

Quality Management and Metrology (MEC-E1090)

Examination on Monday the 11th of December at 12.00...15.00 o'clock, K213

1. **Quality documentation** in ISO 9001 –quality system
2. Finnish Quality Award (Excellence Finland 2018) criterion and why Valtra earned **Finnish Quality Award**
3. **DMAIC** phases in a Lean Six Sigma project and their objectives:
4. What is **$\bar{x}R$ –control card** and how do you utilize the card in quality system
5. **Gauge Blocks**; calibration of the blocks and calibration with the blocks
6. Answer very briefly:
 - a) Measurement uncertainty
 - b) Caliper
 - c) CMM
 - d) Gauge R&R
 - e) Optical quality gate
 - f) MIKES

(Grades 0...6 points/question, accepted examination 40% of the maximum points eq. 14 points)

Rewarding Christmas time!



Kalevi Aaltonen