



UNSW
AUSTRALIA

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Never Stand Still

Engineering Mechanical and Manufacturing Engineering

MTRN3020

MODELLING AND CONTROL OF MECHATRONIC SYSTEMS

3.	Block System Identification	PE2.2 Feedback
4.	Hardware Implementation	PE2.3 Applications

3. Technical Details

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4. Curriculum

Topic	Thursdays (1200-1400)	Location	Lecture Content	Demo/Lab	Suggested Readings
Introduction	Week 1	Colombo C	Mathematical System Computer Controlled Systems, Mathematical Modelling of Systems System Identification Discrete Time Control System Use of Design Packages Rapid Controller Prototyping, Implementation of Control Algorithms	None	Moodle lecture notes
Automatic Control Systems	Week 2	Colombo C	Control System Transfer Function Block Diagram Block Diagram Block Diagram Block Diagram Block Diagram Block Diagram Block Diagram Block Diagram	None	Moodle lecture notes
z-Transform	Week 3	Colombo C	z-Transform z-Transform z-Transform	None	Moodle lecture notes

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Week 4

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Assessment overview

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Program Intended Learning Outcomes	
PE1: Knowledge and Skill Base	PE1.1 C
	PE1.2 C
	PE1.3 I
	PE1.4 D
	PE1.5 K
	PE1.6 U
PE2: Engineering Application Ability	PE2.1 A
	PE2.2 F
	PE2.3 A
	PE2.4 A
PE3: Professional and Personal Attributes	PE3.1 E
	PE3.2 E
	PE3.3 C