CPTR2240 - Database Administration

Credits:	3 (2/1/0)
Description:	Students in this course will identify core database concepts and create database models. Installation, configuration and maintenance of a database management system (DBMS) will be covered. Students will analyze and administer a database's performance optimization. Additional topics will include user administration within the database, backup and restoration, and database normalization.
Prerequisites:	• CPTR1040 OR • CPTR1001
Corequisites:	
Pre/Corequisites*:	• CPTR2224 • CPTR2230
Competencies:	1. Practice installation, configuration and management of a database management system. 2. Apply and practice knowledge of importing and restoring data into a DBMS. 3. Apply and practice knowledge of exporting and backing up data from a DBMS. 4. Construct a database using object-oriented modeling. 5. Learn and demonstrate entity-relationship database modeling. 6. Evaluate current vendor DBMS offerings. 7. Compare and contrast current technologies of a relational database, object-oriented DB, NoSQL and flat file. 8. Understand, differentiate and demonstrate database replication and mirroring. 9. Employ appropriate tools to ensure health of DBMS. 10. Define database normalization. 11. Apply database optimization methods. 12. Communicate database designs and changes to appropriate stakeholders.
MnTC goal areas:	None

**Can be taking as a Prerequisite or Corequisite.*

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