16.480/552 Microprocessors II and Embedded Systems - Fall 2006

This three credit course provides a continuation of the study of microprocessors begun in 16.317. Topics include CPU architecture, memory interfaces and management, coprocessor interfaces, bus concepts, bus arbitration techniques, serial I/O devices, DMA, interrupt control devices. Focus will be placed on the design, construction, and testing of dedicated microprocessor systems (static and real-time). Hardware limitations of the single-chip system will be investigated along with microcontrollers, programming for small systems, interfacing, communications, validating hardware and software, microprogramming of controller chips, and design methods and testing of embedded systems. Laboratories directly related to microprocessor functions and its interfaces.

Prerequisite: 16.311 - Electronics I Laboratory, 16.317 - Microprocessors Systems Design, 16.365 - Electronics I

Instructor: Prof. Yan Luo

Office Hours: WF 9:30am-11am

Office Location: Ball 413

Phone: (978) 934-2592

Email: Yan_Luo@uml.edu

Class time: W 6:00pm-8:50pm

Class location: TBA

Lab time: Open lab

Lab location: BL 406

Please read the course syllabus [here](.).