



CONTINUING STUDIES, CORPORATE
AND DISTANCE EDUCATION

Data Conversion and Laboratory – Fall 2013 (Syllabus)

Course Number: 17.368 **Work:** 207-438-6123
Instructor: Dohn Bowden **Home:** 978-851-0153
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Text: 1. Various on-line documents – see website

Prerequisite: 17.346 or 17.371

Course Description: This course introduces the basic principles of data conversion. It covers the theory of operation for practical data conversion. The theory is complemented with corresponding laboratory experiments.

Course Calendar: Thursday class 6:30 – 9:20 PM

<i>Week</i>	<i>Date</i>	<i>Topics</i>	<i>Lab</i>	<i>Lab Results Due</i>
1	09/05/13	Introduction/Basic Data Conversion, Course Overview, Op Amps in Data Conversion		
2	09/12/13	Op Amp Lab	1	
3	09/19/13	Sample and Hold Lecture and Lab	2	
4	09/26/13	A/D Conversion Fundamentals and Lab	3	1
5	10/03/13	A/D Conversion Lab Continuation	3 con't	
6	10/10/13	Examination 1		
7	10/17/13	D/A Conversion Fundamentals and Lab	4	2
8	10/24/13	D/A Conversion Lab Continuation		
9	10/31/13	Microcontroller and Sensors	4 con't	3
10	11/07/13	Microcontroller and Sensor Lab	5	
11	11/14/13	V/F and F/V Conversion Lecture	5 con't	4
12	11/21/13	Examination 2	Project	5
X	11/28/13	No Class – Thanksgiving		
13	12/05/13	Work on Course Project	Project	
14	12/12/13	Final Exam/Course Project Brief and Demonstration	Demo	

General info: Attendance will be taken. **Lab material must be returned or INC grade will be awarded until material is returned.**

Grading Policy:

Exam #1 (20%), Exam #2 (20%), Laboratory (30%), and Final Exam/Course Project (30%)

A	93-100	B+	87-89	C+	77-79	D+	67-69
A-	90-92	B	83-86	C	73-76	D	60-66
		B-	80-82	C-	70-72	F	Below 60