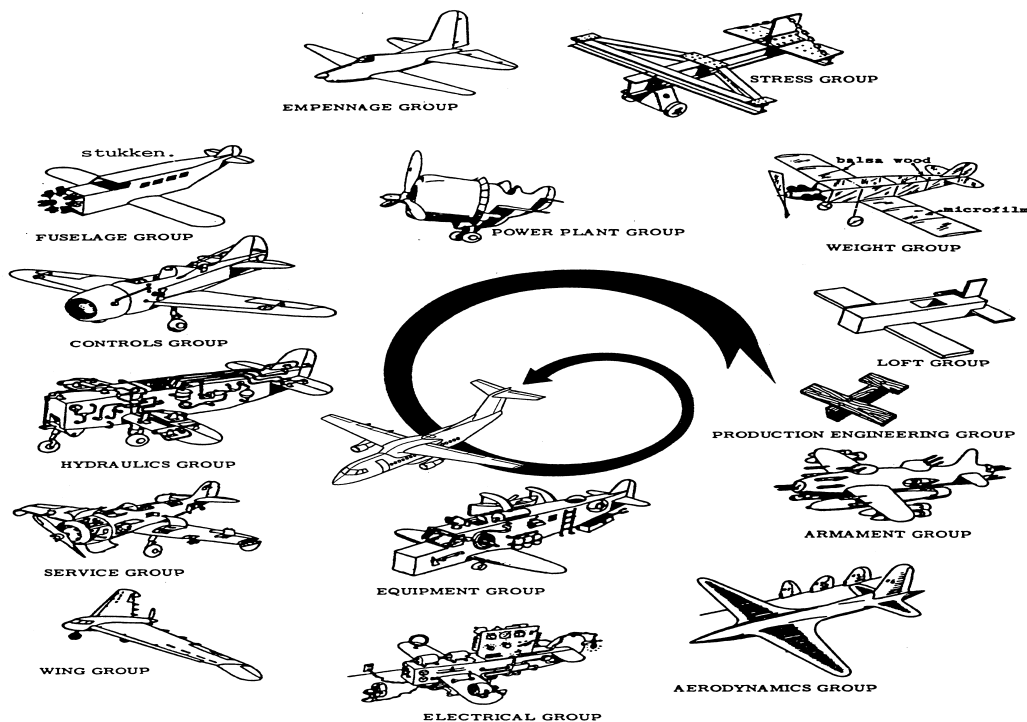


Workshop Designing Engineering Education the Engineering Way

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“A completed airplane is in many ways a compromise of the knowledge, experience and desires of the many engineers that make up the various design and production groups of an airplane company” – C.W. Miller



Dream Airplanes by C.W. Miller

In this hands-on practical workshop we will show you that the same can be said for curriculum design of engineering education. In this workshop you will have the opportunity to design a course, a module or maybe even a semester using the principles of engineering design. Participants are encouraged to bring in their own case so that they may walk away with an outline of a new course and be inspired to develop it further and connect with other lecturers going through the same process in order to learn from each other.

In small pairs or small groups you will go through the steps of engineering design but this time applied to engineering education:

- identifying relevant design requirements both internal (learning objectives) and external (cultural and educational framework) – 10 min
- requirements review - 10 min
- conceptual design phase in which different version of the same course are developed using different teaching & assessment methods in each (i.e. project based, traditional lecture, blended, etc.) – 30 min
- design review in which each idea is pitched against each other highlighting advantages – 10 min
- trade – off and selection of final design for further development – 10 min

References

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Laurillard, Diana (2012), Teaching as a Design Science - Building Pedagogical Patterns for Learning and Technology, Routledge, London.