

ENGINEERING EDUCATION POLICIES AND POLITICIANS...



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1. Which are the optimum procedures for **political** decision-makings regarding Engineering Education?
2. The fundamental importance of detailed “**job**”-**descriptions** of Technical Staff, in Design, Construction and Research (as well as their Region-specificity).
An attempt to redefine the job-descriptions of a Certified Technician, an “Industry” Engineer, an Engineer, and an Engineering Researcher.
3. Engineering Education befitting to a given “job”-description, leads to an appropriate “graduation”. For another “job”, another education programme is needed. (The misunderstandings produced by the term “post-graduate” course...).
4. The underestimation of the economical and social importance of Professional Education.
5. The apparent inadequacy of the BSc in Engineering in U.K. (where the Continental “Integrated and Uninterrupted” system is actually adopted, “MEng”).
6. The rather unfortunate attempt of Bologna-scheme to produce an “Industry” Engineer in 3 years:
 - Extreme difficulties in the 3-years curriculum itself.
 - The distortion of the programme imposed to the followers of the 5-years scheme.

- The unwillingness of the Industry to employ the “3-yearers”.
 - The unwillingness of the students to step-out after the 3-years...
 - An apparent conceptual mistake (hidden populist trends; is a half-MD or a half-Lawyer possible?)
7. The apparent inadequacy of the 4-years BSc in Engineering in USA and the trend towards an “Integrated Uninterrupted” 5-years scheme in USA Universities.
8. The soundness of the “Integrated Uninterrupted” 5-years scheme of Engineering Education in Europe (which served already as a model in other Regions).
- Practical evidence
 - Opinions of Bologna followers
 - Fundamental Prerequisites
9. The need for rational-pragmatic job-descriptions to be served respectively (possibly accounting for Country-particularities)
- a) by 3-years robust **non-university** studies (real “Industry” Engineers on narrow sub-fields),
 - b) by 4-years intensive University studies (if a national Market has a rich sector of medium-level Technology to serve),
 - c) by 5-years normal University studies aiming at medium and high Technology, on the one hand, and able to initiate possible doctoral studies, on the other;
- overall cost-effectiveness being always considered.
10. The confusing (if not provocative) term “Master”:
- The confusion with the old-styled MSc: Engineering is a considerably broader intellectual process than Science
 - Who are really the “Masters” in our world of today?
 - Why a Region-specific term was used to express a successful European tradition of University Engineering Education?
 - The Bologna Master simply befits the needs of a really Professional Engineer; nothing more nor less. It has nothing to do with... “post-graduate” courses (after a manifestly inadequate BSc).
 - What is equivalent to what?