automation tools and mobile apps to utilize the Digital Roadmap of the Land Transport Sector, digitalized operations, optimized resources, and digital payments. Finally, learners will learn about Generative AI, identify cybersecurity risks associated with the transportation sector, and mitigate those risks

Course Objectives

By the end of this course, learners will be able to:

- State the jobs and digital skills required in the current and future digital economy
- Describe the work requirements in a technology-rich environment and know the associated cybersecurity risks
- Identify various digital applications and tools in work applications, including widely applicable national and sectoral platforms
- Suggest how data and information can be used
- Perform functional outcomes such as the use of digital tools and software to access various learning paths and content
- Develop a post-course action plan to continue learning (i.e., to identify courses that would allow participants to further deepen their skills in the four key areas)
- Acquire knowledge of Generative AI and the know-how of prompts

Course Duration

15 Hours

Course Reference No.

TGS-2023037499

Mode of Training

(Classroom + Asynchronous E-learning)

Funding Validity

Till 31 Dec 2027

Full Fee $530

(Subject to 9% GST)

Pricing	Funding	Nett Fee (After GST)
SME OR SINGAPOREAN AGE 40 AND ABOVE	90%	$67.31
NON-SME OR SINGAPOREAN AGE 21 TO 39 OR PR	70%	$173.31

Subsidies available: SFC, SFEC, UTAP

As pre-requisites may differ by course, we strongly encourage you to review the details and contact us for any clarification.

Visit our Website

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Course Content

Learning Unit 1: Data Analytics

- Introduction to SFDW
- Digital Skills and Jobs Awareness for the Transportation Sector
- Importance of Data Analytics in the current and future digital economy for the Transportation Sector
- Use data analytics and visualisation tools such as Excel PivotTable and Power BI to analyse transportation and travel data

Learning Unit 2: Automation

- Introduction to Automation
- Programmable Automation (3D printing and additive manufacturing tools for fabrication of parts and customised items)
- Conversational Automation, such as Google Assistant, Chatbots in government and corporate websites, e.g. LTA, etc.
- Using Power Automate to improve office productivity, e.g. fleet management and scheduling
- Future trends for automation in the transportation workplace

Learning Unit 3: Cybersecurity Risk

- Introduction to Cybersecurity Risk
- Areas of cybersecurity risk and its implication and effect to the individual and transportation sector
- How to mitigate cybersecurity risks? (physical, software, policy and regulatory

Learning Unit 4: In-demand Digital Tools

- Introduction to Industry 5.0
- Artificial Intelligence in transportation sector, e.g. predictive fleet maintenance
- Generative AI such as Gemini and Copilot in areas such as generating response to customer queries or complaints, route planning, training plan for drivers, etc.
- Basic concepts of Generative AI and its risks
- How to design prompt
- Nationally launched applications
- Using VR and AR as well as autonomous road sweeper, driving simulators, etc.
- Enhancing productivity and efficiency with self-drive vehicles
- Explore upcoming digital technology and impact on how we work, live and interact

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