

Författare: Javier Gonzalez-Huerta

Medförfattare:

Typ av session: Presentation, 30 min

Lärosäte: BTH

Engineering an Engineering Degree under the CDIO Framework: Experiences of a (long) Journey Developing a Civilingenjörsprogram

Developing the curriculum for a new program is a challenging activity, in which many factors influence the spectrum of potential choices that can be made in the different decision points. Some factors might constraint the choices or impose certain contents, for example, national regulations (e.g., Högskoleförordning 1993:100), or local regulations (e.g., Lokal examensordning). There are also frameworks that on the one hand, might act as another source of constraint and restriction, but on the other hand might provide guidance on the curricula development process and help organizing the contents, like the CDIO framework (Crawley & Lucas, 2011; Crawley, Malmqvist, Östlund, & Brodeur, 2014). In this talk, I will talk about our experiences, developing a program from scratch following with CDIO, but also following the local CDIO implementation at our University. I will discuss how we approached the problem, the challenges to handle all those conflicting aspects, but also some of the overarching design principles we implemented to make the degree more accessible for students, to enable an active-learning approach, but also to be better connected to “real-life”. Finally, I will also like to talk about open questions and challenges for which there is no clear answer yet, such as how we can assure the proper evaluation of soft skills that are at the core of the CDIO and also highlighted in the ordinance, or what is the best way to integrate entrepreneurship in engineering studies.

Bibliography

Crawley, E. F., & Lucas, W. a. (2011). The CDIO Syllabus v2 . 0 An Updated Statement of Goals for Engineering Education. In Proceedings of the 7th International CDIO Conference (Vol. 24, pp. 1–4).
Crawley, E. F., Malmqvist, J., Östlund, S., & Brodeur, D. R. (2014). Rethinking Engineering Education: The CDIO Approach. Springer. <https://doi.org/10.1007/978-3-319-05561-9>