

## Syllabus

### Course description

<b>Course title</b>	Purchasing and Supply Management
<b>Course code</b>	47516
<b>Scientific sector</b>	ING-IND/17
<b>Degree</b>	Master in Industrial Mechanical Engineering
<b>Semester</b>	2
<b>Year</b>	<i>I – mandatory for Production and Logistics / I – OPT for Mechanics and Automation</i>
<b>Academic year</b>	2018/19
<b>Credits</b>	5
<b>Modular</b>	<i>no</i>

<b>Total lecturing hours</b>	32h
<b>Total lab hours</b>	
<b>Total exercise hours</b>	12h
<b>Attendance</b>	Extremely recommended
<b>Prerequisites</b>	None
<b>Course page</b>	<a href="https://next.unibz.it/en/faculties/sciencetechnology/master-industrial-mechanical-engineering/course-offering/">https://next.unibz.it/en/faculties/sciencetechnology/master-industrial-mechanical-engineering/course-offering/</a>

<b>Specific educational objectives</b>	The course aims at providing an exhaustive overview of procurement, purchasing, outsourcing, supply, and sustainable supply chain management. The evolution and the most recent methodologies will be illustrated, along with the tools and the techniques that are needed to manage procurement in an effective way.
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<b>Lecturer</b>	For lectures: To be defined  For exercises: To be defined
<b>Scientific sector of the lecturer</b>	ING-IND/17
<b>Teaching language</b>	English
<b>Office hours</b>	See on timetable
<b>Teaching assistant (if any)</b>	None
<b>List of topics covered</b>	<ol style="list-style-type: none"> <li>1. Introduction to purchasing and supply management: The enablers of purchasing and supply chain management; The evolution of purchasing and supply chain management</li> <li>2. The purchasing process: Purchasing objectives and responsibilities; E-Procurement and the procure to pay</li> </ol>

	<p>process; Improving the purchasing process;</p> <ol style="list-style-type: none"> <li>3. Policy and procedures</li> <li>4. Supply management integration for competitive advantage: Cross-functional sourcing teams; Integrating Supply Management</li> <li>5. Purchasing and Supply Chain Organisation: Organizational Structure; Placement of purchasing authority; Organizing for Supply Chain Management</li> <li>6. Supply Management and commodity strategy development: Supply Management and enterprise objectives; Strategic sourcing</li> <li>7. Supplier evaluation and selection: Evaluation and Selection Process; Key Supplier evaluation criteria; Developing a supplier evaluation and selection survey</li> <li>8. Supplier Quality Management: Factors affecting Supply Management role in managing supplier quality; Total quality management perspective; Pursuing Six Sigma supplier quality; Using ISO Standards to assess supplier quality systems</li> <li>9. Supplier management and development: creating a world-class supply base: Supplier performance measurement; Overcoming the barriers to supplier development</li> <li>10. Worldwide sourcing: From domestic buying to international purchasing; Global Sourcing</li> <li>11. Strategic cost management: Price analysis; Cost analysis techniques: Total Cost of Ownership; Collaborative approaches to cost management</li> <li>12. Purchasing and supply chain analysis: tools and techniques: Project Management; Learning-Curve Analysis; Value Analysis/Value Engineering; Process Mapping</li> <li>13. Contract management: Elements of a contract; Types of contracts; Alliances and partnerships</li> <li>14. Supply chain information systems and electronic sourcing: An overview of the E-Supply Chain; Enterprise Resource Planning systems; Implementing ERP Systems; Purchasing databases and data warehouses</li> </ol>
<p><b>Teaching format</b></p>	<p><i>Frontal and interactive teaching: lessons will be supported by slides provided by the teacher and will be integrated with interactive activities using office software applications (spreadsheet and open source industrial data analytics applications)</i></p>
<p><b>Learning outcomes</b></p>	<p><b>Intended Learning Outcomes (ILO)</b></p> <p><u>Knowledge and understanding</u></p> <ol style="list-style-type: none"> <li>1. The students know the most important aspects and</li> </ol>

	<p>the terminology of procurement and supply management;</p> <p>2. The students understand the main issues of purchasing and supply management in practice;</p> <p><u>Applying knowledge and understanding</u></p> <p>3. Students will be able to apply theoretical concepts of purchasing and supply management to real contexts;</p> <p>4. By means of good practice examples the students will learn how to use office software applications and open source industrial data analytics applications as supporting tools in daily business;</p> <p><u>Making judgements</u></p> <p>5. The students are able to understand the most important levers for improvement in Italian companies;</p> <p><u>Communication skills</u></p> <p>6. By interactive discussions during which the students will be required to discuss noteworthy themes with business language</p> <p><u>Learning skills</u></p> <p>7. The students will be able to autonomously extend the knowledge acquired during the study course in different industrial contexts.</p>
<b>Assessment</b>	The assessment will be defined by the lecturer as soon as he/she is appointed.
<b>Assessment language</b>	English
<b>Evaluation criteria and criteria for awarding marks</b>	The evaluation criteria will be defined by the lecturer as soon as he/she is appointed.
<b>Required readings</b>	Lecture notes and documents for exercise will be available on the reserve collections
<b>Supplementary readings</b>	Books and articles will be suggested by the teacher during the course