

# Preliminaries

ET2223 Microprocessors, Microcontrollers, and Embedded Systems

Dr. Nimal Skandhakumar  
University of Sri Jayewardenepura

# Course Outline

1. Introduction
2. Digital number systems
3. Microprocessor systems and VLSI devices
4. Interfacing techniques and circuits
5. Assembly language programming
6. Embedded design concepts and definitions
7. Microcontroller system architectures
8. On-chip peripherals
9. Hardware components of embedded systems
10. Communication
11. Real time operating systems
12. RTOS examples
- ~~13. Basic embedded programming~~
- ~~14. Programmable logic controllers (PLC)~~

# Textbooks

- Main references:
  - Fredrick M. Cady: Microcontrollers and Microcomputers —Principles of Software and Hardware Engineering.
- Additional references:
  - David Patterson and John Hennessy: Computer Organisation & Design: The HW/SW Interface

# Additional Information

- Course Homepage:
  - <https://academic.nimal.info/et2223/>
- KDU LMS:
  - ???
- Google Classroom:
  - Go to <https://classroom.google.com/>
  - At the top, click Add + and then Join class.
  - Enter Class Code: **wont5tw**
- Contact:
  - [nimal@sjp.ac.lk](mailto:nimal@sjp.ac.lk)

