




5.00 credits	30.0 h	Q1
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Teacher(s)	Iania Leonardo ;
Language :	English
Place of the course	Louvain-la-Neuve
Prerequisites	<ul style="list-style-type: none"> <li>• Econometrics, Finance and Fundamental mathematical and statistical concepts. Concepts covered in courses such as the ones listed below should be known.</li> <li>• Econométrie [ LECGE1316 ]</li> <li>• Mathématiques en économie et gestion I [ LECGE1112 ]</li> <li>• Mathématiques en économie et gestion II [ LECGE1230 ]</li> <li>• Statistique en économie et gestion I [ LECGE1114 ]</li> <li>• Finance [ LECGE1332 ]</li> </ul> <p>In addition, this course is reserved for students with a bachelor's degree in business engineering or students with equivalent quantitative method skills.</p>
Main themes	<p>The class describes some of the main strategies used by active fund managers and proprietary traders and provides a methodology to analyze them. In class and through exercises, the strategies are illustrated using real data and students learn to use “backtesting” to evaluate a strategy. The class also covers institutional issues related to how trading works, liquidity, margin requirements, risk management, and performance measurement.</p> <p>The class discusses the main strategies active fund managers use in equity markets (discretionary equity investing, short selling, quantitative equity strategies), in tactical asset allocation of equity indices, currencies, fixed-income, and commodities (global macro, managed futures), and in relative-value arbitrage strategies (fixed income arbitrage, convertible bond arbitrage, event driven investments).</p> <p>To analyze these active investment strategies, the class applies tools for performance measurement, backtesting, regression analysis, managing transaction costs, market liquidity risk, funding a strategy, margin requirements, risk management, drawdown control, and portfolio construction. Also, the class discusses the economics underlying these strategies, why certain strategies might work and why others might not.</p>
Learning outcomes	<p><b>At the end of this learning unit, the student is able to :</b></p> <p><b>During their programme, students of the LSM Master's in management or Master's in Business engineering will have developed the following capabilities'</b></p> <p><b>KNOWLEDGE AND REASONING</b></p> <p>2.2 Master highly specific knowledge in one or two areas of management: advanced and current research-based knowledge and methods.</p> <p><b>A SCIENTIFIC AND SYSTEMATIC APPROACH</b></p> <p>3.3 Consider problems using a systemic and holistic approach: recognize the different aspects of the situation and their interactions in a dynamic process.</p> <p><b>WORK EFFECTIVELY IN AN INTERNATIONAL AND MULTICULTURAL ENVIRONMENT</b></p> <p>5.2 Understand the international socio-economic dimensions of an organization and identify the associated strategic issues and operational decisions.</p> <p><b>TEAMWORK AND LEADERSHIP</b></p> <p>6.1 Join in and collaborate with team members. Be open and take into consideration the different points of view and ways of thinking, manage differences and conflicts constructively, accept diversity.</p>

<p>Evaluation methods</p>	<p><b>Continuous evaluation</b></p> <ul style="list-style-type: none"> <li>• Date: will be specified later</li> <li>• Type of evaluation: Group Exercises, Closed-book written test, Bloomberg Market Concepts (all modules)</li> <li>• Comments: No</li> </ul> <p><b>Evaluation week</b></p> <ul style="list-style-type: none"> <li>• Oral: No</li> <li>• Written: No</li> <li>• Unavailability or comments: No</li> </ul> <p><b>Examination session</b></p> <ul style="list-style-type: none"> <li>• Oral: No</li> <li>• Written: No</li> <li>• Unavailability or comments: No</li> </ul>
<p>Teaching methods</p>	<ul style="list-style-type: none"> <li>• Lectures</li> <li>• Teamwork</li> <li>• Bloomberg market concepts® test (all modules).</li> </ul>
<p>Content</p>	<p>The content of the course is the following:</p> <ul style="list-style-type: none"> <li>• Part 1: Setting the stage:             <ul style="list-style-type: none"> <li>• Financial instruments;</li> <li>• Risk-return relationship;</li> <li>• Empirical evidence of return predictability;</li> <li>• Efficient market hypothesis;</li> <li>• Portfolio formation.</li> <li>• Bloomberg market concepts® test (all modules).</li> </ul> </li> <li>• Part 2: Active investment:             <ul style="list-style-type: none"> <li>• Mutual and hedge funds;</li> <li>• Evaluation of trading strategies: Performance measures;</li> <li>• Finding and backtesting strategies: Profiting in efficient inefficient markets;</li> <li>• Portfolio construction and risk management;</li> <li>• Trading and financing a strategy: market and funding liquidity.</li> </ul> </li> <li>• Part 3: Equity strategies             <ul style="list-style-type: none"> <li>• Introduction to equity valuation and investing;</li> <li>• Discretionary equity investing;</li> <li>• Dedicated short bias;</li> <li>• Quantitative equity investing.</li> </ul> </li> <li>• Part 4: Asset allocation and macro strategies             <ul style="list-style-type: none"> <li>• Introduction to asset allocation</li> <li>• Global macro investing</li> <li>• Managed futures: trend-following investing</li> </ul> </li> <li>• Part 5: Arbitrage strategies             <ul style="list-style-type: none"> <li>• Introduction to arbitrage pricing and trading</li> <li>• Fixed-income arbitrage</li> <li>• Convertible bond arbitrage</li> <li>• Event driven investments.</li> </ul> </li> </ul>
<p>Bibliography</p>	<p>“Efficiently Inefficient: How Smart Money Invests and Market Prices Are Determined.” by Lasse H. Pedersen, Published by Princeton University Press, 2015, pp. 357.</p>
<p>Faculty or entity in charge</p>	<p>CLSM</p>

<b>Programmes containing this learning unit (UE)</b>				
Program title	Acronym	Credits	Prerequisite	Learning outcomes
Master [120] : Business Engineering	INGM2M	5		
Master [120] in Actuarial Science	ACTU2M	5		
Master [120] in Economics: General	ECON2M	5		
Master [120] : Business Engineering	INGE2M	5		