DEPARTMENT OF ELECTRONICS
Cochin University of science and Technology

Course Schedule

Course: M.Tech	**Name of Faculty:** Mithun Haridas T.P.
Topic: ELE 3202 Advanced Digital System Design	**Semester:** II
Lecture Hall:	**Timings:** as per CBCS

Week and date	*Lecture topics*	*Assignments*	*Remarks*
Jan 2 – Jan 6	Combination Circuits: Boolean Algebra, logic operation and gates. Decoder, Encoder, MUX De-MUX		
Jan 9 – Jan 13	Arithmetic Modules, K-Map, Quine Mc-Cluskey	*Assignment-1*	Logic Families
Jan 16 – Jan 20	Sequential Circuits: Latches Flip Flops, Counters, Shift registers, Hazards and Races		
Jan 22 – Jan 27	State Machines: design analysis, state assignment reduction		
Jan 30 – Feb 3	System Design using VHDL: Introduction, Modeling Behavioral, Data Flow, Structural	*Assignment-1 submission*	
Feb 6 – Feb 10	First Internals		
Feb 13 – Feb 17	Realization of Combinational and Sequential Circuits, Registers, Counters, Test Bench	*Assignment-2*	Fault Diagnosis and Testability
Feb 20 – Feb 24	Logic Design with Programmable Devices: PLA, PLD, ROM		
Feb 27 – March 3	Design of Moore Mealy Circuit, pattern sequence detector, FPGA		
March 6 – March 10	Fault Diagnosis and Testability: BST, BIST, DFT schemes	*Assignment-2 submission*	
March 13 – March 17	Review of topics		
March 20 – March 24	Seminars		
March 27 – March 31	Second Internals		
April 3 – April 7	Review of topics		