Integration of Business Administration, Computer Science, Interculture, and Statistics: A Course in Applied Systems Engineering

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Karlstad University offers a 270 ECTS Master of Information Technology program. The program started in 2002 and the idea was to arrange the content of the program in themes. In principle, a theme is a semester-long course that integrates different subjects, contains a project, and is given by a team of teachers. Currently the program contains two fully developed themes. One of the themes is “Applied Systems Engineering” comprising 16.5 ECTS Computer Science (database techniques, software engineering, data communications), 6 ECTS Business Administration, 6 ECTS Statistics, and 1.5 ECTS Interculture.

In the presentation we discuss the background of our theme approach for the program as a whole, the background of the “Applied Systems Engineering” theme, and our experiences from the two times the theme was given. Our focus is on cross-disciplinarity. Cross-disciplinarity is most visible expressed in the course plan as the goal of the interculture part: the goal is that the student has knowledge about communication processes in international environments and has understanding of communication processes in cross-disciplinary environments. Moreover, cross-disciplinarity can be very concrete in the project part. For example, the first time the course was given the customer was a teacher of Business Administration and the system to be build was a Balanced Score Card system.