POLITÉCNICA

Brief overview of the UPM Department of Industrial Management

Miguel Gutiérrez – Academic Secretary of the Department

Composition

4 Full Professors + 1 Emeritus

17 Associate Professors – Civil servant

15 Associate Professors – Non civil servant

17 Assistant Professors (PhD)

8 Assistant Lecturers (PhD Students)

32 Part-time Professors

Total: 94 professors – 75 full time equivalent

Teaching (per year): ~1.700 ECTS, ~13.000 students

Research (per year): ~65 scientific publications

QUANTITATIVE METHODS

Statistics, Big data, Simulation, Operations research, Metaheuristics

OPERATIONS

Production and operations management, Supply chain management, Project management, Quality management

ADMINISTRATION

Business administration, Finance, Accounting, Marketing, Human Resources, ICT management, Social Responsibility, Sustainability

ECONOMY AND INNOVATION

Basic micro- and macro- economics, Innovation, Industrial and technology policy, Entrepreneurship

INDUSTRIALES
ETSII | UPM

European
Accreditation
of Engineering
Programmes
EUR-ACE®

Engineering
Accreditation
Commission
ABET

Bachelor in Industrial Technology Engineering

Specialization on Industrial Management

Bachelor in Industrial Management

Master in Industrial Technology Engineering

Specialization on Industrial Management

Master in Industrial Management

Bachelor and Master

Basics of:

- Business administration
- Economics
- Operations management
- Project management

Doctoral programmes

DIO - Engineering Management Doctoral Programme

DEGIN.- Economics and Innovation Management Interuniversity PhD program (in cooperation with Univ. Autónoma de Madrid and Univ. Complutense de Madrid)

EDIM - European Doctorate in Industrial Management (in cooperation with KTH [Coordinator] and Polimi) - Erasmus

Around 20 successful finished PhDs per year

- Access to CEsViMa HPC infrastructure.

- Small distributed cluster running on Linux with around 100 cores and more than 30 Tb of storage.

- Spark under kubernetes as orchestator.

- Ingestion from different sources through different bridges and indexers like Elastisearch.

Funded research programs

- EU projects – Currently 5 ongoing

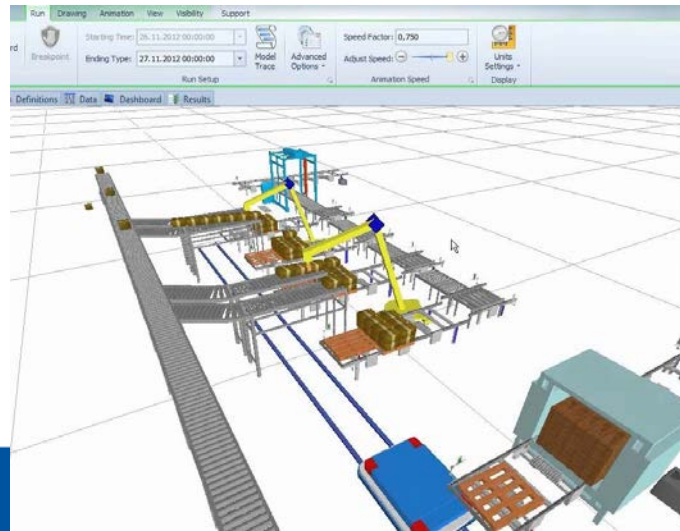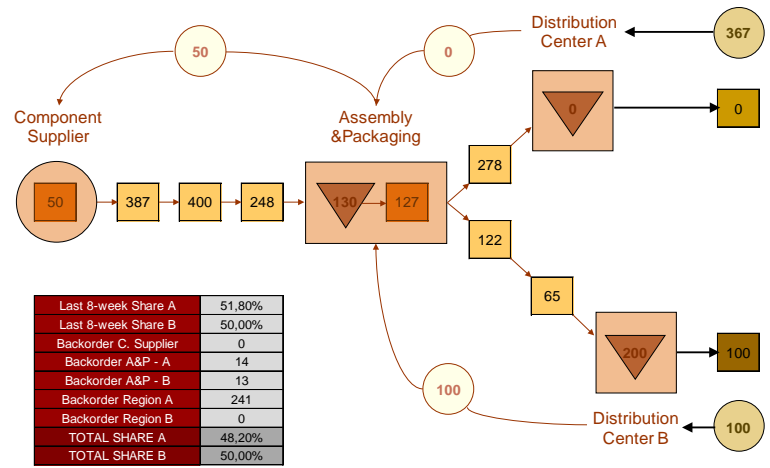- National projects – Currently 22 ongoing

Total research incomes: 2,7 M€

Research networks

- COST Action

- 3 National excellence networks

Last 8-week Share A	51,80%
Last 8-week Share B	50,00%
Backorder C. Supplier	0
Backorder A&P - A	14
Backorder A&P - B	13
Backorder Region A	241
Backorder Region B	0
TOTAL SHARE A	48,20%
TOTAL SHARE B	50,00%

Computational statistics and stochastic modelling
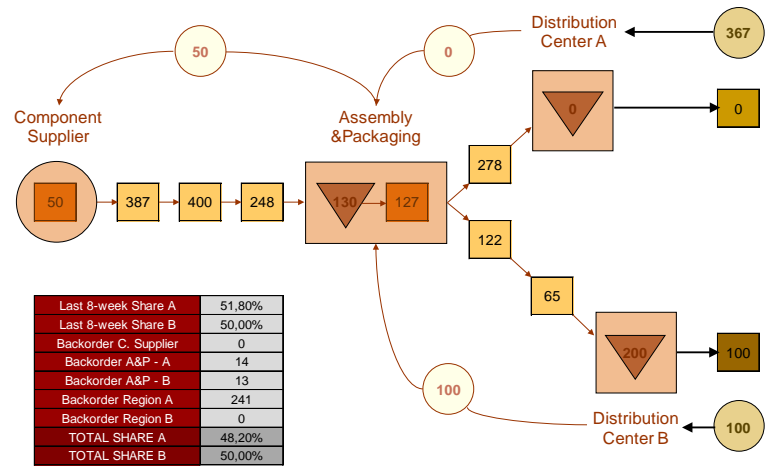
Engineering management and logistics

Project management and quality

Sustainable organizations

Innovation, industrial property and technology policy

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Computational statistics and stochastic modelling

- Time series analysis and forecasting

- Stochastic processes: montecarlo simulation and sensitivity analysis

- Data mining

- Structural modal analysis

Engineering management and logistics

Project management and quality

Sustainable organizations

Innovation, industrial property and technology policy

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Computational statistics and stochastic modelling

Engineering management and logistics

- Applied operations research

- Production and operations management, scheduling

- Supply chain modeling and optimization

- Production systems modeling and simulation

Project management and quality

Sustainable organizations

Innovation, industrial property and technology policy

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Computational statistics and stochastic modelling

Engineering management and logistics

Project management and quality

- Project management competences

- Big Data applications in business

- Internet of Things and Industry 4.0

- Lean management and organizational learning

Sustainable organizations

Innovation, industrial property and technology policy

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Computational statistics and stochastic modelling

Engineering management and logistics

Project management and quality

Sustainable organizations

- Strategic social responsibility and industrial ecology

- Analysis, design and management of network organizations

- Corporate and human developement

- Sustainable development goals (SDG)

Innovation, industrial property and technology policy

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Computational statistics and stochastic modelling

Engineering management and logistics

Project management and quality

Sustainable organizations

Innovation, industrial property and technology policy

- Innovation management and social innovation

- Industrial property

- Design of technology policies

- Digital transformation

Company funded research projects

> 20 currently

Intellectual and industrial property, patents: ~1-2 per year

Spin-off originated in the Department…

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