A Design-Build-Test course in electronics based on the CDIO framework for engineering education

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Abstract

A Design-Build-Test (DBT) course in electronics is presented. The course is designed based on the CDIO (Conceive-Design-Implement-Operate) framework for engineering education. It is part of the curriculum of two engineering programs at Linköping University, Sweden, where it has been given successfully for a number of years. The cornerstones of the course consist of carefully designed learning outcomes based on the CDIO Syllabus, a structured project management model such that the project tasks are carried out according to professional and industry-like routines, with well-designed organisation of the staff supporting the course, and challenging project tasks.