

## Course Descriptions NonDegree 2017-2018

| Course Title  | Data Management   |                          |              |                                   |              |  |           |  |           |  |            |   |                    |   |           |  |           |  |           |  |           |  |                    |                     |                         |                        |                |
|---|---|--------------------------|--------------|-----------------------------------|--------------|--|-----------|--|-----------|--|------------|---|--------------------|---|-----------|--|-----------|--|-----------|--|-----------|--|--------------------|---------------------|-------------------------|------------------------|----------------|
| Course Code   | EBC4091   |                          |              |                                   |              |  |           |  |           |  |            |   |                    |   |           |  |           |  |           |  |           |  |                    |                     |                         |                        |                |
| ECTS Credits  | 6,5   |                          |              |                                   |              |  |           |  |           |  |            |   |                    |   |           |  |           |  |           |  |           |  |                    |                     |                         |                        |                |
| Assessment  | Whole/Half Grades   |                          |              |                                   |              |  |           |  |           |  |            |   |                    |   |           |  |           |  |           |  |           |  |                    |                     |                         |                        |                |
| Period  | <table><tr><th>Period</th><th>Start</th><th>End</th><th>Mon</th><th>Tue</th><th>Wed</th><th>Thu</th><th>Fri</th></tr><tr><td>2</td><td>30-10-2017</td><td>22-12-2017</td><td></td><td>X</td><td></td><td></td><td>X</td></tr></table>   | Period                   | Start        | End                               | Mon          | Tue  | Wed       | Thu  | Fri       | 2  | 30-10-2017 | 22-12-2017  |                    | X   |           |  | X         |  |           |  |           |  |                    |                     |                         |                        |                |
| Period  | Start   | End                      | Mon          | Tue                               | Wed          | Thu  | Fri       |  |           |  |            |   |                    |   |           |  |           |  |           |  |           |  |                    |                     |                         |                        |                |
| 2   | 30-10-2017  | 22-12-2017               |              | X                                 |              |  | X         |  |           |  |            |   |                    |   |           |  |           |  |           |  |           |  |                    |                     |                         |                        |                |
| Level   | Advanced  |                          |              |                                   |              |  |           |  |           |  |            |   |                    |   |           |  |           |  |           |  |           |  |                    |                     |                         |                        |                |
| Coordinator   | Laury Bollen For more information:l.bollen@maastrichtuniversity.nl  |                          |              |                                   |              |  |           |  |           |  |            |   |                    |   |           |  |           |  |           |  |           |  |                    |                     |                         |                        |                |
| Language of instruction   | English   |                          |              |                                   |              |  |           |  |           |  |            |   |                    |   |           |  |           |  |           |  |           |  |                    |                     |                         |                        |                |
| Goals   | <p>The aim of this course is to introduce you to the theoretical and practical issues related to database management. This includes designing databases using data modelling, querying databases using SQL and understanding the underlying theoretical issues. In addition we will discuss some data issues from a managerial perspective.</p> <p>Graduates have profound, evidence-based and up-to-date academic knowledge and understanding of theories, methods and tools in business/economics. This includes demonstrating the ability to develop new ideas.</p> <p>Graduates can apply their profound knowledge and understanding to identify and solve also unstructured or semi-structured real life business/economic problems in unfamiliar environments within broader multidisciplinary contexts. This includes demonstrating analytical skills and a problem-solving attitude.</p> <p>Graduates can independently conduct research.</p> <p>Graduates can effectively communicate both to specialist and nonspecialist audiences. This includes demonstrating strong presentation skills, project- management skills, interpersonal skills, a high level of argumentation and context sensitivity.</p>   |                          |              |                                   |              |  |           |  |           |  |            |   |                    |   |           |  |           |  |           |  |           |  |                    |                     |                         |                        |                |
| Description   | <p>The first half of the course will focus on the theoretical and practical issues of designing and using relational databases, which are the foundation of most data management systems in Organisations. The concepts of relational databases will be the main emphasis of the course. However, the course will also cover non-relational models, such as dimensional solutions. The content of this part of the course will closely follow the mandatory literature for the course.</p> <p>The second part of the course will be dealing with new trends and approaches to 'big data' problems in modern web-driven Organisations. Based on recent literature, we will explore concepts such as distributed databases, document databases and in memory databases. The content of this part of the course is less analytical and more conceptual.</p> <p>For more technical parts of the course, various lectures will be organized to properly introduce and explain the topics at hand. These lectures will be followed by group sessions in which students apply their knowledge. During most tutorial meetings, exercises will be discussed. These exercises have to be prepared by all individual students. Working in teams or groups on these assignments is full acceptable, but in no way mandatory. In addition, each student will be involved in hosting one or several tutorial meetings. Finally, the course includes one group assignment which has to be prepared by subgroups of 3-4 students.</p> |                          |              |                                   |              |  |           |  |           |  |            |   |                    |   |           |  |           |  |           |  |           |  |                    |                     |                         |                        |                |
| Literature  | <p>Textbook</p> <p>Modern Database Management, 11th Edition. by Jeffrey A. Hoffer, Ramesh, Topi. Published by Pearson, ISBN13 9780273779285</p>   |                          |              |                                   |              |  |           |  |           |  |            |   |                    |   |           |  |           |  |           |  |           |  |                    |                     |                         |                        |                |
| Prerequisites   | <p>Course and workload are very demanding for all IB Master Courses. Exchange students need to have obtained a bachelor degree with a major in Business, Information Systems or a related field.</p> <p>An advanced level of English</p>  |                          |              |                                   |              |  |           |  |           |  |            |   |                    |   |           |  |           |  |           |  |           |  |                    |                     |                         |                        |                |
| Teaching methods  | PBL / Presentation / Lecture / Assignment / Groupwork   |                          |              |                                   |              |  |           |  |           |  |            |   |                    |   |           |  |           |  |           |  |           |  |                    |                     |                         |                        |                |
| Assessment methods  | Attendance / Participation / Written Exam   |                          |              |                                   |              |  |           |  |           |  |            |   |                    |   |           |  |           |  |           |  |           |  |                    |                     |                         |                        |                |
| Evaluation in previous academic year  | For the complete evaluation of this course please click <a href="http://iwio-sbe.maastrichtuniversity.nl/rapporten.asp?referrer=codeUM">http://iwio-sbe.maastrichtuniversity.nl/rapporten.asp?referrer=codeUM</a>   |                          |              |                                   |              |  |           |  |           |  |            |   |                    |   |           |  |           |  |           |  |           |  |                    |                     |                         |                        |                |
| This course belongs to the following programme / specialisation                               | <table><tr><td>Master Business Research</td><td>IB Electives</td></tr><tr><td>Master Business Research Track OR</td><td>IB Electives</td></tr><tr><td>Master International Business Specialisation Accountancy</td><td>Electives</td></tr><tr><td>Master International Business Specialisation Controlling</td><td>Electives</td></tr><tr><td>Master International Business Specialisation Entrepreneurship and SME Management</td><td>Electives</td></tr><tr><td>Master International Business Specialisation Information Management and Business Intelligence</td><td>Compulsory Courses</td></tr><tr><td>Master International Business Specialisation Organisation: Management, Change and Consultancy</td><td>Electives</td></tr><tr><td>Master International Business Specialisation Strategic Corporate Finance</td><td>Electives</td></tr><tr><td>Master International Business Specialisation Strategy and Innovation</td><td>Electives</td></tr><tr><td>Master International Business Specialisation Sustainable Finance</td><td>Electives</td></tr><tr><td>Master Information and Network Economics</td><td>Business Electives</td></tr><tr><td>SBE Exchange Master</td><td>Master Exchange Courses</td></tr><tr><td>SBE Non Degree Courses</td><td>Master Courses</td></tr></table>  | Master Business Research | IB Electives | Master Business Research Track OR | IB Electives | Master International Business Specialisation Accountancy | Electives | Master International Business Specialisation Controlling | Electives | Master International Business Specialisation Entrepreneurship and SME Management | Electives  | Master International Business Specialisation Information Management and Business Intelligence | Compulsory Courses | Master International Business Specialisation Organisation: Management, Change and Consultancy | Electives | Master International Business Specialisation Strategic Corporate Finance | Electives | Master International Business Specialisation Strategy and Innovation | Electives | Master International Business Specialisation Sustainable Finance | Electives | Master Information and Network Economics | Business Electives | SBE Exchange Master | Master Exchange Courses | SBE Non Degree Courses | Master Courses |
| Master Business Research  | IB Electives  |                          |              |                                   |              |  |           |  |           |  |            |   |                    |   |           |  |           |  |           |  |           |  |                    |                     |                         |                        |                |
| Master Business Research Track OR   | IB Electives  |                          |              |                                   |              |  |           |  |           |  |            |   |                    |   |           |  |           |  |           |  |           |  |                    |                     |                         |                        |                |
| Master International Business Specialisation Accountancy                                      | Electives   |                          |              |                                   |              |  |           |  |           |  |            |   |                    |   |           |  |           |  |           |  |           |  |                    |                     |                         |                        |                |
| Master International Business Specialisation Controlling                                      | Electives   |                          |              |                                   |              |  |           |  |           |  |            |   |                    |   |           |  |           |  |           |  |           |  |                    |                     |                         |                        |                |
| Master International Business Specialisation Entrepreneurship and SME Management              | Electives   |                          |              |                                   |              |  |           |  |           |  |            |   |                    |   |           |  |           |  |           |  |           |  |                    |                     |                         |                        |                |
| Master International Business Specialisation Information Management and Business Intelligence | Compulsory Courses  |                          |              |                                   |              |  |           |  |           |  |            |   |                    |   |           |  |           |  |           |  |           |  |                    |                     |                         |                        |                |
| Master International Business Specialisation Organisation: Management, Change and Consultancy | Electives   |                          |              |                                   |              |  |           |  |           |  |            |   |                    |   |           |  |           |  |           |  |           |  |                    |                     |                         |                        |                |
| Master International Business Specialisation Strategic Corporate Finance                      | Electives   |                          |              |                                   |              |  |           |  |           |  |            |   |                    |   |           |  |           |  |           |  |           |  |                    |                     |                         |                        |                |
| Master International Business Specialisation Strategy and Innovation                          | Electives   |                          |              |                                   |              |  |           |  |           |  |            |   |                    |   |           |  |           |  |           |  |           |  |                    |                     |                         |                        |                |
| Master International Business Specialisation Sustainable Finance                              | Electives   |                          |              |                                   |              |  |           |  |           |  |            |   |                    |   |           |  |           |  |           |  |           |  |                    |                     |                         |                        |                |
| Master Information and Network Economics  | Business Electives  |                          |              |                                   |              |  |           |  |           |  |            |   |                    |   |           |  |           |  |           |  |           |  |                    |                     |                         |                        |                |
| SBE Exchange Master   | Master Exchange Courses   |                          |              |                                   |              |  |           |  |           |  |            |   |                    |   |           |  |           |  |           |  |           |  |                    |                     |                         |                        |                |
| SBE Non Degree Courses  | Master Courses  |                          |              |                                   |              |  |           |  |           |  |            |   |                    |   |           |  |           |  |           |  |           |  |                    |                     |                         |                        |                |