SI	Module	Competency Unit	Elements	Schedule Date	Actual Date	Don
1	Module05	STCESADJ2EE 501	1. Avoiding the problems About prototyping and incremental life cycles • Managing Information Systems Developments • User Involvement in a Project • The role of CASE tools in systems development	05/11/2018	10/11/2018	
2	Module05	STCESADJ2EE 501	2. Object Orientation The fundamental concepts of object-orientation • The justifications for an object-oriented approach • Introduction to case study scenarios with and without a previous computerized system	06/11/2018	11/11/2018	
3	Module05	STCESADJ2EE 501	3. Modelling Concept What is meant by a model • The distinction between a model and a diagram • The UML concept of a model • Activity Diagram and It's purpose • About the Unified Software Development Process • How phases relate to workflows in an iterative life cycle • An approach to system development • Major activities in the development process	07/11/2018	12/11/2018	
4	Module05	STCESADJ2EE 502	4. Requirement Capture Requirement Capture The distinction between the current and required systems • When and how to apply the main fact finding techniques • The roles played by users • The need to document requirements • Use Case diagram and it's uses in document Requirements	08/11/2018	13/11/2018	
5	Module05	STCESADJ2EE 502	5. Requirements Analysis Why we analyse requirements • Technical terms used with class diagrams • a detailed model of user requirements • How to realize use cases with collaboration diagrams and class diagrams • Boundary , Control and Entity Classes	10/11/2018	14/11/2018	
6	Module05	STCESADJ2EE 502	6. Class Diagram Boundary , Control and Entity Classes • How the CRC technique helps identify classes and allocate responsibilities • How the UML class diagram expresses • Stereotypes	11/11/2018	17/11/2018	
7	Module05	STCESADJ2EE 502	7. Class Diagram Class and Instance Symbol • Association , Links, Multiplicity and operations • Requirement Analysis for the Case Study Agate Ltd	12/11/2018	18/11/2018	
8	Module05	STCESADJ2EE 503	8. Refining the Requirements Model What is meant by a component • How generalization and aggregation help to develop reusable components • How to identify generalization and composition • How to model generalization and composition • What is meant by the term pattern • What types of patterns can be used in software development	13/11/2018	19/11/2018	
9	Module05	STCESADJ2EE 503	9. Object Interaction How to develop object collaboration from use cases • How to model object collaboration using an interaction sequence diagram • How to model object collaboration using an interaction collaboration diagram • How to cross-check between interaction diagrams and a class diagram	14/11/2018		
10	Module05	STCESADJ2EE 503	10. Specifying Operations About the role of operation specifications • What is meant by "Contracts" • About algorithmic and non-algorithmic techniques, and how they differ • How to use: • Decision Tables	15/11/2018		
11	Module05	STCESADJ2EE 503	11. Specifying Controls How to identify requirements for control in an application • How to model object life cycles using statecharts • How to develop statechart diagrams from interaction diagrams • How to model concurrent behaviour in an object • How to ensure consistency with other UML models	17/11/2018		
12	Module05	STCESADJ2EE 504	12. Moving into design The difference between analysis and design • The difference between logical and physical design • The difference between system and detailed design • The characteristics of a good design • The need to make trade-offs in design	18/11/2018		
13	Module05	STCESADJ2EE 504	13. System Design The major concerns of system design • The main aspects of system architecture, in particular what is meant by subdividing a system into layers and partitions • How to apply the MVC architecture	19/11/2018		
14	Module05	STCESADJ2EE 504	14. Object Design Which architectures are most suitable for distributed systems • How design standards are specified • How to apply criteria for good design How to design associations • The impact of integrity constraints on design • How to design operations • The role of normalization in object design	20/11/2018		
15	Module05	STCESADJ2EE 504	15. Design Patterns & Implementation What types of patterns have been identified in software development • How to apply design patterns during software development • The benefits and difficulties that may arise when using patterns About tools used in software implementation • How to draw component diagrams • How to draw deployment diagrams • The tasks involved in testing a system	21/11/2018		