MECHANICAL ENGINEERING
UNIVERSITY of WASHINGTON

Mechatronics Project Based Master's

Sample 4 Quarter Curriculum
(Projects and teams will be identified during Autumn of Year 1)

Course no.	Quarter	Credits
ME 564- Mechanical Engineering Analysis I	AUT Yr 1	3
ME 592- Mechatronics Master's Project	AUT Yr 1	1
ME 545 - Introduction to Control Theory	AUT Yr 1	3
ME 510 -Mathematical Foundations of Systems Theory	AUT Yr 1	4
ME 588- Dynamics and Vibrations	AUT Yr 1	3
Total credits		***10***

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Course no.	Quarter	Credits
ME 565- Mechanical Engineering Analysis II	WIN Yr 1	3
ME 592- Mechatronics Master's Project	WIN Yr 1	1
ME 547-Linear Systems Theory	WIN Yr 1	4
ME 470 -Mechanical Vibrations	Win Yr 1	4
Elective 1	Win Yr 1	3
Total credits		***12***

Course no.	Quarter	Credits
ME 592- Mechatronics Master's Project	SPR Yr 1	4
Elective 2	SPR Yr 1	3
Elective 3	SPR Yr 1	3
Total credits		***10***

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Course no.	Quarter	Credits
ME 592- Mechatronics Master's Project	AUT Yr 2	3
Elective 4	AUT Yr 2	4
Elective 5	AUT Yr 2	3
Total credits		***10***

Shaded courses are required

42

Potential Elective Coures

Course #	Course title
470	Mechanical Vibration
473	Instrumentation
477	Embedded Computing in Mechanical Systems
478	Finite Element Methods
510	Mathematical Foundations of Systems Theory
547	Linear Systems Theory
548	Linear Multivariable Control
578	Convex Optimization
549	Estimation and System Identification
550	Nonlinear Optimal Control

Course#	Course title
578	Convex Optimization
580	Geometric Methods for Non-Linear Control Systems
581	Digital Control
582	Introduction to Discrete Event Systems
583	Nonlinear Control Systems
585	System Identification and Adaptive Control
588	Dynamics and Vibrations
593	Feedforward Control
594	Robust Control
597	Networked Dynamic Systems