

Department of Aerospace Engineering and Mechanics

(Effective Fall 2013 – 126 hours)

FRESHMAN YEAR

Fall
16 Hrs

Placement	MATH 125 Calculus I MA 4	PH 105 MATH 126
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Placement	CH 101 Gen Chem NS 4	
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Enrollment in MATH 125 or higher	ENGR 103 Engineering Foundations ENGR 3	AEM 201
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MATH 125	F AEM 121 Intro to AE O 2	
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Placement or EN 099	EN 101 English Comp I FC 3	EN 102
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Spring
15 Hrs

MATH 125	MATH 126 Calculus II MA 4	PH 106 MATH 227 ME 215
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MATH 125	PH 105 Physics I NS 4	PH 106 AEM 201
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MATH 100	EC 110 Microeconomics SB 3	
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EN 101	EN 102 English Comp II FC 3	
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ENGR 103	ENGR 161 Small-Scale Engineering Graphics ENGR 1	
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SOPHOMORE YEAR

Fall
16 Hrs

MATH 126	MATH 227 Calculus III MA 4	MATH 238 AEM 461
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MATH 126 PH 105	PH 106 Physics II NS 4	ECE 320 AEM 471
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PH 105 MATH 125 ENGR 103	AEM 201 Statics ES 3	AEM 250 AEM 264 AEM 311
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MATH 125	F AEM 249 Algorithms ES 2	AEM 349
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MATH 126 MATH 227	MATH 237 Intro to Linear Algebra MA 3	AEM 349
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Spring
16 Hrs

MATH 227	MATH 238 Applied Diff Equations I MA 3	AEM 313 AEM 349 AEM 469 AEM 470 AEM 471
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AEM 201 MATH 126	AEM 250 & 251 Mechanics of Materials & Lab ES 3 + 1	AEM 341 AEM 470
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AEM 201 MATH 126	AEM 264 Dynamics ES 3	AEM 313 AEM 416 AEM 469
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AEM 201 MATH 227	AEM 311 Fluid Mechanics ES 3	AEM 313 AEM 416 AEM 480
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HU/L/FA Elective HU/L/FA 3		
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Legend

- F = Fall semester only
- S = Spring semester only
- C = Computer requirement
- CS = Computer Science
- ES = Engineering Science
- ENGR = Freshman Engineering

- FC = Freshman Composition
- HI/SB = History/Social Science & Behavioral Science
- HU/L/FA = Humanities/Literature/Fine Arts
- MATH = Mathematics
- NS = Natural Science
- W = Writing requirement

This is an unofficial flow chart prepared to assist students in planning their coursework. The University Catalog contains the official listing of academic information. Aerospace Engineering and Mechanics or other departments may change their prerequisites and corequisites from time to time as course content changes to keep pace with changing technologies. As these changes become known, they are posted on the academic bulletin board outside the department office. Students should consult the CATALOG and seek advisement prior to registering for courses.

Dr. John Baker, Department Head
Aerospace Engineering and Mechanics

Key

Pre-requisites	Course # Title	
Co-requisites	Area & Credits	Downward Dependencies

Department of Aerospace Engineering and Mechanics

(Effective Fall 2013 – 126 hours)

JUNIOR YEAR

Fall
16 Hrs

AEM 264 AEM 311 MATH 238	F AEM 313 Aerodynamics I ES 3	AEM 368 AEM 413 AEM 414
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AEM 249 AEM 250	F AEM 341 Aircraft Structures ES 3	AEM 402 AEM 451 AEM 452 AEM 461
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AEM 249 MATH 237 MATH 238	F AEM 349 Engineering Analysis ES/C 4	AEM 468 AEM 480
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MATH 126 or MATH 132	ME 215 Thermodynamics ES 3	AEM 413
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HU/L/FA Elective HU/L/FA 3		
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Spring
16 Hrs

AEM 313 AEM 349	S AEM 368 Flight Dynamics and Controls I ES 4	AEM 402 AEM 468
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ME 215 AEM 313	S AEM 413 Aerodynamics II ES 3	AEM 402
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AEM 341 MATH 227	S AEM 461 Computational Structures ES/C 3	
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PH 106 MATH 238	ECE 320 Fund Electrical Engineering ES 3	AEM 451 AEM 471
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HI/SB Elective HI/SB 3		
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SENIOR YEAR

Fall
15 Hrs

AEM 341 AEM 368 AEM 413 AEM 408	F AEM 402 Aerospace Design I ES 3	AEM 404
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AEM 413	F AEM 408 Propulsion ES 3	AEM 428
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AEM 368	F AEM 468 Flight Dynamics and Controls II ES 4	
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 AEM 402	F AEM 495 Professional Development ES/W 2	
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AEM Elective ES 3		
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Spring
16 Hrs

AEM 402	S AEM 404 Aerospace Design II ES 3	
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AEM 341 ECE 320 AEM 461	S AEM 451 Structural Design and Test ES/W 4	
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AEM Elective ES 3		
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HI/SB Elective HI/SB 3		
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HU/L/FA Elective HU/L/FA 3		
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