SOFTWARE ENGINEERING

INTERNATIONAL SEMESTER





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THE INTERNATIONAL SEMESTERS

Software drives our world. It is the enabling technology for the experience we have come to expect from our wristwatches, smartphones, PCs, banks, and virtually any other system we use on a daily basis. We expect these systems to be easy to use, flexible and adapt to our needs, and we expect them to integrate seamlessly with other devices we own, and thereby to become an integral part of a bigger, existing system, without any effort of our own. Building software that accommodates these expectations at an ever-increasing pace requires skills beyond those of merely coding. It requires that e.g. scalability, adaptability and testability is built-in from the very beginning of the design of the software.

The set of courses compiled for the Software Engineering semester aims at providing the student with the knowledge and tools to devise and implement software systems with these desired properties, thus making the product viable in the existing market. Most of the courses are also intended for Danish students, but all curriculum activities are conducted in English and are dealt with in an international perspective. The latest know-how and state-of-the-art HW/SW are available and a practical engineering approach to the complex systems is in strong focus.

ADMISSION REQUIREMENTS

The semesters are intended for international and Danish students in the final year of their bachelor engineering studies or at a similar educational level of an ICT programme.

More specifically, basic electronics skills and passed intermediate courses in object-oriented programming concepts (such as encapsulation, inheritance and polymorphism) in C++, C#, Java or similar OO-language, are considered prerequisites for attending this semester programme. Proficiency in English is required (TOEFL IBT 83, IELTS 6.5, Cambridge).

STUDY PROGRAMME OFFERED (AUTUMN SEMESTER ONLY):

- Advanced Front-end Development (5 ECTS)
- Smartphone Applications (5 ECTS)
- Internet of Things: Software Perspective (5 ECTS)
- Software Design (5 ECTS)
- Machine Learning in Health Care Technology (5 ECTS)
- Project Work (5 ECTS)

*Changes in the study programme may occur from each semester

STUDY PERIOD AND APPLICATION DEADLINE

The autumn semester runs from end August through January.

The application period is 1 March to 1 April.

A maximum of 10 international students is accommodated.

FIND OUT MORE

Visit our website at <u>ingenioer.au.dk/en/education/</u> <u>international-programme/</u> or contact the International Coordinator Fie Bøje Misholt. E-mail: <u>fbm@au.dk</u>