



Real cases study through computer applications for futures Agricultural Engineers

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One of the huge concerns on the higher engineer education is the lag of real cases study that the future professionals need in the work and corporation market. This concern was reflected in Bologna higher education system including recommendations in this respect. The knowhow as why this or other methodology is one of the keys to resolve this problem.

In the last courses given in Department of Crop Production, at the Agronomy Engineer School of Madrid (Escuela Técnica Superior de Ingenieros Agrónomos, UPM) we have developed more than one hundred applications in Microsoft Excel®. Our aim was to show different real scenarios which the future Agronomic Engineers can be found in their professional life and with items related to crop production field.

In order to achieve our target, each application in Excel presents a file text in which is explained the theoretical concepts and the objectives, as well as some resources used from Excel syntax. In this way, the student can understand and use of such application, even they can modify and customize it for a real case presented in their context and/or master project.

This electronic monograph gives an answer to the need to manage data in several real scenarios showed in lectures, calculus resolution, information analysis and manage worksheets in a professional and student level.