

BIOMEDICAL ENGINEERING PROGRAM ON THE INTERNET FOR WORLDWIDE USE

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Biomedical Engineering, which is a multi-disciplinary and fast developing field of science, covers a large number of sub-specialties. Therefore, for any university, especially for the smaller ones, it is difficult to produce and update high quality teaching material in all aspects of the field.

Biomedical Engineering is needed all around the world and globalization encourages the students to mobility between universities. It is important that education in Bio-medical Engineering is harmonized to facilitate the mobility. The BIOMEDEA project facilitates this within the study programs in European universities.

Internet is more and more used as a platform for educational material and student administration. The use of internet makes the geographical distances to disappear.

All this gives strong reasons to develop an education program on the Internet.

This is the basis for the project: European Virtual Campus for Biomedical Engineering – EVICAB (www.evicab.eu). It was funded by the European Commission for 2006-2007.

EVICAB offers high-quality courses prepared by the best international teachers. The courses include lecture videos and associated lecture slides. The courses are also associated with additional teaching material like full textbooks, exercises, laboratory exercises etc.

All courses offered by EVICAB are recognized by at least one university in the European Union. Thus it is easy for any other university in the EU to include EVICAB courses to their curriculum.

Because the teaching material in EVICAB is available free of charge and because it can be used via Internet form anywhere in the world, the BME program provided by the EVICAB is available for worldwide use.

EVICAB uses the Wiki-idea but is more strongly controlled by an Administrative Board. This ensures that the teaching material provided by the experts is of high quality and cannot be changed by anyone else than the author. In addition to the primary teaching material, the courses have windows with free access. These are used for providing additional teaching material by the users of EVICAB. In addition to helping the students, this Wiki material may be utilized by the course author for improving the course.

The teaching material for EVICAB is provided by the best experts free of charge. The benefit from this for the teacher is that his/her reputation as an expert will be strengthened worldwide and this will support his/her career as pedagogue and scientist.

Associated to the EVICAB education there is also developed a method for Internet examinations. This will further strengthen the worldwide use of EVICAB because the geographical location of the students and the teachers does not play any role anymore.