JAMES COOK INSTITUTE

COURSE DURATION

15 hours (inclusive of 1-hour assessment)

COURSE SYNOPSIS

This course is targeted at those in the tourism sector. We will cover all the technological advances that are impacting or will impact the sector. In this course, we will understand how various technologies are used or can be implemented in the sector, as well as the digital skills needed for the workforce to function optimally.

Learners will be able to understand and apply analytics to analyse customer profiles, preferences, and demands, as well as to optimize operational resources. Learners will also be able to use automation tools and mobile apps to support business operations, such as hotel room check-in, flight information, and travel itineraries. Finally, learners will learn about Generative AI, identify cybersecurity risks associated with the tourism sector, and mitigate those risks.

LEARNING OUTCOMES

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

TRAINING METHODOLOGY

Interactive lecture, group discussion, hands-on activity, tech-enabled learning through Chatbots and Online Quiz

ASSUMED SKILLS

- Learners must be able to read, write, speak and understand English at Secondary school level

- Learners to have minimum GCE 'O' level or ITE certificate education

- Learner should have at least 1 year's working experience in any industry

- Learners must be able to operate a personal computer, use keyboard and mouse

COURSE CONTENT

Learning Unit 1: Data Analytics

- Introduction to SFDW
- Digital Skills and Jobs Awareness for the Tourism (Hospitality) Sector
- Importance of Data Analytics in the current and future digital economy for the Tourism (Hospitality) Sector
- Use data analytics and visualisation tools such as Excel PivotTable and Power BI to analyse business data, such tour bookings, hotel room utilisation, tourist traffics in attractions, etc.

Learning Unit 2: Automation

- Introduction to Automation
- Programmable Automation (3D printing and additive manufacturing tools for fabrication of customised souvenirs, customised amenities in hotel room, etc.)
- Using Power Automate to improve office productivity such as room confirmations, tour bookings, etc.
- Conversational Automation, such as Google Assistant and chatbots to enhance customer service
- Autonomous Robots for food delivery, etc.
- Future trends for automation in the tourism workplace

Learning Unit 3: Cybersecurity Risk

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

Learning Unit 4: In-demand Digital Tools

- Introduction to Industry 4.0
- Artificial Intelligence in the Tourism (Hospitality) Sector such as analysing tourist profiles
- Basic concepts of Generative AI and its risks
- How to design prompt
- Generative AI such as Gemini and Copilot to respond to customer queries, create customised travel itinerary, etc.
- Nationally launched applications
- Using VR and AR as well as autonomous robots for enhance customer experience
- Explore upcoming digital technology and impact on how we work, live and interact
- Develop a learning plan to take ownership of own skills upgrading