

ATHENS 2008 - MACHINE TOOLS AND MANUFACTURING SYSTEMS DESIGN

MON 17.11 (Morning)

Machine tools fundamentals (prof. M. Monno - MM, prof. A. Bernasconi - AB, ing. V. Mussi - VM):

- Welcome to Politecnico
- Material removal fundamentals, CNC machining centres and components (MM)

MON 17.11 (Afternoon)

- Basics of FEM in machine tools design (AB)
- Traditional and innovative materials (AB+VM)

TUE 18.11 (M)

Machine tools dynamic (prof. G. Bianchi - GB, prof. P. Pennacchi - PP, ing. P. Albertelli - PA, ing. M. Goletti- MG):

- Numerical modelling of structures and components (PA)
- Structural analysis: testing methods and instruments (GB+MG)

TUE 18.11 (A)

- Machining process simulation and instability conditions (GB+PA+MG)
- Condition monitoring and diagnostics methods (PP)

WED 19.11 (M)

Tolerancing and precision engineering (prof. G. Moroni - GM, prof. A. Armillotta - AA, ing. S. Petrò - SP):

- An introduction to Precision Engineering (GM)
- Geometrical Tolerance Verification and Process Monitoring (SP)

WED 19.11 (A)

- Geometrical Tolerancing (AA)
- Geometric Error Measurement and Compensation of Machine Tools (GM)

THU 20.11 (M)

Manufacturing systems (prof. A. Matta - AM, ing. S. Borgia - SB, ing. P. Cobianchi - PC, ing. P. Moriggi- PM):

- Setup planning and pallet configuration on Flexible Manufacturing System (PC)
- Part program simulation on CNC machining centres (PM)

THU 20.11 (A)

- Analysis of transfer lines (AM)
- Design of rotary transfer lines (SB)

FRI 21.11 (M)

Economics and organizational aspects (prof. P. Rizzi - PR, dr.ssa M. De Nicola - MD, dr. M. Lazzarini - ML):

- Importance of the machine tools production in Italy and in Europe (PR+ML)
- Strategies for competitiveness of companies: new business models (PR+MD)
- Innovation and protection of the intellectual property (PR+ML)

FRI 21.11 (A)

- Technical visit to a machine tools manufacturing plant in Piacenza