

COURSE TITLE	TE142485: Distributed Database Management System Credits: 2 ELECTIVE COURSE
LEARNING OBJECTIVES	<ul style="list-style-type: none"> • To give the knowledge about the concepts of database management system (DBMS) and its components. • To give information about the most recent development of DBMS.
COMPETENCY	<ul style="list-style-type: none"> • Students understand the difference between file system and DBMS. • Students understand the constructing components of DBMS. • Students literate SQL instructions for definition and data processing. • Students can create a database through normalization process. • Students can create a database from E-R diagram. • Students understand the most recent applications of DBMS like distributed database, mobile database, spatial database, a fuzzy database, stream database, half-structured database, distributed multimedia database, and the role of database in data warehouse and data mining.
SUBJECTS	<p>File system and DBMS, database model (hierarchy, network, and relational), E-R diagram, query relational, integrity and security, relational database design (dependency, integrity, normal form, normalization, and decomposition).</p> <ul style="list-style-type: none"> • Components of DBMS, storage, file structure, organization, and indexing. Query processing, query optimization, transaction management, concurrent control, and recovery system. • Distributed database, mobile database, spatial database, a fuzzy database, stream database, half-structured database, distributed multimedia database, and the role of database in data warehouse and data mining.
MAIN REFERENCES	<ul style="list-style-type: none"> • Silberschatz, Korth, Sudarshan, <u>Database System Concept</u>, Fifth Edition, McGraw-Hill, 2006. • Raghu Ramakrisnan, <u>Database Management Systems</u>, Second Edition, McGraw-Hill, 2006.
OPTIONAL REFERENCES	-
PREREQUISITE	-