

<b>Database Fundamental</b>					
<b>Course Code</b> CIS62004	<b>Student Workload</b> 120 hours	<b>Credits</b> (according to ECTS) 6	<b>Semester</b> 2	<b>Frequency</b> Each odd-semester	<b>Duration</b> 16 meetings
<b>1</b>	<b>Types of courses</b> <i>Compulsory (programme study level)</i>	<b>contact hours</b> 84 hours	<b>independent study</b> 36 hours	<b>class size</b> 20 - 40 students	
<b>2</b>	<b>Prerequisites for participation</b>				
<b>3</b>	<b>Learning outcomes</b> IS-ILO-4 Graduates can develop professional careers in computer science based on quality aspects, data-driven decision making, be responsible, and make continuous improvements.				
<b>4</b>	<b>Subject aims</b> <ul style="list-style-type: none"> <li>• Students are able to identify database requirements for the development of information systems of an organization, model the database structure, and solve problems through the execution of query syntax to meet the organization's data needs.</li> <li>• Students are able to apply database architecture to relational database management system tools that are popularly used by the industrial community such as MySQL and IBM DB2</li> <li>• Students are able to demonstrate understanding and application of database models including the initiation, installation, configuration, and query execution stages in the form of transactions to data extraction on relational database management system tools</li> <li>• Students are able to demonstrate the ability to perform database modeling and its application to RDBMS tools to meet transaction needs (data manipulation and extraction)</li> </ul>				
<b>5</b>	<b>Teaching methods</b> Lectures, case study, class discussion, presentation				
<b>6</b>	<b>Assessment methods</b> Assignment, mid-term examination, end-term examination, project evaluation, practical-skill assessment				
<b>7</b>	<b>This module is used in the following degree programs as well</b>				
<b>8</b>	<b>Responsibility for module</b>				
<b>9</b>	<b>Other information</b> Neeraj Sharma, Database Fundamentals, 1 <sup>st</sup> Edition, 2010 Raul Chong, Getting Started With DB2 Express-C, 3 <sup>th</sup> Edition 2009				