COURSE DETAILS

96407   Information Systems Development   (6 credits)

Course Learning Outcomes

1. To acquire knowledge of information systems development.
2. To be able to apply principles, theories and techniques of information systems development in business into practice effectively.
3. To acquire knowledge of planning, control, monitoring and auditing of information system developed.

Course Description

Business data computer processing; information system development cycle; analysis and design of object oriented system; feasibility study; methodologies and techniques for information system analysis, cost analysis and data needs assessment; methodologies and techniques for information system design; techniques for prototyping; guideline in program development and testing, documentation, information system installation and maintenance; monitoring, and evaluation information system.

96408   Database System Management   (6 credits)

Course Learning Outcomes

1. To acquire knowledge of data, information and database system.
2. To gain skills in database management effectively and appropriately.
3. To acquire competency on administration and database management effectively.

Course Description

Concepts of database system; database system security; database system characteristics and structures; characteristics and relationship of data; logical and physical structures of data; characteristics of data and information; data and information manipulation methods; data dictionary; case studies and simulations related to the application of database systems.

96414   Computer Programming   (6 credits)

Course Learning Outcomes

1. To acquire basic knowledge of computer programming.
2. To gain knowledge and skill in process, methods, techniques and updated technology for computer programming.
3. To have understanding and competency on computer programming for business.

Course Description

Concept of Object-Oriented; Logic in Problem solving and algorithms; Object-oriented problem analysis; Principles of Object-oriented programming; Steps in Analysis planning; Flowchart by UML; Design, development, testing and program installation; Tools for program development; Document Preparation for Program manual.

99316 Object Oriented Analysis and Design   **(6 credits)**

Course Learning Outcomes

1. To gain knowledge about the analysis and design of object-oriented systems.
2. To be able to apply principles, theories and techniques in the analysis and design of object-oriented systems into practice appropriately.
3. To be able to plan, control, monitor and evaluate the information system developed by object-oriented processes.

Course Description

Introduction to object-oriented system analysis and design. Object oriented concept, abstract analysis, object oriented system development process. Principles of using visual language for UML design. Object-Oriented Systems Analysis, Use Case, Class Diagrams, Object-Oriented Systems Design, Interaction Diagram, State Diagram and Activity Diagram. System testing concepts, System design with case tools. A Case study of system management and system tracking and its architecture.

99319 Web and Mobile Interaction Design   **(6 credits)**

Course Learning Outcomes

1. To understand the principles of interaction design in both web and mobile forms.
2. To apply the principles and theories of interaction design in the appropriate practice by taking into account the user needs.

Course Description

Designing web and mobile interactive systems based on the principles of human-computer interaction and the theoretical models of motion and perception. Learning about user experience and user interface design taking into account user behavior. Content creation and the development of graphical user interfaces, user interaction using interactive media and data interaction with the system. Multi-channel content delivery and location-based content delivery, including information exchange between members of social networking groups.

99420 Web Programming   **(6 credits)**

Course Learning Outcomes

1. To obtain knowledge of principles, techniques, languages and tools for developing web applications.
2. To have skills to develop web applications effectively and suitable for the nature of the business.

Course Description

Internet technology and internet media application and development of related software including the network infrastructure necessary for web design and construction. Web server management mechanism, scripting for server access. CGI programming and dynamic webpage, creation module on server, communication with the database and setting up a website performance tuning and safety. Website maintenance methods and website administration methods, and browser side programming, and server side.

99421 Object Oriented Programming   **(6 credits)**

Course Learning Outcomes

1. To be able apply knowledge and understanding about object-oriented programming in basic and advanced programming.
2. To be able learn the patterns and problems of current programs.
3. To be able develop various skills, thinking processes and techniques in programming.

Course Description

Knowledge of object-oriented programming, data structure programming, algorithms, working with data files, error handling, trading program, graphic programming, design and program in the user interface, network and database programming, case studies.

99422 Advanced Programming on Mobile   **(6 credits)**

Course Learning Outcomes

1. To apply knowledge and understanding of object-oriented programming in mobile application programming.
2. To analyze problems and patterns of mobile applications.
3. To develop various thinking process skills and techniques in mobile application programming.

Course Description

Introduction to mobile application development, infrastructure of mobile devices, mobile devices platforms, data storage of mobile devices, mobile location management, mobile application development tools, user interface design on mobile devices, mobile application development on mobile operating systems, evaluating mobile applications and browsers, and case studies of mobile application development on mobile operating systems.

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