

## Syllabus Progress Report for COMPUTER ARCHITECTURE (EC-502): Upto 03.11.2023

<b>Course Name:</b>	<b>COMPUTER ARCHITECTURE</b>	<b>Course Code:</b>	<b>EC-EC502</b>
Teacher Name:	Manas Kumar Parai	Teacher Employee Code:	8012
Department Name:	Electronics & Communication Engineering	Semester:	5th
LTP Structure:	3-0-0		
Total No. of classes Allotted:	25		
Total No. of clases conducted:	20		
% of syllabus covered:	90%		
<b>Module No.</b>	<b>Topics Covered</b>	<b>Methodology Used</b>	<b>No. of Lectures conducted</b>
1	Introduction to Computer Architecture, Adder, Subtractor, Adder-Subtractor, Arithmetic Microoperation, Shift Microoperation, MOD-5 Asynchronous Counter, Logical Microoperation, Arithmetic Logic Shift Unit, Basic Structure of Computers, Functional units, machine instructions and programs, Types of instructions, Instruction sets: Instruction formats, software, performance issues software, Assembly language, Stacks, Ques, Subroutines.	Chalk & Board, Presentation, Flipped Mode	8
2	Information Representation, Instruction formats Processor Organization Microprogrammed Control	PPT & Flipped	2
3	Basic concepts, minimizing microinstruction size, multiplier control unit. Microprogrammed computers - CPU control unit Memory organization, device characteristics, RAM, ROM, Memory management, Concept of Cache & associative memories, Virtual memory. System organization, Input - Output systems, Interrupt, DMA. Standard I/O interfaces	Chalk & Board, Presentation, Flipped Mode	8
4	Concept of Parallel Processing, Pipelining	Presentation	2

**Signature of the Faculty  
Member**

**Signature of HOD**