A Model for the Development of a CDIO Based Curriculum in Electrical Engineering

This paper deals with a model providing a structured method for engineering curriculum design. The model is developed to show the major influencers on the curriculum design and the relations between the influencers. These influencers are identified as the engineering science, the business environment, the university environment, and the teachers and students. Each of them and their influence on the curriculum is described and the sources of information about the influencers are discussed. The CDIO syllabus has been defined as part of the basis for the Bachelor of Engineering programs at the Technical University of Denmark and this gives a strong direct impact of the university environment on the resulting curriculum in electrical engineering. The resulting Bachelor of Engineering curriculum is presented and it is discussed how it complies with the model for curriculum development. The main conclusion and recommendation is that a conscious use of the model presented in the paper can structure and improve the curriculum development in a way leading to a well-founded and well-structured curriculum.