Name of the Course: Digital System Architecture (EL-426)

Textbook:
1. Computer Architecture: Quantitative Approach by Patterson and Hennessy

This course covers the basics of uniprocessor, Multicore architecture and programming.

Topics to be covered:

1) Fundamentals of Computer Design
2) ARM architecture (to be covered in the lab)
3) Instruction Level Parallelism and its Dynamic Exploitation
4) Memory Hierarchy Design
5) Multiprocessors and TLP
6) Parallel Programs (Lab)
7) CiLK (Lab)
8) Programming for performance
9) Workload Driven Evaluation
10) Shared memory multiprocessor

Grade Policy
- 1st Midterm  25%  (one of the mid-terms may be converted into
- 2nd Midterm  25% a lab exam or a project)
- Lab/HW  20%
- Final Exam  30%
- **Attendance**  75% required as per the Institute Rules