

| Course unit title:  | Quantitative Methods for Management   |
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| Course unit code:   | MAT 203   |
| Type of course unit   | Compulsory  |
| (compulsory, optional):   |   |
| Level of course unit:   | Bachelor (1st Cycle)  |
| Year of study:  | 2   |
| Semester when the course  | 2   |
| unit is delivered:  |   |
| Number of ECTS credits  | 6   |
| allocated:  |   |
| Name of lecturer(s):  | Dr Neophytos Mikellides   |
| Learning outcomes of the course unit:   | <ul> <li>Formulate a linear programming problem and solve it to find the optimised solution.</li> <li>Analyse a time series, explain its behaviour in terms of other variables and develop a structural model of behaviour.</li> </ul>  |
|   | <ul> <li>Identify trend, fluctuations about the trend of greater or less regularity, seasonal components, residual, irregular or random effect in a time series.</li> <li>Use the moving average method and differencing for trend removal, recognise seasonality and use general tools to de-seasonalise it.</li> <li>Use basic methods for forecasting.</li> <li>Use decision making methods in optimising real case scenarios.</li> </ul>  |
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| Mode of delivery:   | Face-to-face  |
| Mode of delivery:<br>Prerequisites and co-  | Face-to-face Pre-requisite: MAT 201   |
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| Mode of delivery:<br>Prerequisites and co-<br>requisites:<br>Recommended optional   | Face-to-face Pre-requisite: MAT 201 None  |
| Mode of delivery:<br>Prerequisites and co-<br>requisites:<br>Recommended optional<br>programme components:  | Face-to-face         Pre-requisite: MAT 201         None  |
| Mode of delivery:<br>Prerequisites and co-<br>requisites:<br>Recommended optional<br>programme components:<br>Course contents:  | Face-to-face         Pre-requisite: MAT 201         None         This course provides a further understanding of the statistical tools necessary for analysing and presenting data, elements of decision making and constructing mathematical models, which can be applied in a business environment. The course provides students with a firm basis of quantitative and analytical abilities which will be utilised in more complex decision making aspects in concurrent and subsequent modules.  |
| Mode of delivery:<br>Prerequisites and co-<br>requisites:<br>Recommended optional<br>programme components:<br>Course contents:<br>Recommended or required   | Face-to-face         Pre-requisite: MAT 201         None         This course provides a further understanding of the statistical tools necessary for analysing and presenting data, elements of decision making and constructing mathematical models, which can be applied in a business environment. The course provides students with a firm basis of quantitative and analytical abilities which will be utilised in more complex decision making aspects in concurrent and subsequent modules.         Required Reading:  |
| Mode of delivery:<br>Prerequisites and co-<br>requisites:<br>Recommended optional<br>programme components:<br>Course contents:<br>Recommended or required<br>reading:   | Face-to-face         Pre-requisite: MAT 201         None         This course provides a further understanding of the statistical tools necessary for analysing and presenting data, elements of decision making and constructing mathematical models, which can be applied in a business environment. The course provides students with a firm basis of quantitative and analytical abilities which will be utilised in more complex decision making aspects in concurrent and subsequent modules.         Required Reading:         Curwin, J., and Slater, R. (2007). Quantitative Methods for Business Decisions.         6 <sup>th</sup> edition. Cengage Learning.   |
| Mode of delivery:         Prerequisites and corequisites:         Recommended optional programme components:         Course contents:         Recommended or required reading:         Planned learning activities  | Face-to-face         Pre-requisite: MAT 201         None         This course provides a further understanding of the statistical tools necessary for analysing and presenting data, elements of decision making and constructing mathematical models, which can be applied in a business environment. The course provides students with a firm basis of quantitative and analytical abilities which will be utilised in more complex decision making aspects in concurrent and subsequent modules.         Required Reading:         Curwin, J., and Slater, R. (2007). Quantitative Methods for Business Decisions. 6 <sup>th</sup> edition. Cengage Learning.         Lectures, homework.   |
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| Mode of delivery:         Prerequisites and correquisites:         Recommended optional programme components:         Course contents:         Recommended or required reading:         Planned learning activities and teaching methods:         Assessment methods and criteria:         Language of instruction: | Face-to-face         Pre-requisite: MAT 201         None         This course provides a further understanding of the statistical tools necessary for analysing and presenting data, elements of decision making and constructing mathematical models, which can be applied in a business environment. The course provides students with a firm basis of quantitative and analytical abilities which will be utilised in more complex decision making aspects in concurrent and subsequent modules.         Required Reading:         Curwin, J., and Slater, R. (2007). Quantitative Methods for Business Decisions. 6 <sup>th</sup> edition. Cengage Learning.         Lectures, homework.         Class Participation:       5%         Assignment:       10%         Mid-Term Test:       15%         Final Examination:       70% |