

Database Programming

Course Title: Database Programming					
Course Code: CSD600 01	Student Workload: 8.50 Hours / Weeks	Credits: 3 Credits (4.50 ECTS)	Semester: 3 rd Semester	Frequency: Odd Semester	Duration: 16 Weeks/ Semester (<i>Lecture:</i> 14 weeks; <i>Midterm assessment</i> : 1 week; <i>Final assessment</i> : 1 week)
1	Types of Courses: IT study program specific skills	Contact Hours: <i>Lecturing:</i> 2.50 Hours/ Week; <i>Practical Work:</i> 0.00 Hours/ Week	Independent Study: <i>Self-study:</i> 3.00 Hours/ Week; <i>Strcutured Assignment:</i> 3.00 Hours/ Week	Class Size: 40 Students	
2	Prerequisites for Participation (If Applicable): Database System				
3	Learning Outcomes: <ol style="list-style-type: none"> M1: Able to explain concepts in database programming and examine appropriate database objects to support better information system performance(ILO-1) M2: Able to identify problems that become a need in application development for better database access and performance(ILO-3) M3: Able to apply basic concepts of database programming to database objects to be used in the development of information systems needed by the organization(ILO-1) M4: Demonstrate understanding and application of database programming on Stored Procedure, Function, and Trigger objects appropriately according to needs in information system development(ILO-3) 				
4	Subject aims/Content: At the end of the course, students are expected: <ol style="list-style-type: none"> L1: Students can explain the concept of database programming. L2: Students can determine the programming syntax on database objects Stored Procedure, Function, and Trigger. L3: Students can determine database objects that suit the needs of information system development. L4: Students can formulate requirements specifications from database objects Stored Procedure, Function, and Trigger L5: Students can solve database access and performance problems through the application of Stored Procedures, Functions, and Triggers L6: Students can apply Parameters and Variables to database objects. L7: Students can apply Conditionals and Loops to database objects. L8: Students can apply Cursor and Result Set to database objects. L9: Students can apply Dynamic SQL, Conditional Handling, and nested and recursive SQL on database objects. L10: Students can develop database programming results in Stored Procedures, Functions, and Triggers on the selected RDBMS server. L11: Students can complete the provision of Stored Procedure, Function, and Trigger database objects to manage access, improve performance, and response from database servers 				
5	Teaching Methods: Lecturing, Group Discussion, Case-Based Learning				
6	Assessment Methods: Essay, multiple-choice, project assessment, anecdotal record/logbook				

7	This Course is Used in The Following Study Programme/s as Well: -
8	Responsibility for Course:
9	Other Information: Bibliography: <ol style="list-style-type: none">1. Yip, Paul, "DB2 SQL Procedural Language for Linux, Unix and Windows", Prentice Hall Professional, 2003.2. Bedoya, Hernando, "Stored Procedures, Triggers, and User-Defined Functions on DB2 Universal Database for iSeries", IBM Redbooks, 2006