



“Principles of Digital Fabrication” course

University of Oulu, Faculty of Information Technology and Electrical Engineering invites high school students to register for the course “Principles of Digital Fabrication” to be held at **Fab Lab Oulu** in University of Oulu Linnanmaa campus (<http://www.oulu.fi/fablab/>) between 12rd March 2018 and 15nd May 2018.

During the course, students will build an **interactive robot (gadget)** that combines mechanical, electrical and software components using the tools and devices existing at our Fab Lab. The course follows project based learning approach combined by 6 practical tutorial like-lectures where students will be provided with basic principles and guidelines. Students will learn how to design mechanical components with solid modeling tools, how to use those parts together with sensors and actuators to create a physical gadget (robot), and how to program the robot so it is able to interact with the world around it. Students will work in small teams.

This course is an excellent introduction to digital fabrication and modern computer science and their surrounding fields. The course also introduces the students to the use of University of Oulu’s versatile FabLab digital instant manufacturing processes. The project instructors are students, doctoral students, post-doctoral researchers and professors. Completing this course increases your professional qualifications and gives 5 ECTS credits to carry out any other college degree later at our University.

Registration and additional information on email:
[georgi.georgiev\(AT\)oulu.fi](mailto:georgi.georgiev(AT)oulu.fi)

Application deadline is 05.03.2018.

FabLab Oulu is a small digital manufacturing working area (fabrication laboratory) that complies with open innovation concept developed by MIT in the United States. In Fab Lab it is possible to design your own product or hardware from the scratch. Available for use are three 3D-printers, laser cutter, vinyl cutter, precision milling machine, electronics workbenches and open source design software. Fab Lab Oulu is located in the campus of the University of Oulu, rooms TF 132-135, entrance 2T, Erkki Koiso-Kanttilan katu 3.

**Digitaalisen
valmistuksen
perusteet**

