

Course: Continuous Time Signal Processing

credits: 4

Course code ELVH19ACTSP

Name Continuous Time Signal Processing

Study year 2020-2021

ECTS credits 4
Language English
Coordinator B.D. Williams

Modes of delivery Assignment

Lecture

Practical / Training

Assessments Continuous Time Signal Processing - Written,

organised by School

Learning outcomes

• The student can calculate the frequency response of an LTI system.

Content

During this study unit you will have tutorials and theory. For the theory you will get some homework assignments. If you do these

- The student can calculate and sketch the magnitude and phase of the fragging for the student can calculate and sketch the magnitude and phase of the fragging for the system, and recognise the most fundamental meanings of these characteristics your written exam.
- The student can perform a frequency analysis of a signal by use of the correct form
 of the Fourier Transform in combination with standard characteristics and tables of the Fourier transform.
- The student can apply Fourier analysis to calculate the impact of sampling and windowing on spectra.
- The student can apply convolution and multiplication properties of FT theory to filtering, modulation and sampling of a continuous time series.

Included in programme(s)

Electrical Engineering Major Sensor Technology Minor Technology to Create Exchange Technology to Create (autumn)

School(s)

Institute of Engineering