

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

Aerospace 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	<i>Introduction to Aerospace Engineering</i>		MAE 251	fall only
251	<i>Aerospace Vehicle Performance</i>	C or better in MA 241 and PY 205	CSC 113	fall only
252	<i>Aerodynamics I</i>	MA 242, C- or better MAE 251		spring only
253	<i>Experimental Aerodynamics I</i>		MAE 252	spring only
351	<i>Aerodynamics II</i>	MAE 252, C- or better in MAE 201		spring only
352	<i>Experimental Aerodynamics II</i>	MAE 253	MAE 351	spring only
361	<i>Dynamics & Controls</i>	MA 341, C- or better in MAE 208		fall only
371	<i>Aerospace Structures I</i>	C- or better in MAE 214 or CE 313		fall only
372	<i>Aerospace Vehicle Structures Lab</i>		MAE 371	fall only
405	<i>Controls Lab</i>		MAE 435	fall, spring, summer
435	<i>Principles of Automatic Control</i>	MAE 315 or MAE 361		fall, spring, summer
451	<i>Experimental Aerodynamics III</i>	MAE 352	MAE 458	fall only
480	<i>Aerospace Vehicle Design I</i>	MAE 252, MAE 371, (MAE 457 or 467)		fall only
481	<i>Aerospace Vehicle Design II</i>	MAE 480		spring only

Mechanical Engineering (ME)				
Course	Title	Prerequisites	Co-reqs	Offering
200	<i>Introduction to Mechanical Engineering Design</i>	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	<i>Engineering Thermodynamics II</i>	CSC 113, C- or better in MAE 201		fall, spring, summer
305	<i>Mechanical Engineering Lab I</i>	PY 208, C- or better in MAE 206		fall, spring, summer
306	<i>Mechanical Engineering Lab II</i>	MAE 305	MAE 308, 310	fall, spring, summer
308	<i>Fluid Mechanics</i>	MA 242, C- or better in MAE 208		fall, spring, summer
310	<i>Heat Transfer Fundamentals</i>	MA 341, C- or better in MAE 201		fall, spring, summer
315	<i>Dynamics of Machines</i>	MA 341, C- or better in MAE 208		fall, spring, summer
316	<i>Strength of Mechanical Components</i>	C- or better in MAE 214 or CE 313		fall, spring, summer
405	<i>Controls Lab</i>		MAE 435	fall, spring, summer
415	<i>Analysis for Mechanical Engineering Design</i>	MAE 302, MAE 308, MAE 310, MAE 315, MAE 316		fall only
416	<i>Mechanical Engineering Design</i>	MAE 415		spring only
435	<i>Principles of Automatic Control</i>	MAE 315 or MAE 361		fall, spring, summer
482	<i>Engineering Entrepreneurship and New Product Development I</i>	MAE 302, MAE 308, MAE 310, MAE 315, MAE 316		fall only
483	<i>Engineering Entrepreneurship and New Product Development II</i>	MAE 482	MAE 484	spring only
484	<i>Engineering Entrepreneurship Senior Design Lab</i>		MAE 483	spring only

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