



ATME

College of Engineering



DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

Course with Code: EMBEDDED SYSTEMS DESIGN/BEE613B					Faculty: Mr. Shreeshayana R		Semester & Section: VI	
Class No.	Date planned (DD/MM)	Topics to be covered	TLP Planned	Class No.	Date of Conduction (DD/MM)	Topics Covered	TLP Executed	Remarks if any deviation
MODULE-1								
1		Orientation, Module-1: Introduction	ICT					
2		Embedded Systems and general purpose computer systems, history	Chalk & Talk					
3		Classifications, applications and purpose of embedded systems	Chalk & Talk					
4		Core of Embedded Systems: Microprocessors and microcontrollers, RISC and CISC controllers,	Chalk & Talk					
5		Big endian and Little endian processors, Application specific ICs	Chalk & Talk					
6		Communication interface, embedded firmware	Chalk & Talk					
7		Other system components, PCB and passive components, Assignment-1	Chalk & Talk					
8		Summary of Module 1, VTU QP Discussion, Evaluation using SRS	ICT					
Assignment-1:Group Activity-1, Mock Test-1								



DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

Course with Code: EMBEDDED SYSTEMS DESIGN/BEE613B					Faculty: Mr.Shreeshayana R		Semester & Section: VI	
Class No.	Date planned (DD/MM)	Topics to be covered	TLP Planned	Class No.	Date of Conduction (DD/MM)	Topics Covered	TLP Executed	Remarks if any deviation
MODULE 2								
9		Module 2: Characteristics and quality attributes of embedded systems Characteristics	ICT					
10		Operational and non-operational quality attributes	Chalk & Talk					
11		Application specific embedded system- Washing machine	Chalk & Talk					
12		Application specific embedded system domain specific – automotive	Chalk & Talk					
13		Application specific embedded system	ICT					
14		Application specific embedded system	ICT					
15		Summary of Module 2,VTU QP Discussion, Assignment-2	ICT					
16		Evaluation using SRS	ICT					
Assignment-2: Group Activity-2, Mock Test-1								



DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

Course with Code: EMBEDDED SYSTEMS DESIGN/BEE613B					Faculty: Mr.Shreeshayana R		Semester & Section: VI	
Class No.	Date planned (DD/MM)	Topics to be covered	TLP Planned	Class No.	Date of Conduction (DD/MM)	Topics Covered	TLP Executed	Remarks if any deviation
MODULE 3								
17		Module-3 Hardware Software Co design and Program Modelling:Introduction	ICT					
18		Fundamental issues in Hardware Software Co-design	Chalk & Talk					
19		Computational models in Embedded System Design	Chalk & Talk					
20		Embedded Hardware Design and Development	Chalk & Talk					
21		Analog Electronic Components, Digital Electronic Components	Chalk & Talk					
22		VLSI & Integrated Circuit Design	Chalk & Talk					
23		Electronic Design Automation Tools, Summary of Module 3, VTU QP Discussion, Assignment-3	ICT					
24		Evaluation using SRS	ICT					
Assignment-3- Group Activity-3, Mock Test-3 IA-1 Scheme Discussion								



ATME

College of Engineering



DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

Course with Code: EMBEDDED SYSTEMS DESIGN/BEE613B					Faculty: Mr.Shreeshayana R		Semester & Section: VI	
Class No.	Date planned (DD/MM)	Topics to be covered	TLP Planned	Class No.	Date of Conduction (DD/MM)	Topics Covered	TLP Executed	Remarks if any deviation
MODULE 4								
25		MODULE-4: Embedded Firmware Design and Development	ICT					
26		Embedded Firmware Design Approaches	Chalk & Talk					
27		Embedded Firmware Development Language	Chalk & Talk					
28		Embedded System Development Environments	Chalk & Talk					
29		Types of files generated on cross compilation	Chalk & Talk					
30		disassemble/decompiler	Chalk & Talk					
31		Simulators, Emulators and Debugging, Summary of Module 4, VTU QP Discussion, Assignment-4	ICT					
32		Evaluation using SRS	ICT					
Assignment-4, Mock Test-4 IA-II Scheme Discussion								



DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

Course with Code: EMBEDDED SYSTEMS DESIGN/BEE613B					Faculty: Mr.Shreeshayana R		Semester & Section: VI	
Class No.	Date planned (DD/MM)	Topics to be covered	TLP Planned	Class No.	Date of Conduction (DD/MM)	Topics Covered	TLP Executed	Remarks if any deviation
MODULE 5								
32		MODULE-5: Real-time Operating System(RTOS) based Embedded System Design:	ICT					
33		Operating System basics	Chalk & Talk					
34		Types of Operating Systems	Chalk & Talk					
35		Tasks, Process and Threads	Chalk & Talk					
36		Multiprocessing and Multitasking	Chalk & Talk					
37		Task Scheduling	Chalk & Talk					
38		VTU QP Discussion, Assignment-4	Chalk & Talk					
39		Summary of Module 5	ICT					
40		Evaluation using SRS	ICT					
Mock Test-5								



DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

	Activity	Planned	Actual	Remarks
1	Theory Classes	40		
2	Assignments/Quizzes/ Self study	5: Mock Test 3: Group Project Activity 5: SRS/Quiz		
3	Tutorials/ Extra classes	-		
4	Internal Assessments	3		
5	ICT based Teaching (% of usage in Curriculum)	16/40=40%		
Planning			Execution	
Faculty Signature:			Faculty Signature:	
HoD Signature:			HoD Signature:	