

METE 3100 - Actuators and power electronics - Course schedule

January	Wed	9	Lecture 1	Introduction to actuators power electronics for mechatronics
	Fri	11	Lecture 2	Magnetic circuits
	Wed	16	Lecture 3	Transformers
	Fri	18	Lecture 4	Rectifiers
	Wed	23	Lecture 5	DC/DC converters
	Fri	25	Lecture 6	Inverters
	Wed	30	Lecture 7	Pulse width modulation
February	Fri	1	Lecture 8	3-phase inverters
	Wed	6	Lecture 9	Electromagnetic energy conversion
	Fri	8	Midterm 1	Lectures 1 to 9
	Wed	13	Lecture 10	Mechanical force in electromagnetic systems
	Fri	15	Lecture 11	Rotating machines
	Wed	20	No class	Winter reading week
	Fri	22	No class	Winter reading week
	Wed	27	Lecture 12	Stepper motors
March	Fri	1	Lecture 13	DC machines
	Wed	6	Lecture 14	DC motor speed and position control
	Fri	8	Lecture 15	DC motor torque control
	Wed		Midterm 2	Lectures 1 to 16
	Fri	15	Lecture 16	Induction motors 1/2
	Wed	20	Lecture 17	Induction motors 2/2
	Fri	22	Lecture 18	Synchronous motors
	Wed	27	Lecture 19	Single-phase motors
	Fri	29	Lecture 20	Transient and Dynamics
April	Wed	3	Lecture 21	Introduction to discrete control
	Fri	5	Lecture 22	Final examination review - Design project due
		8-20	Final exam	All lectures included