



Philadelphia University
Faculty of Engineering & Technology

Distributed and Embedded Real-Time Systems (640751)

First Semester 2020-2021 Projects

- Project 1: IoT-based Real-time Monitoring System Design.
Project 2: Distributed and Embedded Real-Time System Design using Wireless Sensor Network.
Project 3: IoT-based Monitoring for a Photovoltaic Power Station.
Project 4: Real-time Maximum Power Point Tracking in PV System for Rapidly Changing Solar Irradiance.
Project 5: IoT-based Real-time Monitoring and Fault Detection for PV Systems.
Project 6: Real-Time control of a Mobile Robot.
Project 7: Design and Implementation of an Embedded controller for 3DOF Manipulator.
Project 8: IoT-based Real-time Control for Multi-Robot System.
Project 9: Microcontroller-Based Real-Time Algorithm Implementation.
Project 10: FPGA-Based Embedded Real-Time System Design.

<i>Phase 1: Project Selection and Summary.</i>	<i>6 November, 2021</i>
<i>Phase2: Planning Phase: Design Plan & Requirement Analysis.</i>	<i>4 December, 2021</i>
<i>Phase3: Development Phase: Hardware and software design.</i>	<i>30 December, 2021</i>
<i>Phase4: System Realization and Final Report.</i>	<i>15 January, 2022</i>

Prof. Kasim Al-Aubidy