Supply Chain Management

The Major **Supply Chain Management** aims to provide students with the set of advanced competences and skills required to **manage global supply chains, from the definition of the strategy to its execution, through the processes of plan, source, make, and deliver**. Students will learn how to manage sustainability, innovation and finance from a supply chain perspective

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Advanced Supply Chain Planning Lab

Expected Learning Outcomes

By attending this Lab, students will learn to:

- **Be familiar with the most relevant digital technologies and solutions** used by SC managers today (IoT, Cloud, Advanced Analytics, Additive Manufacturing, Advanced automation)
- **Better understand the theory of SC Planning**, by applying models and approaches to real cases , and by analyzing the actual implementation steps of complex models in real life situation;
- **Use a prominent data manipulation language** (r) to manipulate large datasets, and build useful analysis for subsequent decision making tasks;
- **Analyze and end-to-end SC problem**, provided by a real company, to select the proper methodology / model and to provide an effective solution to the planning challenge proposed;
- **Improve their presentation skills**, fostering the value of the teamwork, and using a language adequate to both managers and fellow students.

Learning Experience

The aim of this Laboratory is to expose students to advanced SC Planning practices, IT tools and to give them a direct experience about this subject with companies.

To achieve this result, the course will rely on different learning methodologies:

- **SC Analytics,** coding with r, to acquire skills in manipulating large sets of data, and to develop descriptive and diagnostic analytics
- **Case study**, to discuss in small groups the applications of practices and tools in real industrial scenario
- **Lab Visit,** showing IoT and other digital technologies applicable in SC Planning
- **Company guest speeches,** to learn directly from experts how some best practices are adopted into their companies
- **Projects work with companies,** to be exposed to real business problems, to learn about data acquisition and manipulation, to be challenged about real achieving tangible results in short time

Professor

Prof. Giovanni Miragliotta (giovanni.miragliotta@polimi.it)

Examples of involved companies

Ducati, Lamborghini, L'Oreal, Pirelli , Prysmian, Trillium, Whirlpool

Supplier Relationship Management Lab

Expected Learning Outcomes

At the end of the course, student:

- Is able to **read a real procurement problem** and identify appropriate and valuable solutions, through a quantitative assessment of the options and a critical review of the results
- Is able to **apply different procurement models in specific business contexts**, to improve the performance of the purchasing department and to face new challenges of the business
- Is able to **undestand a business scenarios and develop solutions** to improve the processes and competences of the procurement department in an innovative way, through the application of structured models and with an assessment of the implications in the short and long term
- Is able to **present solutions and ideas** in a professional and constructive way, fostering the value of the teamwork, and using a language adequate to both managers and fellow students

Learning Experience

The aim of this Laboratory is to expose students to the **most adopted tools** by companies in managing their relationships with suppliers.

This laboratory will focus on managing relationships with suppliers, along the whole relationship lifecycle, and will exploit different learning methodologies:

- **Simulation**, to apply in groups the use of specific tools or method into a simulated context
- **Case study**, to discuss in small groups the applications of some tools into some firm environment
- **Company speeches**, to learn directly from experts how some best practices are adopted into their companies
- **Projects in and with companies**, to be exposed to real business problems and to look for innovative solutions to improve the performance of the procurement department

Professors

Prof. Antonella Moretto (antonella.moretto@polimi.it)

Examples of involved companies

Eni, Whirpool, Lamborghini, Henkel, Accenture