

NATIONAL INSTITUTE OF TECHNOLOGY, TIRUCHIRAPPALLI

DEPARTMENT OF COMPUTER APPLICATIONS

	COURSE PLA	N – PART I			
Name of the programme and specialization	MCA				
Course Title	Computer Networks Lab				
Course Code	CA704	No. of Credits	2		
Course Code of Pre- requisite subject(s)	CA718				
Session	January 2023	Section	A		
Name of Faculty	Dr. Jitendra Kumar Mr. G. Appasami	Department	Computer Applications		
Official Email	jitendra@nitt.edu appa.govi@gmail.com	Telephone No.	+4312503734, 9786554175		
Name of Course Coordinator(s) (if, applicable)	Dr. Sindhia Lingaswam	y			
Official E-mail	sindhia@nitt.edu	Telephone No.	9940220299		
Course Type (please tick appropriately)	Core course (✓)	Elective course ()			

Syllabus (approved in BoS)

- 1. Introduction to Components for building Network Topologies
- 2. Switch Configuration, Addressing, Port and terminal Security, VLAN and Trunk link configuration
- 3. Router Configuration Static, Default routing, Dynamic Routing
- 4. IP Subnetting
- 5. Implementation of TCP and UDP
- 6. Implementation of OSI Layers

COURSE OBJECTIVES

- To practice installation and configuration of different network architecture.
- To practice and configure different routing protocols.

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Course Outcomes Students will be able to:	Programme Outcomes (PO) (Enter Numbers only)
Configure different network topologies.	1, 2
Build the network according to the requirement.	1, 2, 5
Configure different routing protocols.	1, 2
Implement different networking principles.	1, 2, 4



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COURSE PLAN - PART II

COURSE OVERVIEW

This course makes students install, configure networks and build the network according to the requirement and implement the network principles using simulation software (Packet racer, GNS3, NS3, etc).

COURSE TEACHING AND LEARNING ACTIVITIES

S.No.	Week/Contact Hours	Topic	Mode of Delivery
1	Week 1	Study of basic network commands and Network configuration commands	Demonstration
2	Week 2	Study of networking components and network simulation tools	Demonstration
3	Week 3	Implementation of Client-Server application	Demonstration
4	Week 4	Introduction to Components for building Network Topologies	Demonstration
5	Week 5	Switch Configuration, Addressing, Port and terminal Security	Demonstration
6	Week 6	VLAN and Trunk link configuration	Demonstration
7	Week 7	Router Configuration – Static, Default routing, Dynamic Routing	Demonstration
8	Week 8	IP Subnetting	Demonstration
9	Week 9	Implementation of TCP and UDP	Demonstration
10	Week 10	Implementation of OSI Layers	Demonstration



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COURSE ASSESSMENT METHODS (shall range from 4 to 6)

S.No.	Mode of Assessment	Week/Date	Duration	% Weightage
1.	Lab Activities	Weekly	Lab duration	20
2.	Project	11 th week	Lab duration	20
3.	Model Assessment	12 th week	Lab duration	20
CPA*	Compensation Assessment*	As per schedule	Lab duration	20
4.	End Semester Lab	As per schedule	3 hours	40

*mandatory;

COURSE EXIT SURVEY (mention the ways in which the feedback about the course shall be assessed)

- The students through the class representative may give their feedback at any time to the course faculty which will be duly addressed.
- The students may also give their feedback during Class Committee meeting.

COURSE POLICY (including compensation assessment to be specified)

MODE OF CORRESPONDENCE (email/ phone etc)

The students can get the availability of faculty member both online and offline. They can get their doubts clarified at any time with their faculty member with prior appointment.

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COMPENSATION ASSESSMENT

One compensation assessment for absentees in assessments (other than final assessment) is mandatory. Only genuine cases of absence shall be considered.

ATTENDANCE POLICY(A uniform attendance policy as specified below shall be followed)

- At least 75% attendance in each course is mandatory.
- A maximum of 10% shall be allowed under On Duty (OD) category.
- > Students with less than 65% of attendance shall be prevented from writing the final assessment and shall be awarded 'V' grade.



(Mr. G. Appasami) (

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ACADEMIC DISHONESTY & PLAGIARISM

- > Possessing a mobile phone, carrying bits of paper, talking to other students, copying from others during an assessment will be treated as punishable dishonesty.
- > Zero mark to be awarded for the offenders. For copying from another student, both students get the same penalty of zero mark.
- > The departmental disciplinary committee including the course faculty member, PAC chairperson and the HoD, as members shall verify the facts of the malpractice and award the punishment if the student is found guilty. The report shall be submitted to the Academic office.
- The above policy against academic dishonesty shall be applicable for all the programmes.

The above policy against academic distinctesty shall be appreciate to all the programmer.	
ADDITIONAL INFORMATION, IF ANY	
NIL	
FOR APPROVAL	
Course Faculty Literal CC- Chairperson Course Faculty Literal	y
(Dr. Jitendra Kumar) (Dr. Sindhia Lingaswamy) (Dr.Michael Arc	

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Guidelines

- a) The number of assessments for any course shall range from 4 to 6.
- b) Every theory course shall have a final assessment on the entire syllabus with at least 30% weight-age.
- c) One compensation assessment for absentees in assessments (other than final assessment) is mandatory. Only genuine cases of absence shall be considered.
- d) The passing minimum shall be as per the PG regulations of the Institute.
- e) Attendance policy and the policy on academic dishonesty & plagiarism by students are uniform for all the courses.
- f) Absolute grading policy shall be incorporated if the number of students per course is less than 10.
- g) Necessary care shall be taken to ensure that the course plan is reasonable and is objective.