INFORMATION TECHNOLOGY IN NUCLEAR ENGINEERING

— ABOUT —

Language: English
Qualification: Master of Science in Informatics
Speciality: Information and Communication Technologies
Specialization: Software applications development and analysis
Code: 0613
Credits: 120 – 75 learning + 45 research
Place: Georgian Technical University

— CONTACT INFORMATION —

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— DESCRIPTION —

The educational program sets objectives of students training in the state-of-the-art information technology trends and creation of the competence in response to the innovation decision making and development.

The educational program is based on the research topic and collaboration experience of the European Organization for Nuclear Research - CERN, Geneva, Switzerland. See program details here https://www.cadcamge.ch/edprog

The duration of the program is two years - four semesters and foresee learning and research components. Learning components consist of 12 syllabuses, with 6 core and 6 optional courses. According to the optional courses and the subject of the dissertation, students can succeed in the formation in two directions - 3-Dimensional Computer-Aided Geometry Modelling, or Development of the Client-Server software applications.

By the first direction, students will pass through the geometry modeling package CATIA and learn facilities design and analysis based on the different engineering methods (see example here https://www.cadcam.ge/sim-report-for-presentation.pdf).

By the second direction, students will learn technologies of development of the visualization applications inside the web-browsers (see example here https://tracer.web.cern.ch).

— RESEARCH COMPONENT —

Scientific research and dissertations will be carried out on the research topics of CERN. Students will be involved in the collaboration projects of CERN and will establish partnerships with the groups from the world-leading Universities (see details here https://www.cadcam.ge). Dissertations will be chaired by researchers with multiple years' experience of working at CERN.

— FIELD OF EMPLOYMENT —

1. Organizations and companies, who are requiring Computer-Aided Design technologies in Mechanical engineering, Energetics, military industries, etc.

2. Organizations and companies developing software applications for Telecommunication, Medicine, Advertisement, etc.

3. High Energy Physics Collaborations for the development of the Simulation infrastructure and cognitive applications for the Outreach and Education

4. Universities