



**FAKULTI TEKNOLOGI DAN KEJURUTERAAN**

<b>PROGRAM</b>	<b>Diploma in IT System Support</b>
<b>COURSE NAME</b>	<b>Database Modelling</b>
<b>COURSE CODE</b>	<b>DTS 3013</b>
<b>CREDIT HOUR</b>	<b>3</b>
<b>SYNOPSIS</b>	This course emphasizes application using relational database system management. It is prepared student with technical skills for application programming with database. It is cover entity relational model, definition and SQL queries and application development.
<b>COURSE STRUCTURE</b>	
<b>CHAPTER</b>	<b>TOPICS</b>
<b>1</b>	<b>Introduction</b>  1.1 Definition of database  1.2 Database Management System  1.3 Advantages database system  1.4 Database system environment  1.5 Brief history on improvement of database technology
<b>2</b>	<b>Entity-Relationship Modelling</b>  2.1 Entity, entity set and attribute  2.2 Relationship of entities  2.3 Draw the entity-relationship diagram



<b>3</b>	<b>Relational Database</b>  3.1 Entity implementation and relationship  3.2 Index file  3.3 Normalization
<b>4</b>	<b>Query language 'Structured Query Language' (SQL)</b>  4.1 Definition and manipulate data in SQL  4.2 Basic query in SQL  4.3 DDL, DML and DCL  4.4 Join
<b>5</b>	<b>Form and Report</b>  5.1 Design in form and report  5.2 Develop form  5.3 Develop report
<b>6</b>	<b>Application Development</b>  6.1 Application structure  6.2 User interface  6.3 Transaction, recovery, back up and security control
<b>References:</b>	<ol style="list-style-type: none"><li>1. Carlos Coronel and Steven Morris, 2018, Database Systems: Design, Implementation, &amp; Management. 13th Edition. Cengage</li><li>2. Elmasri Ramez., NavatheShamkant B. 2015, Fundamentals of Database Systems (7th Edition)</li></ol>