



HÖGSKOLAN I GÄVLE

Electronics and Measurement Systems 7.5 cr

Elektronik och mätteknik 7,5 hp

Set by Faculty of Engineering and Sustainable Development

Version

Set at

Valid from

2/27/17

HT2017

Level	G1F
Education level	First cycle
Course identifier	EEG313
Credits	7.5 cr
Main field of study	Electronics
Subject group	Electronics
Disciplinary domain	Technology 100.0 %

Learning outcomes

After completion of the course the student shall be able to

1. state basic components, concepts and methods in analogue electronics and measurement techniques
2. describe and analyse the underlying technical theory in analogue electronics and measurement techniques
3. practice experimental activities, particularly within the measurement-technical field.

Course content

Elementary measurement techniques
Transistor amplifiers
Generators
Operational amplifiers
Advanced measurement of electrical quantities
Elementary opto components, on a general level
Measurement of non-electrical quantities
Instruments in systems

Teaching

Lectures, calculation exercises and laboratory sessions

Prerequisites

Electric Circuits 7.5 cr and Digital Control Theory 7.5 cr or equivalent

Examination	Written examination and laboratory sessions		
Grade	A, B, C, D, E, Fx, F		
Other regulations	Degree criteria for final grade will be given by course coordinator or examiner latest at the beginning of the course.		
Sustainable environment	Content with sustainable development is not relevant to this course.		
Module			
	0010	Written examination	5 cr Grade: AF
	0020	Laboratory Sessions	2.5 cr Grade: UG