

## Course Descriptions Exchange 2021-2022

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|--------------|---|
| Course Title | Decision Support Systems and Business Modelling |
| Course Code  | EBC2088   |
| ECTS Credits | 6,5   |
| Assessment   | Whole/Half Grades                               |

| Period | Period | Start     | End      | Mon | Tue | Wed | Thu | Fri |
|--------|--------|-----------|----------|-----|-----|-----|-----|-----|
| 5      |        | 11-4-2022 | 3-6-2022 |     | X   |     |     | X   |

|   |  |   |   |  |                           |   |   |  |                                    |  |                                 |  |                                  |  |                                   |  |                             |  |                             |  |                                  |  |                           |                                 |                                    |                                 |                                 |                                 |                                  |                                 |                                   |                                 |                             |                                 |                             |                                 |                                  |                       |                           |                     |                           |                        |                  |
|---|--|---|---|--|---------------------------|---|---|--|------------------------------------|--|---------------------------------|--|----------------------------------|--|-----------------------------------|--|-----------------------------|--|-----------------------------|--|----------------------------------|--|---------------------------|---------------------------------|------------------------------------|---------------------------------|---------------------------------|---------------------------------|----------------------------------|---------------------------------|-----------------------------------|---------------------------------|-----------------------------|---------------------------------|-----------------------------|---------------------------------|----------------------------------|-----------------------|---------------------------|---------------------|---------------------------|------------------------|------------------|
| Level   | Intermediate   |   |   |  |                           |   |   |  |                                    |  |                                 |  |                                  |  |                                   |  |                             |  |                             |  |                                  |  |                           |                                 |                                    |                                 |                                 |                                 |                                  |                                 |                                   |                                 |                             |                                 |                             |                                 |                                  |                       |                           |                     |                           |                        |                  |
| Coordinator   | Andre Berger For more information:a.berger@maastrichtuniversity.nl   |   |   |  |                           |   |   |  |                                    |  |                                 |  |                                  |  |                                   |  |                             |  |                             |  |                                  |  |                           |                                 |                                    |                                 |                                 |                                 |                                  |                                 |                                   |                                 |                             |                                 |                             |                                 |                                  |                       |                           |                     |                           |                        |                  |
| Language of instruction   | English  |   |   |  |                           |   |   |  |                                    |  |                                 |  |                                  |  |                                   |  |                             |  |                             |  |                                  |  |                           |                                 |                                    |                                 |                                 |                                 |                                  |                                 |                                   |                                 |                             |                                 |                             |                                 |                                  |                       |                           |                     |                           |                        |                  |
| Goals   | Understanding the role and operation of decision support systems. Independent development of a decision support system.<br>Master programming in Excel and the design of user interfaces in VBA for Excel.   |   |   |  |                           |   |   |  |                                    |  |                                 |  |                                  |  |                                   |  |                             |  |                             |  |                                  |  |                           |                                 |                                    |                                 |                                 |                                 |                                  |                                 |                                   |                                 |                             |                                 |                             |                                 |                                  |                       |                           |                     |                           |                        |                  |
| Description   | Decision support systems are computer-based systems for management decision makers who deal with semi-structured decision problems.<br>A DSS is closely related to a MIS, a management information system. Where a MIS helps decision makers utilize data and models to solve structured problems, a DSS aims to give the same support, in case the problem is less structured (less routine). In this course, we will focus on the separate techniques that form the building blocks of a DSS: databases, spreadsheet models, recommendation model, and the user interface. Developing a business model as a decision aid for a self-designed choice problem is the major assignment of the course.<br>We will use Excel and VBA as a tool to program our own DSS. Writing a management report describing the DSS and its possible implementation is the second practical assignment. Together, those two assignments compose the project done by small project groups of 2 students.   |   |   |  |                           |   |   |  |                                    |  |                                 |  |                                  |  |                                   |  |                             |  |                             |  |                                  |  |                           |                                 |                                    |                                 |                                 |                                 |                                  |                                 |                                   |                                 |                             |                                 |                             |                                 |                                  |                       |                           |                     |                           |                        |                  |
| Literature  | The course is built around a reader that will be distributed before the course. Secondary literature references about decision support systems in general will be provided in the reader.  |   |   |  |                           |   |   |  |                                    |  |                                 |  |                                  |  |                                   |  |                             |  |                             |  |                                  |  |                           |                                 |                                    |                                 |                                 |                                 |                                  |                                 |                                   |                                 |                             |                                 |                             |                                 |                                  |                       |                           |                     |                           |                        |                  |
| Prerequisites   | Basic mastery of Excel, or an alternative spreadsheet application: cell referencing, building formulas, use of logical functions.<br>This does not include mastery of VBA for Excel: training in VBA programming is part of the course.<br><br>An advanced level of English.   |   |   |  |                           |   |   |  |                                    |  |                                 |  |                                  |  |                                   |  |                             |  |                             |  |                                  |  |                           |                                 |                                    |                                 |                                 |                                 |                                  |                                 |                                   |                                 |                             |                                 |                             |                                 |                                  |                       |                           |                     |                           |                        |                  |
| Teaching methods  | PBL / Presentation / Lecture / Assignment / Groupwork  |   |   |  |                           |   |   |  |                                    |  |                                 |  |                                  |  |                                   |  |                             |  |                             |  |                                  |  |                           |                                 |                                    |                                 |                                 |                                 |                                  |                                 |                                   |                                 |                             |                                 |                             |                                 |                                  |                       |                           |                     |                           |                        |                  |
| Assessment methods  | Final Paper / Oral 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>Bachelor Economics and Business Economics - Economics</td><td>Year 3 Quantitative Economics Elective(s)</td></tr> <tr> <td>Bachelor Economics and Business Economics - Emerging Markets</td><td>Year 3 Elective Course(s)</td></tr> <tr> <td>Bachelor Economics and Business Economics - Economics and Management of Information</td><td>Year 2+3 Quantitative Economics Elective(s)</td></tr> <tr> <td>Bachelor Economics and Business Economics - International Business Economics</td><td>Year 3 QE Elec(s) - Maj Accounting</td></tr> <tr> <td>Bachelor Economics and Business Economics - International Business Economics</td><td>Year 3 QE Elec(s) - Maj Finance</td></tr> <tr> <td>Bachelor Economics and Business Economics - International Business Economics</td><td>Year 3 QE Elec(s) - Maj Inf Mgmt</td></tr> <tr> <td>Bachelor Economics and Business Economics - International Business Economics</td><td>Year 3 QE Elec(s) - Maj Marketing</td></tr> <tr> <td>Bachelor Economics and Business Economics - International Business Economics</td><td>Year 3 QE Elec(s) - Maj Org</td></tr> <tr> <td>Bachelor Economics and Business Economics - International Business Economics</td><td>Year 3 QE Elec(s) - Maj SCM</td></tr> <tr> <td>Bachelor Economics and Business Economics - International Business Economics</td><td>Year 3 QE Elec(s) - Maj Strategy</td></tr> <tr> <td>Bachelor International Business - Emerging Markets</td><td>Year 3 Elective Course(s)</td></tr> <tr> <td>Bachelor International Business</td><td>Year 3 QE Elec(s) - Maj Accounting</td></tr> <tr> <td>Bachelor International Business</td><td>Year 3 QE Elec(s) - Maj Finance</td></tr> <tr> <td>Bachelor International Business</td><td>Year 3 QE Elec(s) - Maj Inf Mgmt</td></tr> <tr> <td>Bachelor International Business</td><td>Year 3 QE Elec(s) - Maj Marketing</td></tr> <tr> <td>Bachelor International Business</td><td>Year 3 QE Elec(s) - Maj Org</td></tr> <tr> <td>Bachelor International Business</td><td>Year 3 QE Elec(s) - Maj SCM</td></tr> <tr> <td>Bachelor International Business</td><td>Year 3 QE Elec(s) - Maj Strategy</td></tr> <tr> <td>SBE Exchange Bachelor</td><td>Bachelor Exchange Courses</td></tr> <tr> <td>SBE Exchange Master</td><td>Bachelor Exchange Courses</td></tr> <tr> <td>SBE Non Degree Courses</td><td>Bachelor Courses</td></tr> </table> | Bachelor Economics and Business Economics - Economics | Year 3 Quantitative Economics Elective(s) | Bachelor Economics and Business Economics - Emerging Markets | Year 3 Elective Course(s) | Bachelor Economics and Business Economics - Economics and Management of Information | Year 2+3 Quantitative Economics Elective(s) | Bachelor Economics and Business Economics - International Business Economics | Year 3 QE Elec(s) - Maj Accounting | Bachelor Economics and Business Economics - International Business Economics | Year 3 QE Elec(s) - Maj Finance | Bachelor Economics and Business Economics - International Business Economics | Year 3 QE Elec(s) - Maj Inf Mgmt | Bachelor Economics and Business Economics - International Business Economics | Year 3 QE Elec(s) - Maj Marketing | Bachelor Economics and Business Economics - International Business Economics | Year 3 QE Elec(s) - Maj Org | Bachelor Economics and Business Economics - International Business Economics | Year 3 QE Elec(s) - Maj SCM | Bachelor Economics and Business Economics - International Business Economics | Year 3 QE Elec(s) - Maj Strategy | Bachelor International Business - Emerging Markets | Year 3 Elective Course(s) | Bachelor International Business | Year 3 QE Elec(s) - Maj Accounting | Bachelor International Business | Year 3 QE Elec(s) - Maj Finance | Bachelor International Business | Year 3 QE Elec(s) - Maj Inf Mgmt | Bachelor International Business | Year 3 QE Elec(s) - Maj Marketing | Bachelor International Business | Year 3 QE Elec(s) - Maj Org | Bachelor International Business | Year 3 QE Elec(s) - Maj SCM | Bachelor International Business | Year 3 QE Elec(s) - Maj Strategy | SBE Exchange Bachelor | Bachelor Exchange Courses | SBE Exchange Master | Bachelor Exchange Courses | SBE Non Degree Courses | Bachelor Courses |
| Bachelor Economics and Business Economics - Economics                               | Year 3 Quantitative Economics Elective(s)  |   |   |  |                           |   |   |  |                                    |  |                                 |  |                                  |  |                                   |  |                             |  |                             |  |                                  |  |                           |                                 |                                    |                                 |                                 |                                 |                                  |                                 |                                   |                                 |                             |                                 |                             |                                 |                                  |                       |                           |                     |                           |                        |                  |
| Bachelor Economics and Business Economics - Emerging Markets                        | Year 3 Elective Course(s)  |   |   |  |                           |   |   |  |                                    |  |                                 |  |                                  |  |                                   |  |                             |  |                             |  |                                  |  |                           |                                 |                                    |                                 |                                 |                                 |                                  |                                 |                                   |                                 |                             |                                 |                             |                                 |                                  |                       |                           |                     |                           |                        |                  |
| Bachelor Economics and Business Economics - Economics and Management of Information | Year 2+3 Quantitative Economics Elective(s)  |   |   |  |                           |   |   |  |                                    |  |                                 |  |                                  |  |                                   |  |                             |  |                             |  |                                  |  |                           |                                 |                                    |                                 |                                 |                                 |                                  |                                 |                                   |                                 |                             |                                 |                             |                                 |                                  |                       |                           |                     |                           |                        |                  |
| Bachelor Economics and Business Economics - International Business Economics        | Year 3 QE Elec(s) - Maj Accounting   |   |   |  |                           |   |   |  |                                    |  |                                 |  |                                  |  |                                   |  |                             |  |                             |  |                                  |  |                           |                                 |                                    |                                 |                                 |                                 |                                  |                                 |                                   |                                 |                             |                                 |                             |                                 |                                  |                       |                           |                     |                           |                        |                  |
| Bachelor Economics and Business Economics - International Business Economics        | Year 3 QE Elec(s) - Maj Finance  |   |   |  |                           |   |   |  |                                    |  |                                 |  |                                  |  |                                   |  |                             |  |                             |  |                                  |  |                           |                                 |                                    |                                 |                                 |                                 |                                  |                                 |                                   |                                 |                             |                                 |                             |                                 |                                  |                       |                           |                     |                           |                        |                  |
| Bachelor Economics and Business Economics - International Business Economics        | Year 3 QE Elec(s) - Maj Inf Mgmt   |   |   |  |                           |   |   |  |                                    |  |                                 |  |                                  |  |                                   |  |                             |  |                             |  |                                  |  |                           |                                 |                                    |                                 |                                 |                                 |                                  |                                 |                                   |                                 |                             |                                 |                             |                                 |                                  |                       |                           |                     |                           |                        |                  |
| Bachelor Economics and Business Economics - International Business Economics        | Year 3 QE Elec(s) - Maj Marketing  |   |   |  |                           |   |   |  |                                    |  |                                 |  |                                  |  |                                   |  |                             |  |                             |  |                                  |  |                           |                                 |                                    |                                 |                                 |                                 |                                  |                                 |                                   |                                 |                             |                                 |                             |                                 |                                  |                       |                           |                     |                           |                        |                  |
| Bachelor Economics and Business Economics - International Business Economics        | Year 3 QE Elec(s) - Maj Org  |   |   |  |                           |   |   |  |                                    |  |                                 |  |                                  |  |                                   |  |                             |  |                             |  |                                  |  |                           |                                 |                                    |                                 |                                 |                                 |                                  |                                 |                                   |                                 |                             |                                 |                             |                                 |                                  |                       |                           |                     |                           |                        |                  |
| Bachelor Economics and Business Economics - International Business Economics        | Year 3 QE Elec(s) - Maj SCM  |   |   |  |                           |   |   |  |                                    |  |                                 |  |                                  |  |                                   |  |                             |  |                             |  |                                  |  |                           |                                 |                                    |                                 |                                 |                                 |                                  |                                 |                                   |                                 |                             |                                 |                             |                                 |                                  |                       |                           |                     |                           |                        |                  |
| Bachelor Economics and Business Economics - International Business Economics        | Year 3 QE Elec(s) - Maj Strategy   |   |   |  |                           |   |   |  |                                    |  |                                 |  |                                  |  |                                   |  |                             |  |                             |  |                                  |  |                           |                                 |                                    |                                 |                                 |                                 |                                  |                                 |                                   |                                 |                             |                                 |                             |                                 |                                  |                       |                           |                     |                           |                        |                  |
| Bachelor International Business - Emerging Markets                                  | Year 3 Elective Course(s)  |   |   |  |                           |   |   |  |                                    |  |                                 |  |                                  |  |                                   |  |                             |  |                             |  |                                  |  |                           |                                 |                                    |                                 |                                 |                                 |                                  |                                 |                                   |                                 |                             |                                 |                             |                                 |                                  |                       |                           |                     |                           |                        |                  |
| Bachelor International Business   | Year 3 QE Elec(s) - Maj Accounting   |   |   |  |                           |   |   |  |                                    |  |                                 |  |                                  |  |                                   |  |                             |  |                             |  |                                  |  |                           |                                 |                                    |                                 |                                 |                                 |                                  |                                 |                                   |                                 |                             |                                 |                             |                                 |                                  |                       |                           |                     |                           |                        |                  |
| Bachelor International Business   | Year 3 QE Elec(s) - Maj Finance  |   |   |  |                           |   |   |  |                                    |  |                                 |  |                                  |  |                                   |  |                             |  |                             |  |                                  |  |                           |                                 |                                    |                                 |                                 |                                 |                                  |                                 |                                   |                                 |                             |                                 |                             |                                 |                                  |                       |                           |                     |                           |                        |                  |
| Bachelor International Business   | Year 3 QE Elec(s) - Maj Inf Mgmt   |   |   |  |                           |   |   |  |                                    |  |                                 |  |                                  |  |                                   |  |                             |  |                             |  |                                  |  |                           |                                 |                                    |                                 |                                 |                                 |                                  |                                 |                                   |                                 |                             |                                 |                             |                                 |                                  |                       |                           |                     |                           |                        |                  |
| Bachelor International Business   | Year 3 QE Elec(s) - Maj Marketing  |   |   |  |                           |   |   |  |                                    |  |                                 |  |                                  |  |                                   |  |                             |  |                             |  |                                  |  |                           |                                 |                                    |                                 |                                 |                                 |                                  |                                 |                                   |                                 |                             |                                 |                             |                                 |                                  |                       |                           |                     |                           |                        |                  |
| Bachelor International Business   | Year 3 QE Elec(s) - Maj Org  |   |   |  |                           |   |   |  |                                    |  |                                 |  |                                  |  |                                   |  |                             |  |                             |  |                                  |  |                           |                                 |                                    |                                 |                                 |                                 |                                  |                                 |                                   |                                 |                             |                                 |                             |                                 |                                  |                       |                           |                     |                           |                        |                  |
| Bachelor International Business   | Year 3 QE Elec(s) - Maj SCM  |   |   |  |                           |   |   |  |                                    |  |                                 |  |                                  |  |                                   |  |                             |  |                             |  |                                  |  |                           |                                 |                                    |                                 |                                 |                                 |                                  |                                 |                                   |                                 |                             |                                 |                             |                                 |                                  |                       |                           |                     |                           |                        |                  |
| Bachelor International Business   | Year 3 QE Elec(s) - Maj Strategy   |   |   |  |                           |   |   |  |                                    |  |                                 |  |                                  |  |                                   |  |                             |  |                             |  |                                  |  |                           |                                 |                                    |                                 |                                 |                                 |                                  |                                 |                                   |                                 |                             |                                 |                             |                                 |                                  |                       |                           |                     |                           |                        |                  |
| SBE Exchange Bachelor   | Bachelor Exchange Courses  |   |   |  |                           |   |   |  |                                    |  |                                 |  |                                  |  |                                   |  |                             |  |                             |  |                                  |  |                           |                                 |                                    |                                 |                                 |                                 |                                  |                                 |                                   |                                 |                             |                                 |                             |                                 |                                  |                       |                           |                     |                           |                        |                  |
| SBE Exchange Master   | Bachelor Exchange Courses  |   |   |  |                           |   |   |  |                                    |  |                                 |  |                                  |  |                                   |  |                             |  |                             |  |                                  |  |                           |                                 |                                    |                                 |                                 |                                 |                                  |                                 |                                   |                                 |                             |                                 |                             |                                 |                                  |                       |                           |                     |                           |                        |                  |
| SBE Non Degree Courses  | Bachelor Courses   |   |   |  |                           |   |   |  |                                    |  |                                 |  |                                  |  |                                   |  |                             |  |                             |  |                                  |  |                           |                                 |                                    |                                 |                                 |                                 |                                  |                                 |                                   |                                 |                             |                                 |                             |                                 |                                  |                       |                           |                     |                           |                        |                  |