Climate Change Analyst

POLICY/RESEACRH

SECTOR

Fostering innovation and better skills match with the green and digital sectors through the integration of emerging technologies (drones, VR, AR) in VET

Co-funded by the European Union

360 DRONES

✏️Short Description

A Climate Change Analyst evaluates environmental data to understand the effects of climate change and support evidence-based policy decisions. This green role contributes to sustainability by helping mitigate climate risks, develop adaptive strategies, and monitor environmental conditions using emerging technologies like drones. It applies in sectors such as government, urban planning, agriculture, and environmental consultancy.

🎯Key Skills Required

🛰️ **Remote sensing & drone piloting** – gathering spatial climate data through UAV technology
🗺️ **GIS & mapping tools** – visualizing and analyzing climate-related geospatial information
📊 **Climate data analysis & forecasting** – interpreting data trends to predict environmental changes
🌱 **Environmental monitoring** – tracking indicators such as air quality, vegetation, and temperature
📝 **Policy analysis & technical reporting** – evaluating climate policies and preparing detailed reports
🔬 **Field research & lab testing** – conducting hands-on experiments to support climate studies

💡Future Trends & Market Opportunities

Demand for Climate Change Analysts is rising as nations pursue climate goals like the Paris Agreement and EU Green Deal. Growing risks from extreme weather and environmental degradation are driving the need for experts who can turn data into actionable insights. New technologies—such as drones, AI models, and satellite monitoring—enable faster, more accurate analysis. As sustainability becomes a top priority, this role is expanding across sectors like urban planning, agriculture, energy, and disaster response.

🛩️Drone Applications

🌦️ **Aerial data collection** for climate modeling and environmental risk mapping
🔥 **Thermal imaging** to detect urban heat islands and monitor ecosystem stress
🌿 **NDVI mapping** to assess vegetation health and land degradation
🌊 **Flood and erosion surveillance** in coastal and high-risk areas
🏞️ **Real-time monitoring** of air quality, water bodies, and deforestation
🚨 **Disaster response** support through rapid environmental assessment

Sector & Classification

🌍 Sector: Policy/ Research

🟦 ESCO Code: **ISCO-08 code:** 2133

External Sources

🌐 Drought Monitoring and Planning with Drones

🌐 How Drones are used in Vegetation Management and Wildfire Risk Reduction

🌐 COP28 Climate Summit | Role of drones in climate change management

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[Drought Monitoring with Drones: A Hundred Fields at a Time]

[Advances in UAV-Based Remote Sensing for Climate-Smart Agriculture]

[UAS remote sensing applications to abrupt cold region hazards]

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