

Department of Aerospace Engineering and Mechanics

(Effective Fall 2010 or after – 126 hours)

FRESHMAN YEAR

Fall
15 Hrs

Placement	MATH 125 Calculus I MA 4	PH 105 MATH 126

Placement	CH 101 Gen Chem NS 4	

MATH 100	ENGR 111 Engineering the Future. ENGR 1	

MATH 125	ENGR 131 Eng'g Concepts and Design I ENGR 1	

MATH 112	F AEM 121 Intro to AE O 2	

Placement or EN 099	EN 101 English Comp I FC 3	EN 102

Spring
16 Hrs

MATH 125	MATH 126 Calculus II MA 4	PH 106 MATH 227 ME 215

MATH 125	PH 105 Physics I NS 4	PH 106 AEM 201

MATH 100	EC 110 Microeconomics SB 3	

EN 101	EN 102 English Comp II FC 3	

ENGR 131	ENGR 141 Eng'g Concepts and Design II ENGR 1	

MATH 112	ENGR 151 Fund Eng'g Graphics ENGR 1	

SOPHOMORE YEAR

Fall
16 Hrs

MATH 126	MATH 227 Calculus III MA 4	MATH 238 AEM 461

MATH 126 PH 105	PH 106 Physics II NS 4	ECE 320 AEM 471

PH 105 MATH 125 ENGR 151	AEM 201 Statics ES 3	AEM 250 AEM 264 AEM 311

MATH 125	F AEM 249 Algorithms C 2	AEM 349

MATH 126 MATH 227	MATH 237 Intro to Linear Algebra MA 3	AEM 349

Spring
16 Hrs

MATH 227	MATH 238 Applied Diff Equations I MA 3	AEM 313 AEM 349 AEM 469 AEM 470 AEM 471

AEM 201 MATH 126	AEM 250 Mechanics of Materials ES 3	AEM 341 AEM 470

AEM 250	AEM 251 Mechanics Lab ES 1	

AEM 201 MATH 126	AEM 264 Dynamics ES 3	AEM 313 AEM 416 AEM 469

AEM 201 MATH 227	AEM 311 Fluid Mechanics ES 3	AEM 313 AEM 416 AEM 480

PH 106 MATH 238	ECE 320 Fund Electrical Engineering ES 3	AEM 451 AEM 471

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. Stanley E. Jones, Department Head
Aerospace Engineering and Mechanics

Key

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

Department of Aerospace Engineering and Mechanics

(Effective Fall 2010 or after – 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
--------------------------------	--	-------------------------------

AEM 249 AEM 250	F AEM 341 Aircraft Structures ES 3	AEM 402 AEM 451 AEM 452 AEM 461
--------------------	--	--

AEM 249 MATH 237 MATH 238	F AEM 349 Engineering Analysis ES/C 4	AEM 468 AEM 480
---------------------------------	---	--------------------

MATH 126 or MATH 132	ME 215 Thermodynamics ES 3	AEM 413
----------------------------	----------------------------------	---------

HU/L/FA Elective HU/L/FA 3		
-------------------------------	--	--

Spring
16 Hrs

AEM 313 AEM 349	S AEM 368 Flight Dynamics and Controls I ES 4	AEM 402 AEM 468
--------------------	---	--------------------

ME 215 AEM 313	S AEM 413 Aerodynamics II ES 3	AEM 402
-------------------	---	---------

AEM 341 MATH 227	S AEM 461 Computational Structures ES 3	
---------------------	---	--

HU/L/FA Elective HU/L/FA 3		
-------------------------------	--	--

HI/SB Elective HI/SB 3		
---------------------------	--	--

SENIOR YEAR

Fall
15 Hrs

AEM 341 AEM 368 AEM 413 AEM 408	F AEM 402 Aerospace Design I ES 3	AEM 404
--	---	---------

AEM 413	F AEM 408 Propulsion ES 3	AEM 428
---------	--	---------

AEM 368	F AEM 468 Flight Dynamics and Controls II ES 4	
---------	--	--

AEM 402	F AEM 495 Professional Development ES/W 2	
---------	---	--

AEM Elective ES 3		
----------------------	--	--

Spring
16 Hrs

AEM 402	S AEM 404 Aerospace Design II ES 3	
---------	--	--

AEM 341 ECE 320 AEM 461	S AEM 451 Structural Design and Test ES/W 4	
-------------------------------	---	--

AEM Elective ES 3		
----------------------	--	--

HI/SB Elective HI/SB 3		
---------------------------	--	--

HU/L/FA Elective HU/L/FA 3		
-------------------------------	--	--

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. Stanley E. Jones, Department Head
Aerospace Engineering and Mechanics

Key

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