Sample 4 Quarter Curriculum

(Projects and teams will be identified during Autumn of Year 1)

Course no.	Quarter	Credits
ME 564	AUT Yr 1	3
ME 598M	AUT Yr 1	1
ME 547	AUT Yr 1	4
ME 473	AUT Yr 1	4
Total credits		**12**

Course no.	Quarter	Credits
ME 565	WIN Yr 1	3
ME 598M	WIN Yr 1	1
ME477	WIN Yr 1	4
Elective 1	WIN Yr 1	3
Total credits		**11**

Course no.	Quarter	Credits
ME 598M	SPR Yr 1	4
Elective 2	SPR Yr 1	3
Elective 3	SPR Yr 1	3
Total credits		**10**

Course no.	Quarter	Credits
ME 598M	AUT Yr 2	3
Elective 4	AUT Yr 2	3
Elective 5	AUT Yr 2	3
Total credits		**9**

Shaded courses are required

42

Potential Electives

Course #	Credits	Course
471	4	Automatic Control
473	4	Instrumentation
477	4	Embedded Computing in Mechanical Systems
478	4	Finite Element Methods
547	4	Linear Systems Theory
548	3	Linear Multivariable Control
578	4	Convex Optimization
549	3	Estimation and System Identification
550	3	Nonlinear Optimal Control
570	3	Manifolds and Geometry for Systems and Control
578	4	Convex Optimization
580	3	Geometric Methods for Non-Linear Control Systems
581	3	Digital Control
582	3	Introduction to Discrete Event Systems
583	3	Nonlinear Control Systems
585	3	System Identification and Adaptive Control
593	3	Feedforward Control
594	3	Robust Control
597	3	Networked Dynamic Systems

At least 1 course in computational or numerical analysis must be taken from the following list of approved courses.

Quarter	Course	Credits	Title
Autumn	AMATH 581	5	Scientific Computing
Autumn	AMATH 584	5	Applied Linear Algebra and Introductory Numerical Analysis
Winter	AA 540	3	Finite Element Analysis I
Winter	AA 543	3	Computational Fluid Dynamics
Winter	CESG 504	3	Finite Element Methods in Structural Mechanics
Winter	ME 578	4	Convex Optimization
Winter	ME 574	3	Introduction to Applied Parallel Computing for Engineers
Spring	ME 535	3	Computational Techniques in Mechanical Engineering