NATIONAL INSTITUTE OF TECHNOLOGY, TIRUCHIRAPPALLI
DEPARTMENT OF COMPUTER APPLICATIONS

COURSE PLAN – PART I			
Name of the programme and specialization	**M.Sc. Computer Science**		
Course Title	**DBMS and Data mining Lab**		
Course Code	**CAS 754**	**No. of Credits**	**2**
Course Code of Pre-requisite subject(s)	-		
Session	**Jan 2022**	**Section**	-
Name of Faculty	**Dr. S. Sangeetha**	**Department**	**Computer Applications**
Official Email	**sangeetha@nitt.edu**	**Telephone No.**	**0431-2503743**
Name of Class committee Chairperson	**Dr.B.Balaji**		
Official E-mail	**balaji@nitt.edu**	**Telephone No.**	
Course Type (please tick appropriately)	☑ **Core course**	☐ **Elective course**	

Syllabus (approved in BoS)

- Exercises to construct and query databases.
- Exercises to implement Data mining algorithms using ENCOG and WEKA

COURSE OBJECTIVE

- To construct and query databases.
- To work with ETL tools
- To implement mining algorithms.
- To apply mining techniques on realistic data

MAPPING OF COs with POs

Course Outcomes	Programme Outcomes (PO)
Work with ETL tools	1,5
Demonstrate the classification, clustering and etc. in large data sets.	1,2,3,4,5
Ability to add mining algorithms as a component to the exiting tools.	1,2,3,4,5
Ability to apply mining techniques for realistic data.	1,2,3,4,5

COURSE PLAN – PART II

COURSE OVERVIEW

DBMS and Data mining lab helps the students to learn creation and manipulation of database. It enables the students to access the data by writing appropriate SQL queries. Data mining part of the course helps the student to learn preprocessing and mining useful information in the data using datmining tools.

COURSE TEACHING AND LEARNING ACTIVITIES

Week	Topic
1	Problems based on Data Definition Language
2	Problems based on Data Manipulation
3	Problems based on simple SQL queries
4	Problems based on Complex SQL queries
5	ETL and Data Preprocessing
6	Implementation of Association Mining algorithms
7	Implementation of Classification Algorithms
8	Implementation of Clustering Algorithms
9	Project work
10	Project work
11	Project work
12	Project work

COURSE ASSESSMENT METHODS (shall range from 4 to 6)

S.No.	Mode of Assessment	Week/Date	Duration	% Weightage
1.	Code Evaluation-1	Week 5	2 hours	20
2.	Code Evaluation-2	Week 9	2 hours	20
3.	Project	At the end of the course	4 weeks	30
CPA	Compensation Assessment	At the end of the course	1 Hr	20
4	Final Assessment	At the end of the course	3 Hrs	30

Essential Reading

http://vlabs.iitb.ac.in/vlabs-dev/labs/dblab/index.php
https://pandas.pydata.org/docs/user_guide/index.html
https://scikit-learn.org/stable/user_guide.html

COURSE EXIT SURVEY

The students through the class representative may give their feedback at any time to the course faculty which will be duly addressed.

COURSE POLICY (including compensation assessment to be specified)

ATTENDANCE POLICY

As per Institute policy

ACADEMIC DISHONESTY & PLAGIARISM

- 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 students are expected to come out with their original solution for problems given as assignment, and tests/examinations.

ADDITIONAL INFORMATION, IF ANY

FOR APPROVAL

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

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.