

## National Institute of Technology Meghalaya An Institute of National Importance

CURRICULUM

Depa Course	grannine	e Dau	Bachelor of Technology in Computer Science and Engineering         Year of Regulation											2019-2020			
Course	Programme Department		Computer Science and Engineering							Semester			•	2019-2020 V			
	•								Credit		Semester			Marks D	istribution		
Code		Course Name Database Management Systems									P	С	INT	MID	END	Total	
CS 30	03							3	1	0	4	50	50	100	200		
		To understand the fundamentals concepts of database, operation of							001				nental com				
		relational data model and its requirement in an organization. To understand the various relational data models, application of relational						Course Outcomes	CO1	systems, Relational Database Management System and i need towards an organization.							
	d d	data models to design logical database including E-R diagrams and database normalization. And also write the simple and optimized advanced database queries using Structured Query Language (SQL). To develop and ability to design and implement a small database project using Structured Query Language (SQL).							CO2	Able to demonstrate the data models, analyse the real problems and requirements, to give the appropriate solusing the principles of Entity Relationship Diagram.							
Course Objectiv									CO3	<ul> <li>Able to attain the practical understanding of SQL, convert th Entity relationship model to relational tables, operations to store the data using queries.</li> <li>Able to apply the principles of normalization to remove the redundancy and inconsistency to improve the performance using database tuning and query optimization.</li> <li>Able to understand the concurrent transactions, Problem such as failures, solutions to solve the concurrency problem &amp; recovery from failure using protocols</li> </ul>							
			To understand the requirement of database tuning, concept of a database transaction, including concurrency control, backup & recovery, data object						CO4								
		ocking protocols and role of database administrator.							CO5								
<u> </u>		Mapping with Program Outo							omes (POs)	)	& recovery from failure using			Mapping with PSOs			
No. C	COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO	
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3 (	CO3	1	2	3	3	2	2	0	0	0	0	0	0	2	3	3	
4 (	CO4	1	2	3	3	3	2	3	0	2	0	0	1	2	3	2	
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