

System Dynamics Italian Chapter (SYDIC) Annual Report (2006-2007) (Habib Sedehi)

The final design and development of the System Dynamics Italian Chapter (*SYDIC*) new website (www.systemdynamics.it) continue to be in progress . The site was designed and developed involving both Engineering faculty students of Rome “Tor Vergata” University and BSc Communication Sciences faculty students of Rome “La Sapienza” University. The *SYDIC* website has the aim to involve all the members in order to heavily and continuously interact by putting in common each other’s experiences.

After the success of the last year starting year of the new SD course for advanced degree (II° level “Laurea”) students at Communication Sciences faculty- Rome University “La Sapienza”, the course has been confirmed and more than 50 students were introduced to System Dynamics methodology and development of simulation modelling.

There has been continues academic activities in the field all over our the country. Following are those which were reported by *SYDIC* members:

University of Bologna – Faculty of Mathematical, Physical and Natural Sciences – Dynamics of Complex Organisations course¹

Research activity in System Dynamics:

- Analysis of supply-chain dynamics using computer simulation
- Analysis of the combination of computer simulation and mathematical analysis in conducting research (in cooperation with the Department of Mathematics).

Thesis in System Dynamics:

- Analysis of competitive dynamics of firm population within an industrial district; Mathematical models and Computational approach
- Analysis of inertia in firms’ strategic behaviour by computer simulation models
- Computer simulation models for the analysis of outsourcing in software production. Exploring dynamics and selecting strategies

University of Siena – Department of Social and Business Studies – Governance and Management Control course²

Research activity in System Dynamics:

- Applying System Dynamics to develop performance measurement systems

University of Pisa – Faculty of Computer Sciences – Department of Environmental Sciences – Environmental modelling course³

University of Rome “La Sapienza” – Faculty of Communication Sciences – Advanced degree in Enterprise Communication – System Theory and Dynamic Simulation Modelling course⁴

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Research activity in System Dynamics:

- Human Resource management and planning
- Customer Relationship Management
- Dynamic and Web Marketing Management
- Internal Enterprise Communication analysis

Thesis in System Dynamics:

- Communication process analysis through Promotion Mix Marketing
- Software Project Management Dynamics modelling

University of Rome “La Sapienza”– Master at Faculty of Statistics Sciences – Department of Data Intelligence and Strategic Decisions – Integrative lessons in SD⁵

University of Rome “Tor Vergata” – Faculty of Economics – Business Studies Department⁶

Research activity in health care, cultural sector and SD

- Dynamics and Performance Determinants in Clusters of Firms: A Computational Approach

University of Rome “Tor Vergata”– Faculty of Engineering – Department of Enterprise Engineering –Production Processes Modelling course and Master in Network System Engineering – Introduction to simulation” course⁷

Thesis in System Dynamics:

- The paperless process in Italian Government Administration
- The human resource management in Software Projects
- The Beergame: A Microworld for Supply Chain multiplayer analysis
- Software project Open source and collaborative development

ENI Corporate University – Mattei School of Management – Master in Energy and Environmental Economics and Management - Integrative lessons in SD⁸

- Introduction to SD with some applications to energy and environment
- Energy and Environmental Modelling using SD

Massachusetts Institute of Technology (MIT) – NSE & ESD Department
PhD Student in the risk and safety division⁹

Use of SD in the following main fields;

- Thermo-Hydraulic Design of Power Plants
- Risk and Safety applications
- Fuel management and supply chain for the nuclear fuel cycle

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