Drone Systems and Applications in 4IR

Short Learning Programme (SLP)

OVERVIEW

Drone systems have become a significant component in the Fourth Industrial Revolution (4IR) due to their versatile applications across various sectors. These systems are increasingly used in logistics, agriculture, surveillance, and disaster management, owing to their ability to collect real-time data and reach remote or hazardous areas. The interest in drone systems stems from their potential to enhance operational efficiency, reduce human labor costs, and provide innovative solutions to complex problems like environmental monitoring or infrastructure inspections. Moreover, as technologies such as AI, machine learning, and IoT are integrated with drone systems, their functionality and range of applications continue to expand. This trend is driven by the growing need for automation and data-driven decision-making in industries worldwide.

This **Short Learning Programme (SLP)** focuses on the growing field of drone technology within the context of the 4th Industrial Revolution. The course provides a comprehensive introduction to the applications, operations, and regulatory frameworks of drone systems. Participants will gain valuable insights into how drones are transforming industries such as agriculture, construction, logistics, and more.

THE PROGRAMME

This **Short Learning Programme (SLP)** is presented by the **Institute of Transport and Logistics Studies (Africa)** and the **Institute for Intelligent Systems** at the **University of Johannesburg** and is sponsored by the **Transport Education and Training Authority (TETA).**

BENEFITS OF ATTENDING

- Acquire essential knowledge of cutting-edge drone technologies
- Learn about the latest industry trends and regulatory policies
- Discover how drones can enhance efficiency and innovation in various sectors
- Network with industry experts and peers

TOPICS COVERED

- Introduction to drone technology and its evolution
- Practical drone operations and flight regulations
- Applications of drones in agriculture, urban planning, and construction
- Data collection and processing using drones
- Ethical and legal considerations in drone usage
- The future of drone technology in 4IR

WHO SHOULD ATTEND

This programme is ideal for professionals and enthusiasts from industries such as agriculture, logistics, construction, urban planning, and technology, as well as students and researchers interested in 4IR innovations. No prior experience with drones is required, making it accessible to beginners as well as those looking to deepen their expertise.

ASSESSMENTS

- Practical Assessment - 25%
- Written Test - 25%
- Final Written Exam - 50%

COURSE INFORMATION

- Cost of SLP: R8500 (Fully Funded by TETA)
- 6 Sessions in person at UJ
- Course dates: 1 October to 15 November 2024 (7 weeks)
- Grade 12 or NQF 4 equivalent is required
- Student will receive a Certificate of Completion after successful completion

NOTE:
Candidates who fail to complete the SLP will be responsible to repay the full R8500 sponsorship. These terms will be activated if a final grade is not obtained and is not linked to a pass or fail grade.

STEPS TO APPLY

New Applicant:

- **Step 1: Complete the Application form:** Apply Here
  Apply by using the application token: **DRONESLP** *(The token is case sensitive).*

Registered UJ Student:

- **Step 1:** Click Here and use your student number and pin to login.
- **Step 2:** Upon completion of step 1 above, email the following documents and information to **tscmbiographics@uj.ac.za**

1. Certified copy of ID
2. Certified copy of Grade 12 Certificate
3. Certified copy of Academic transcript
4. CV

As well as the following information:

1. Occupation/Job Title
2. Name of employer
3. Industry sector in which you are employed
4. Is your employer registered in any TETA Chamber

IMPORTANT DATES

- **Sign-up and application:**
  9 September to 27 September 2024
- **Start of Course:**
  1 October 2024
- **Completion of course:**
  15 November 2024

For further enquiries, send an email message to **tscmbiographics@uj.ac.za**

Transport Education Training Authority

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