



## Summary

Germany has one of the strongest economies in Europe and the world and is therefore very attractive as a trading partner for many European countries. Nevertheless, there is a lack of qualified engineers with international experience who have adequate German language skills in specific fields, such as the field of Automation Technology.

Therefore, universities and companies from four different European Union countries worked together to develop a curriculum and teaching material for an interdisciplinary online-course which combines the fields of Automation Technology and German as a foreign language.

The course is called “ADOK” (Automatisierung und Deutsch im Online-Kurs/Automation Technology and German as an Online-Course) and is available free of charge on our website, [www.adok.projekt.eu](http://www.adok.projekt.eu). This interdisciplinary course combines Automation Technology with German as a foreign language and contributes to the further networking of the European higher educational system. The course uses methods that combine the study of technology, more specifically “Programmable Logic Control Systems” (PLC), with the study of German which does not function as a medium for learning other subjects, but is a learning target in itself.

The financial support of the EU within the framework of the Lifelong Learning Project (LLP), made it possible for an international team to produce contemporary teaching material to convey to students not only technical knowledge, but also the fundamentals of German. Automation technology was chosen because of the relevant part it will play in the future in all economical fields. Qualified professionals with good German language skills are rare but because Germany is a major trading partner of Finland, The Czech Republic, and Estonia there is a need for them in these countries.

The goal of this course is to train engineers to be good programmers with German language skills. It is a combination of problem-based instruction in the field of Control Engineering and integrated language learning. Situations from daily professional life are simulated in a manner that positively motivates the participants. The use of computer technology enables students a faster start in foreign language learning. During the test phase students and professors visited the partner universities. They used the website, [www.adok-projekt.eu](http://www.adok-projekt.eu), the Moodle platform, Skype and several workshops for their communication.

The target groups for the course are engineering students who work towards a bachelor's degree at European institutions of higher education and qualified employees of companies in technical industries who can use the material in continuing training. ADOK can be used either as a programming course in combination with the study of German or as a sheer German course focusing on the specific language of Control Technology. It can also be used as a preparatory course for a study abroad. In this way it supports European student mobility. This learning material guarantees:

- the acquisition of practical and programming-focused language skills
  - a highly-motivating atmosphere
  - the opportunity for language and engineering professors to learn from one another
  - and the easy application of the course material for further professional development.