Definition and First Year of a New International Master in Industrial Processes Automation

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Networks and Industrial Computation
- Networks topology, design and communication
- Safety and security, medium and norm
- Wireless sensing, industrial automata and field buses

Multi-objective Control
- Global system understanding
- Model-based control: optimization, robustness and nonlinearities
- Complex control applications.

Networked Control Systems
Remote control and Embedded Systems

Modeling and Real-time Applications
- Multi-physics for models, identification and estimation
- Embedded systems applications;
- Real-time applications with CRio and Labview

Advanced Discrete Event Systems
- Management of interlaced tasks: scheduling, logistics and simulations
- Automaton, Markov chains and petri nets
- Conception and design for industrial plants

Modern Industrial Processes Automation
- Increased complexity & communication
- Meet security, robustness, productivity & quality specifications
- Scalability and global system approaches
- System integration theory & technical capabilities.

Safety, Supervision and Diagnosis
- Hierarchical context of monitoring and supervision
- Preliminary safety analysis
- Integrate automation in supervision and operator interface

Integrated projects