DEPARTMENT OF COMPUTER APPLICATIONS

NATIONAL INSTITUTE OF TECHNOLOGY, TIRUCHIRAPPALLI

COURSE PLAN – PART I			
Name of the programme and specialization	M.Sc. (Computer Science)		
Course Title	FOSS LAB		
Course Code	CAS 702	**No. of Credits**	2
Course Code of Pre-requisite subject(s)	NIL		
Session	January 2022	**Section (if, applicable)**	NA
Name of Faculty	Prof. Michael Arock	**Department**	Computer Applications
Email	michael@nitt.edu	**Telephone No.**	
Name of PAC Chairman	Dr. S. Domnic		
E-mail	domnic@nitt.edu	**Telephone No.**	0431-2503745
Course Type	Lab Course		
Google classroom link	https://classroom.google.com/u/0/c/NTEyOTM1OTg0Nzk0		

Syllabus

To expose students to FOSS environment and introduce them to use and modify existing programs using open source packages/Technology listed below:

1. HTML
2. CSS
3. LaTex
4. Python
5. WEKA
6. Google Scholar
7. Github

Course Objective

- Lab objective is to explore various open-source packages/technologies and apply them.

Course Outcomes (CO)	Aligned Programme Outcomes (PO)											
	PO1	PO2	PO3	PO4	PO5	PO6	P07	PO8	PO9	PO10	PO11	PO12
To use GitHub for software development and version control in teams.	✓			✓	✓		✓	✓				
To develop applications in FOSS environment.	✓	✓	✓	✓	✓		✓	✓				
To identify and evaluate various FOSS options for any software requirement.	✓	✓	✓	✓	✓		✓	✓				

After successful completion of the course, students should be able to:

1. To use GitHub for software development and version control in teams.
2. To develop applications in FOSS environment.
3. To identify and evaluate various FOSS options for any software requirement.

COURSE PLAN – PART II

COURSE TEACHING AND LEARNING ACTIVITIES

S. No.	Week	Topic	Mode of Delivery
1	Week 1	HTML: Introduction, Editors, Basic, Elements, Attributes, Headings, Paragraphs, Styles, Formatting, Quotations, Comments, Colors, CSS, Links, Images, Favicon, Tables, Lists, Block & Inline, Classes, Id, Iframes, JavaScript, File Paths, Head, Layout, Responsive, Computer code, Semantics, Style Guide, Entities, Symbols, Emojis, Charset, URL Encode, Forms, Form Attributes, Form Elements, Input Types, Input Attributes, Input Form Attributes, Graphics, Canvas, SVG, Media, Video, Audio, Plug-ins, YouTube, Drag/Drop.	Hard copy document, Chalk and Board, Online resource

2	Week 2	HTML and CSS: Web page design	Hard copy document, Chalk and Board, Online resource.
3	Week 3	LaTex: Create a document, Creating Sections, Referencing Equation, Writing some simple to difficult math, Add figure, Creating Matrix Equation, Tables, Creating a new command	Hard copy document, Chalk and Board, Online resource
4	Week 4	LaTex: Draw the flowchart, create reference section by adding bibliography	Hard copy document, Chalk and Board, Online resource
5	Week 5	Project 1	Pen, Copy, Desktop
6	Week 6	Python machine learning coding.	Hard copy document, Chalk and Board, Online resource
7	Week 7	Download Weka source code and run it.	Hard copy document, Chalk and Board, Online resource
8	Week 8	Evaluation-I	Pen, Copy, Desktop
9	Week 9	Read a Research Paper and implement the open source code	Hard copy document, Chalk and Board, Online resource
10	Week 10	Compensation Assessment	Pen, Copy, Desktop
11	Week 11	Project 2	Pen, Copy, Desktop
12	Week 12	Create a Github account for software development	Hard copy document, Chalk and Board, Online resource
13	Week 13	Final Assessment	Pen, Copy, Desktop

COURSE ASSESSMENT METHODS

S. No.	Mode of Assessment	Tentative Schedule	Duration in Min	% Weightage
1	Lab Activities	Periodic	Lab duration	20
2	Project 1	5th Week	Lab duration	20
3	Evaluation-I	8th week	60 Minutes	10
CPA	Compensation Assessment*	10th week	10 Minutes	20
4	Project 2	11th week	Lab duration	20
5	Final Assessment	As per the academic schedule	120 Minutes	30
			Total Marks	100

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

COURSE POLICY (including compensation assessment to be specified)

MODE OF CORRESPONDENCE

By Email: michael@nitt.edu

COMPENSATION ASSESSMENT POLICY

The compensation assessment will be conducted for absentees in assessments (other than final assessment) only after the submission of medical or On-duty certificates signed by the competent authority.

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 programmes.

ADDITIONAL INFORMATION	NIL

FOR APPROVAL

Course Faculty _____ **CC-Chairperson** _____ **HOD** _____