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| 6.00 credits | 30.0 h | Q1 |
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|-----------------------------|---|
| Teacher(s)                  | De Winne Rudy ;   |
| Language :                  | French  |
| Place of the course         | Mons  |
| Prerequisites               | MQAHD1325 ' Management mathematics<br>MQAHD1327 ' Statistical methods in management   |
| Main themes                 | <p>Linear regression</p> <ul style="list-style-type: none"> <li>• Revision of the method of least squares applied to the estimate of the regression line;</li> <li>• Generalisation of the regression analysis in the multivariate case;</li> <li>• Properties of parameter estimators;</li> <li>• Formulation and logical test of hypothesis relating to parameters;</li> </ul> <p>Linearisable multivariate models.</p>   |
| Learning outcomes           | <p><b>At the end of this learning unit, the student is able to :</b></p> <p>On completion of this course, students will be able:<br/>in terms of knowledge:</p> <ul style="list-style-type: none"> <li>• to apply the principles and method of the multiple regression estimation models, both linear or linearised, to one or more explanatory variables.</li> </ul> <p><sup>1</sup> in terms of skills:</p> <ul style="list-style-type: none"> <li>• to ask pertinent questions, from a managerial perspective, regarding a proposed case and the characteristics of available data;</li> <li>• to select the appropriate statistical approach and apply it;</li> </ul> <p>to provide methodologically correct answers to the problem posed after disciplined interpretation of results both statistically and at a managerial level.</p> |
| Teaching methods            | <ul style="list-style-type: none"> <li>• Lectures, partially based on the MOOC in econometrics developed at UCLouvain</li> <li>• Exercises in the computer room (Software used: R)</li> </ul>   |
| Bibliography                | <ul style="list-style-type: none"> <li>• JOHNSTON J., DINARDO J. (1999), Méthodes Econométriques, Economica, traduction de JOHNSTON J., DINARDO J. (1997), Econometric Methods, 2th ed. Mc Graw'Hill.</li> </ul>  |
| Faculty or entity in charge | CLSM  |

**Programmes containing this learning unit (UE)**

| Program title                                  | Acronym | Credits | Prerequisite | Learning outcomes   |
|--|---------|---------|--------------|---|
| Master [120] in Management<br>(shift schedule) | GEHM2M  | 6       |              |  |