



HELLENIC MEDITERRANEAN UNIVERSITY
School of Engineering

Department of Electrical and Computer Engineering

Department of Mechanical Engineering

ΔΙΑΛΕΞΗ



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***Challenges in Robot–PLC Integration:
Communication, Data Mapping, and Troubleshooting***

The lecture introduces the practical integration of industrial robots and PLCs in automated production systems, with a focus on communication logic and typical fault scenarios. It discusses how the overall system architecture is structured and how key data flows circulate between the robot controller, the PLC, HMI, and SCADA. The session covers data mapping principles - how commands, statuses, and error codes are represented as bit/word structures and established as a clear, agreed interface between devices. A structured troubleshooting methodology is presented. Common real-world symptoms are addressed, such as the robot not responding to commands, incorrect status feedback, or communication interruptions.

***Thursday, 7 May 2026
Seminar Room (1st floor),
Central Library
14:15 - 15:00***

Γιώργος Παπαδουράκης – Γεώργιος Αρναουτάκης – Gareth Owens