NATIONAL INSTITUTE OF TECHNOLOGY, TIRUCHIRAPPALLI

DEPARTMENT OF COMPUTER APPLICATIONS

COURSE PLAN – PART I			
Name of the program and specialization	MCA		
Course Title	Networks Lab		
Course Code	CA705	No. of Credits	2
Course Code of Pre-requisite subject(s)	CA727		
Session	July 2022	Section (if, applicable)	A & B
Name of Faculty	Divakar Keshri	Department	Computer Applications
Official Email	405120005@nitt.edu	Telephone No.	7004582656
Name of PAC Chairman	Dr. R. Eswari, Assistant Professor		
Official E-mail	eswari@nitt.edu	Telephone No.	0431-2503744
Course Type (please tick appropriately)	☑ Core course	☐ Elective course	

Syllabus (approved in BoS)

- Exercises to practice installation and configuration to understand network architecture and build a network
- Exercises to implement network principles

COURSE OBJECTIVES

To enhance the understanding of the following concepts of computer networks through experiments and simulation.

- Install and configure networks
- Build the network according to the requirement
- Implement network principles

MAPPING OF COs with POs

Course Outcomes	Program Outcomes (PO) (Enter Numbers only)
1. Install and configure networks	1, 2
2. Build the network according to the requirement	1, 2, 5
3. Implement network principles	1, 2, 4

COURSE PLAN – PART II

COURSE OVERVIEW

This course makes students install, configure networks and build the networks according to the requirement and implement the network principles using Simulation software Packet Tracer

COURSE TEACHING AND LEARNING ACTIVITIES

S.No.	Week/Contact Hours	Topic	Mode of Delivery
1	Week 1	Introduction to Packet Tracer, Building Networks	PPT, using CISCO Packet Tracer
2	Week 2	Switch Configuration, Addressing	PPT, using CISCO Packet Tracer
3	Week 3	Switch Configuration – Port and terminal Security	PPT, using CISCO Packet Tracer
4	Week 4	Switch Configuration – VLAN and Trunk link configuration	PPT, using CISCO Packet Tracer
5	Week 5	Router Configuration – Static, default routing	PPT, using CISCO Packet Tracer
6	Week 6	Router Configuration – Dynamic Routing	PPT, using CISCO Packet Tracer
7	Week 7	Subnetting various address	PPT, using CISCO Packet Tracer
8	Week 8 and Week 9	Implementation of TCP and UDP	PPT, using CISCO Packet Tracer
9	Week 10	Implementation of OSI Layers	PPT, using CISCO Packet Tracer

COURSE ASSESSMENT METHODS (shall range from 4 to 6)

S. No.	Mode of Assessment	Week/Date	Duration	% Weightage
1	Exercises Demonstration – I	6th Week	-	10
2	Exercises Demonstration – II	10th Week	-	15
3	Laboratory Report	Every week	-	25
4	Project	11th	-	25
5	Final Assessment* – Oral Viva Voce Examination	12th	3hrs	25

***mandatory; refer to guidelines on page 4**

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 faculty which will be duly addressed.
- The students may give their feedback during class committee meetings.

COURSE POLICY (including compensation assessment to be specified)

Compensation Assessment

One compensation assessment for absentees in assessment (other than the 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.

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 programs.

ADDITIONAL INFORMATION, IF ANY

Students are advised to learn the beginner-level free Online course "Introduction to Packet Tracer" offered by CISCO learning academy available at URL: https://www.netacad.com/courses/packet-tracer/introduction-packet-tracer

FOR APPROVAL

Course Faculty	CC- Chairperson	HOD
Divakar Keshri	Dr. R. Eswari,	Prof.Dr.PJA Alphonse
Ph.D Scholar	Assistant Professor	Professor and Head

Guidelines

a) The number of assessments for any theory course shall range from 4 to 6.

b) Every theory course shall have a final assessment on the entire syllabus with at least 30% weightage.

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 regulations.

B.Tech. Admitted in				P.G.
2018	2017	2016	2015	
35% or (Class average/2) whichever is greater.		(Peak/3) or (Class Average/2) whichever is lower		40%

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.