

Level: master				
Course title: Nuclear instrumentation				
Status: elective				
ECTS: 9				
Requirements: Nuclear physics				
Learning objectives To introduce students to the principles of nuclear instrumentation and methods of its application.				
Learning outcomes Gaining knowledge about nuclear instrumentation.				
Syllabus Pulse signals in nuclear electronics (Terminology, Analogue and digital signals. Fast and slow signals). NIM standard (Modules, NIM bin power supply). Signal transfer (Coaxial cables, Impedance adjustment, Loss in cables and pulse distortion). Electronic processing of signal pulses (Pre-amplifiers, Amplifiers, Discriminators, Single channel analyzers, Multi-channel analyzers, Time to amplitude converters, Scalers, Coincidence units). Computer controlled electronics: CAMAC				
Weekly teaching load				Other:
Lectures: 3	Exercises: 1	Other forms of teaching: 1	Student research:	