Department of Mechanical & Aerospace Engineering (MAE)
Pre/Co-requisite Reference Sheet

Aersopace Engineeringn (AE)				
Course	**Title**	**Prerequisites**	**Co-reqs**	**Offering**
201	Engineering Thermodynamics I	MA 242, (PY 208 or PY 202)		fall, spring, summer
206	Engineering Statics	C or better in both MA 241 and PY 205		fall, spring, summer
208	Engineering Dynamics	MA 242, C- or better in MAE 206		fall, spring, summer
214	Solid Mechanics	MA 242, C- or better in MAE 206		fall, spring, summer
250	*Introduction to Aerospace Engineering*		MAE 251	fall only
251	*Aerospace Vehicle Performance*	C or better in MA 241 and PY 205	CSC 113	fall only
252	*Aerodynamics I*	MA 242, C- or better MAE 251		spring only
253	*Experimental Aerodynamics I*		MAE 252	spring only
351	*Aerodynamics II*	MAE 252, C- or better in MAE 201		spring only
352	*Experimental Aerodynamics II*	MAE 253	MAE 351	spring only
361	*Dynamics & Controls*	MA 341, C- or better in MAE 208		fall only
371	*Aerospace Structures I*	C- or better in MAE 214 or CE 225		fall only
372	*Aerospace Vehicle Structures Lab*		MAE 371	fall only
405	*Controls Lab*		MAE 435	fall, spring, summer
435	*Principles of Automatic Control*	MAE 315 or MAE 361		fall, spring, summer
451	*Experimental Aerodynamics III*	MAE 352	MAE 458	fall only
480	*Aerospace Vehicle Design I*	MAE 252, MAE 371, (MAE 457 or 467)		fall only
481	*Aerospace Vehicle Design II*	MAE 480		spring only

Mechanical Engineering (ME)				
Course		**Prerequisites**	**Co-reqs**	**Offering**
200	*Introduction to Mechanical Engineering Design*	Sophomore or Junior standing in ME		fall only
201	Engineering Thermodynamics I	MA 242, (PY 208 or PY 202)		fall, spring, summer
206	Engineering Statics	C or better in both MA 241 and PY 205	MA 242	fall, spring, summer
208	Engineering Dynamics	MA 242, C- or better in MAE 206		fall, spring, summer
214	Solid Mechanics	MA 242, C- or better in MAE 206		fall, spring, summer
302	*Engineering Thermodynamics II*	CSC 113, C- or better in MAE 201		fall, spring, summer
305	*Mechanical Engineering Lab I*	PY 208, C- or better in MAE 206		fall, spring, summer
306	*Mechanical Engineering Lab II*	MAE 305	MAE 308, 310	fall, spring, summer
308	*Fluid Mechanics*	MA 242, C- or better in MAE 208		fall, spring, summer
310	*Heat Transfer Fundamentals*	MA 341, C- or better in MAE 201		fall, spring, summer
315	*Dynamics of Machines*	MA 341, C- or better in MAE 208		fall, spring, summer
316	*Strength of Mechanical Components*	C- or better in MAE 214 or CE 225		fall, spring, summer
405	*Controls Lab*		MAE 435	fall, spring, summer
415	*Analysis for Mechanical Engineering Design*	MAE 302, MAE 308, MAE 310, MAE 315, MAE 316		fall only
416	*Mechanical Engineering Design*	MAE 415		spring only
435	*Principles of Automatic Control*	MAE 315 or MAE 361		fall, spring, summer
482	*Engineering Entrepreneurship and New Product Development I*	MAE 302, MAE 308, MAE 310, MAE 315, MAE 316		fall only
483	*Engineering Entrepreneurship and New Product Development II*	MAE 482	MAE 484	spring only
484	*Engineering Entrepreneurship Senior Design Lab*		MAE 483	spring only

Technical Electives (AE and ME)				
Course		**Prerequisites**	**Co-reqs**	**Offering***
342	*Automotive Engineering*	MAE 201, MAE 308, MAE 315		spring only
403	*Air Conditioning*	MAE 302, MAE 308, MAE 310		spring only
406	*Energy Conservation in Industry*	MAE 302, MAE 310		fall only
407	*Steam and Gas Turbines*	MAE 302, (MAE 308 or MAE 252)		spring only
408	*Internal Combustion Engine Fundamentals*	MAE 302		fall only
410	*Modern Manufacturing Processes*	MAE 316 or MAE 371		fall only
412	*Design of Thermal System*	MAE 302, MAE 308, MAE 310		fall, spring
413	*Design of Mechanical Systems*	MAE 315, MAE 316		fall only
420	*Dynamic Analysis of Human Movement*	MAE 208		spring only
421	*Design of Solar Thermal Systems*	MAE 302, MAE 310		spring only
426	*Fundamentals of Product Design*	MA 241		spring only
430	*Applied Finite Element Analysis*	MAE 201, (MAE 316 or MAE 371)		fall, spring
440	*Non-Desctructive Testing and Evaluation*	Junior or Senior standing in engineering		fall only
455	*Boundary Layer Theory*	MAE 252 or MAE 308		fall only
456	*Computational Methods in Aerodynamics*	MAE 252, CSC 113		fall only
457	*Flight Vehicle Stability and Control*	MAE 252, (MAE 361 or MAE 315)		spring only
458	*Propulsion*	MAE 351		fall only
459	*Rocket Propulsion*	MAE 351 or MAE 302		fall only
467	*Introduction to Space Flight*	MAE 361 or MAE 315		spring only
472	*Aerospace Structures II*	MAE 371		spring only
495	*Special Topics in Mechanical and Aerospace Engineering*	varies		varies
496	*Undergraduate Project Work in Mechanical and Aerospace Enginee*	completion of some 300-level MAE courses		fall, spring, summer

** Courses listed in italics are only available to students post-CODA.*

* Tech elective offerings are subject to change and may not be offered every year.

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