



**FAKULTI TEKNOLOGI DAN KEJURUTERAAN**

<b>PROGRAM</b>	<b>Diploma in IT System Support</b>
<b>COURSE NAME</b>	<b>System Analysis and Design</b>
<b>COURSE CODE</b>	<b>DTC 5123</b>
<b>CREDIT HOUR</b>	<b>3</b>
<b>SYNOPSIS</b>	The course covers an overview of the system (definition of systems analyst and characteristics); evaluation (observation; questionnaires; interviews; sampling and search records); the stages of system design (design input / output and files); test system; providing a method for users; implementation of the system; exchange process system; The maintenance system; control, and security and system documentation. The practical training will be carried out.
<b>COURSE STRUCTURE</b>	
<b>CHAPTER</b>	<b>TOPICS</b>
<b>1</b>	<b>Introduction</b>  1.1 Definition of system  1.2 The type of system and its features  1.3 System Analyst  1.4 SDLC Phase  1.5 Title project selection
<b>2</b>	<b>Topic 2: Planning</b>  2.1 Five Activities in Design Phase 2.1.1 Identification of the problem 2.1.2 Generate the project schedule 2.1.3 To ensure project feasibility 2.1.4 Determining project staff 2.1.5 Initiating projects



<b>3</b>	<b>System Analysis</b>  3.1 Data Collection 3.1.1 Guidance Interviews 3.1.2 Questionnaire  3.2 Identifying Purposes 3.2.1 Other Development Methodology – Prototyping 3.2.2 Joint Application Development (JAD)"
<b>4</b>	<b>Systems Design</b>  4.1 Introduction to Design Phase  4.2 Activities Involved in Design Phase  4.3 Design Approach  4.4 Basic System Development
<b>5</b>	<b>Design Phase (Input and Output)</b>  5.1 Introduction to Input and output  5.2 Types of Output  5.3 Design Screen Output  5.4 Design Printed Output  5.5 Types of Input  5.6 The importance of internal control for the design input output  5.7 Designing User Interfaces
<b>6</b>	<b>Design Phase Data Modelling (ERD)</b>  6.1 Entity Relationship Diagram  6.2 Entity  6.3 Relationship  6.4 Cardinality  6.5 Attribute  6.6 Key



<b>7</b>	<b>Design Phase Process Modelling (DFD)</b>  7.1 Data Flow Diagram  7.2 Data flows  7.3 Data storage  7.4 External entities  7.5 Figure Context
<b>8</b>	<b>Phase Of Development and Implementation</b>  8.1 Activities in the Development and Implementation Phase  8.2 Activities in the Development Phase  8.3 Activities in the Implementation Phase
<b>References:</b>	<ol style="list-style-type: none"><li>1. Stanley Bellbrook. 2017. System Design Interview: A Strategic Guide for A Successful Interview. Stanley.</li><li>2. Scott Tilley and Harry J. Rosenblatt. 2016. System Analysis and Design. 11th Edition. Shelly Cashman Series</li></ol>