Chapter  2

Why Get Your Engineering Programme Accredited?

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ABSTRACT

In many countries engineering degree programmes can be submitted for accreditation by a professional body and/or graduate engineers can be certified or registered. Where this is available most academic institutions feel that they must offer accredited engineering programmes. The author suggests that these processes are at best ineffective (they do not achieve their aims) and at worst they are destructive of creativity, innovation and confidence in the academic community. The author argues that such processes (including any internal certification within the Conceive-Design-Implement-Operate, i.e., CDIO Initiative) should be abandoned completely. The author proposes alternative ways of maintaining the quality of engineering design and manufacture, which place the responsibility where it properly lies – with the manufacturer or contractor. This is a polemic piece, not a referenced review of accreditation.

INTRODUCTION

In many countries undergraduate engineering programmes can be submitted to a national body for accreditation. Graduates from accredited programmes are eligible, often with an additional requirement for relevant work experience, for registration as a professional engineer. In the UK this accreditation is overseen by the Engineering Council via UK-Spec. and opens the way to C.Eng, I.Eng or EngTech qualifications. In the USAABET serves a similar function, while in Australia the appropriate body is Engineers Australia. In all cases the programme, its students, and sometimes its graduates, are scrutinised by a committee of professional engineers before accreditation is awarded for a fixed period such as five years. The accreditation process involves substantial paperwork and usually a one or two day visitation, so is quite costly both for the educational institution and the professional body. I argue in this article that this considerable effort does not represent good value for money and in some cases may have a negative effect on the quality of engineering education.
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