



**UNDERGRADUATE CURRICULUM GUIDE**  
**Bachelor of Science in Aerospace Engineering**  
 2004-2005 Catalog (Code: MAE\_BS02)

**FRESHMAN YEAR**

<b><u>FIRST SEMESTER</u></b>			<b><u>SECOND SEMESTER</u></b>		
<b><u>COURSE</u></b>	<b><u>TITLE</u></b>	<b><u>UNITS</u></b>	<b><u>COURSE</u></b>	<b><u>TITLE</u></b>	<b><u>UNITS</u></b>
MAE 101A	Intro to Aerospace Engineering	1	GEN ED	General Education (D1b)	3
UNIV 100	Intro to the University	1	PHYS 151	Mech. & Heat (B1b)	4
MATH 122	Calculus 1 (B2)	4	MATH 123	Calculus II (B2)	4
GEN ED	General Education (A2)	3	GEN ED	General Education (A3)	3
MAE 172	Engineering Graphics	3	GEN ED	General Education (B1a or C3 or E)	3
GEN ED	General Education (A1)	3			
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		15			17

**SOPHOMORE YEAR**

GEN ED	General Education (C1)	3	EE 211	Electric Circuits I	3
PHYS 152	Elec. & Magnetism (B1b)	4	EE 211L	Electric Circuits Laboratory	1
MATH 224	Anal. Geom. & Calc. III	4	MATH 370A	Applied Math I	3
MAE 205	Computer Methods in ME	2	MAE 371	Anal. Mech. II (Dynamics)	3
CE 205	Anal Mech I (Statics)	3	GEN ED	General Education (D2a)	3
			CHEM 111A	General Chemistry (B1b)	5
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		16			18

**JUNIOR YEAR**

MAE 333	Engr. Fluid Mechanics	3	MAE 453	Stability&Cont Aero Vehicles	3
MAE 373	Mech. of Deformable Bodies	3	MAE 334	Aerodynamics I	3
MAE 350	Flight Mechanics	3	MAE 365	Aerospace Structures I	3
GEN ED	General Education (D1a)	3	MAE 381	Space Environments	3
MAE 330	Engr. Thermodynamics I	3	ECON 300	Fund. of Economics (D2b)	3
GEN ED	General Education (C2a,b, or c)	3	MAE 390	AE Seminar & Comm. Skills	1
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		18			16

**SENIOR YEAR**

MAE 465	Aerospace Structures II	3	MAE 452	Propulsion	3
GEN ED*	General Education (C2a,b,or c)	3	MAE 486	Avionics Systems	3
MAE 434	Aerodynamics II	3	MAE 479	A/S System Design II	3
MAE 408	Systems Engr. & Integration	3	MAE XXX	Elective	3
MAE 483	Space Flight & Orbital Mech.	3	MAE 374	Mech. Prop. Matls. Lab	1
MAE 478	A/S System Design I	3	MAE 440	Aerodynamics Lab	1
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		18			14

**\*General Education:** A minimum of nine (9) units of Upper-Division (UD) are required. Six (6) units must be Upper-Division Interdisciplinary (UDI) in one particular THEME (please see the College of Engineering section in the University Catalog). A minimum of nine (9) units of Capstone courses (▲), with three (3) units of Global (●) and three (3) units of Human Diversity (◆), are required. Please consult a General Education advisor.

The above 132 units minimum program allows for a six (6) unit General Education waiver (3 units in category D2, and 3 in B1a or C3 or E). All IC and category A classes must be taken for a letter grade. Students are advised to plan their programs with care in order to meet all departmental and General Education requirements within 132units.