

NATIONAL INSTITUTE OF TECHNOLOGY, TIRUCHIRAPPALLI

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

COURSE PLAN – PART I						
Name of the programme and specialization	M. Tech					
Course Title	DBMS Laboratory					
Course Code	CS608 No. of Credits 2					
Course Code of Pre- requisite subject(s)	Semester III					
Session	JAN/2023 Section (if, applicable)					
Name of Faculty	Dr. Chandramani Chaudhary	Department	CSE			
Official Email	chandramani@nitt.edu	Telephone No.	NIL			
Name of Course Coordinator(s) (if, applicable)	NIL					
Official E-mail	NIL	Telephone No.	NIL			
Course Type (please tick appropriately) Elective course						
Syllabus (approved in	BoS)					
 Working with Basic SQL Working with Intermediate SQL. Advanced SQL using procedures, functions and Triggers. Database Design and Normalization techniques. Working with XML Accessing Databases from Programs using JDBC Working with PHP and MySQL Indexing and Query Processing Query Evaluation Plans Working with classification algorithms using Python / R programming Working with clustering techniques using Python / R programming Database Design and implementation (Mini Project) Text Books Silberschatz, Henry F. Korth, and S. Sudharshan, "Database System Concepts", 6th Ed., McGraw Hill, 2010. RamezElmasri and Shamkant B. Navathe, "Fundamentals of Database Systems", Seventh Edition, Pearson Education / Addison Wesley, 2016 						
Text Books 1. Silberschatz, Henry F. Ko 2010. 2. RamezElmasri and Shami	implementation (Mini Project orth, and S. Sudharshan, "Databas kant B. Navathe, "Fundamentals) se System Concepts", 6t				
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COURSE OVERVIEW

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- To understand the database design and normalization techniques
- To understand the internals of a database system
- To implement supervised and unsupervised learning techniques on relational data using Python/R programming language

MAPPING OF COs with POs				
Co	ourse Outcomes	Programme Outcomes (PO) (Enter Numbers only)		
1.	Comprehend the internal working of a database system			
2.	Design database and apply normalization techniques			
3.	Design and develop a database using SQL and the mechanism in			
	connecting with a Web based GUI			
4.	Apply Machine learning algorithms to the real time datasets using			
	Python/R programming languages			

COURSE PLAN – PART II

In this course, students will learn about the design and implementation of web pages with Python, JavaScript, and SQL using frameworks like Django.

COURS	E TEACHING AND LE	(Add more rows)		
S.No.	Week/Contact Hours	Торіс	Mode of Delivery	
2	23/0/2023 to 27/0/2023 3 hours	Working with Basic SQL		
3	30/01/2023 to 3/02/2023 3 hours	Working with Intermediate SQL.		
4	6/02/2023 to 10/02/2023 3 hours	Advanced SQL using procedures, functions and Triggers.		
5	13/02/2023 to 17/02/2023 3 hours	Database Design and Normalization techniques.		
6	20/02/2023 to 24/02/2023 3 hour	Lab Exam-1		
8	27/02/2023 to 3/03/2023 3 hours	Working with XML		



NATIONAL INSTITUTE OF TECHNOLOGY, TIRUCHIRAPPALLI

9	6/03/2023 to 10/03/2023 3 hours	Access	ing Databases from P using JDBC	rograms	grams	
10	13/03/2023 to 17/03/2023 3 hours	Working with PHP and MySQL				
12	20/03/2023 to 24/0/2023 3 hour	Lab Exam -2				
13	27/03/2023 to 31/03/2023 3 hours	Indexing and Query Processing				
14	3/04/2023 to 6/04/2023 2 hours	Query Evaluation Plans				
15	10/04/2023 to 13/04/2023 3 hours	Working with classification and clustering algorithms using Python / R programming				
16	17/04/2023 to 21/04/2023 3 hours	Database Design and implementation				
COURSE ASSESSMENT METHODS (shall range from 4 to 6)						
S.No.	Mode of Assessm	ent	Week/Date	Duratio	on	% Weightage
1	Continous Assessn	nent	Every lab session	3 hour		20
2	Lab exam -1		21/03/2023 to 24/0/2023	3 hour		30
3	Report		13/02/2023 to 15/04/2023	3 hours		20
4	Final Assessmen	Final Assessment *		3 hours		30
*mandatory; refer to guidelines on page 4						

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

1. Students' feedback through PAC meetings

2. Feedbacks are collected before final examination through MIS or any other standard format followed by the institute

3. Students, through their Class Representatives, may give their feedback at any time to the course faculty which will be duly addressed.



COURSE POLICY (including compensation assessment to be specified)

MODE OF CORRESPONDENCE (email/ phone etc) Email and Phone

COMPENSATION ASSESSMENT POLICY

1. One compensation assessment will be given after completion of Cycle Test 1 and 2 for the students those who are absent for any assessment due to genuine reason.

2. Compensatory assessments would cover the syllabus of Cycle tests 1 & 2

3. The prior permission and required documents must be submitted for absence signed by HoD/CSE.

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, IF ANY

1. The Course Coordinator is available for consultation during the time intimated to the students **2.** Relative grading adhering to the instructions from the office of the dean (Academic) will be adopted for the course.

FOR APPROVAL



NATIONAL INSTITUTE OF TECHNOLOGY, TIRUCHIRAPPALLI

Course Faculty

CC- Chairperson

HOD



<u>Guidelines</u>

- 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.

	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.