

## DESCRIPTION OF THE EDUCATIONAL ACTIVITY

Academic year: **2010-2011**

Course title: ***Manufacturing Technology and Quality Management***

Course number: **-----**

Type of educational activity: ***mandatory subject***

Subject Group: ***ING-IND/16***

Year of study: ***2<sup>nd</sup> year "Laurea" (B.Sc. Manag Eng)***

Semester: ***1<sup>st</sup>-2<sup>nd</sup>***

Total number of credits: ***12***

Global workload (n. of hours) : ***300***

Number of hours allocated to: lectures, tutorials, laboratory, individual study: ***70, 30, 20, 180***

Name of lecturer: ***Pierpaolo Carlone (Manuf. Tech.), Roberto Palmieri (Quality Management)***

Objectives of the course: **To give to the students the proper knowledge and tools to professionally approach problems related to manufacturing processes and quality management, by the means of theoretical lessons, practical lessons and laboratory activities.**

Prerequisites: ***Engineering materials and technology***

Course contents:

***Plasticity of metals; metal forming processes (forging, rolling, drawing, extrusion); material cutting: machining processes and equipment (tools materials and geometry, structures and kinematics of the machine tools); machining processes (turning, drilling, grinding, milling, broaching, filing, planing, slotting); product manufacturing cycle. Statistical Process Control. Control Charts (X-R, P, C, U, CUSUM, EWMA). Sampling Procedures. UNI EN ISO 9001.***

Recommended reading:

***Notes of the lessons***

***F. Giusti, M. Santochi – Tecnologia meccanica e studi di fabbricazione – Ed. Ambrosiana***

***K. Ishikawa – Introduction to quality control -***

Teaching methods: ***lectures, exercises, laboratory applications***

Assessment methods: ***written test and oral examination***

Language of instruction: ***Italian (available in English during office hours)***

Additional information: ***further information can be requested via e-mail: pcarlone@unisa.it, rpalmieri@unisa.it***