**CS6397 - Synthesis and Optimization of High-Performance Systems**

**CS 6397 (CE 6397)** Synthesis and Optimization of High-Performance Systems (3 semester hours) A comprehensive study of the high-level synthesis and optimization algorithms for designing high performance systems with multiple CPUs or functional units for critical applications such as Multimedia, Signal processing, Telecommunications, Networks, and Graphics applications, etc. Topics including algorithms for architecture-level synthesis, scheduling, resource binding, real-time systems, parallel processor array design and mapping, code generations for DSP processors, embedded systems and hardware/software codesigns. Prerequisite: **CS 5343**. (3-0) T (2016-02-05 21:14:40)