

Course Code	CSE 234
Course Name	Computer Architecture and Operating Systems
Credits	4
Course Offered to	UG-CSAM, CSSS-2nd year core
Course Description	The overall objective of this course is to provide a comprehensive overview of the basic features of a computer. It puts together basic computer organization, systems software and operating systems. The course lays the basis for more advanced topics in computer science, both hardware and software.

Pre-requisites		
Pre-requisite (Mandatory)	Pre-requisite (Desirable)	Pre-requisite(other)
Programming		

*Please insert more rows if required

Post Conditions*(For suggestions on verbs please refer the second sheet)			
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CO1	CO2	CO3	CO4
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analyse a computer system, Build basic systems software Code Algorithms of OS Develop awareness of security issues

Weekly Lecture Plan			
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Week Number	Lecture Topic	COs Met	Assignment/Labs/Tutorial
1	Number and character representation	CO1, CO2	
2	1's and 2's complement, basic computer organization	CO2	Representation,implement algorithms
3	computer operation, assembly language	CO1, CO2	1's, 2's complement
4	Assemblers, linkers, loaders	CO2	Assembler Project
5	Control Unit and memory structure	CO1	Mapping logic Buses
6	IO and Interrupts	CO1	
7	OS structure and Process management	CO3	
8	Inter process communicaiton and process scheduling	CO3	
9	Memory management	CO3	process scheduling
10	File systems	CO3	memory management algos
11	Deadlocks	CO1	file systems
12	Security	CO4	deadlocks
13	Wrap up		

Assessment Plan	
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Type of Evaluation	% Contribution in Grade
Attendance	5
Quizzes	15
Assignment	10
Project	20

Mid-sem	25
End-sem	25

*Please insert more row for other type of Evaluation

Resource Material	
Type	Title
Textbook	Computer Systems Organization
	Modern Operating Systems