College of Engineering and Computer Science

Aerospace Engineering — Name _____

Fall 2017 — SUID _____

pr= prerequisite, co=corequisite

Minor/Second Major (if any): _____

		CREDIT	FIRST-YEAR		SOPHOMORE		JUNIOR		SENIOR		VAR
		GRADE	F	S	F	S	F	S	F	S	+/-
MATHEMATICS (15)											
MAT295	Calculus 1	(4)____	4								
MAT296	Calculus 2 (pr: MAT 295 min C-)	(4)____		4							
MAT397	Calculus 3 (pr: MAT 296 min C-)	(4)____			4						
MAT485	Diff Eqn & Matrix Algebra for Engrs (pr: MAT 397)	(3)____				3					
SCIENCES (12)											
CHE106	General Chem Lecture I (co: CHE 107)	(3)____	3								
CHE107	General Chem Lab I (co: CHE 106)	(1)____	1								
PHY211	General Physics 1 (co: PHY 221, MAT 295)	(3)____		3							
PHY221	General Physics Lab 1 (co: PHY 211)	(1)____		1							
PHY212	General Physics 2 (pr: PHY 211, 221, co: PHY 222, MAT 296)	(3)____			3						
PHY222	General Physics Lab 2 (co: PHY 212, MAT296)	(1)____			1						
WRITING SKILLS/SOCIAL SCIENCE/HUMANITIES (15)											
WRT105	Studio 1: Practices of Academic Writing	(3)____	3								
WRT205	Studio 2: Critical Research and Writing (pr: WRT 105)	(3)____		3							
SSH Elective	_____	(3)____	3								
SSH Elective	_____	(3)____		3							
SSH Elective	_____	(3)____			3						
PROGRAM CUSTOMIZATION (15)											
Course1	_____	(3)____					3				
Course2	_____	(3)____						3			
Course3	_____	(3)____							3		
Course4	_____	(3)____								3	
Course5	_____	(3)____								3	
ENGINEERING (23)											
ECS101	Intro. to Engr. & Comp. Sci.	(3)____	3								
ECS104	Engr. Comp Tools (co: MAT 295)	(3)____		3							
ECS221	Statics (pr: PHY 211, co: MAT 296)	(3)____			3						
ECS222	Dynamics (pr: ECS 221, MAT 296)	(3)____				3					
ECS325	Mechanics of Solids (pr: ECS 221, co: MAT 397)	(4)____				4					
ECS326	Engr. Materials,Prop. & Proc.	(3)____			3						
ELE231	Elec. Engr. Fundamentals 1 (pr: MAT 295)	(3)____					3				
ELE291	Elec. Engr. Laboratory 1 (co: ELE 231)	(1)____					1				
AEROSPACE ENGINEERING (48)											
AEE342	Aerodynamics (pr: MAE 341)	(4)____						4			
AEE343	Compressible Flow (pr: MAE 251, MAE 341)	(3)____						3			
AEE427	Aircraft Perfomance & Dynamics (pr: MAE 341)	(4)____							4		
AEE446	Propulsion (pr: AEE 343)	(3)____							3		
AEE471	Des. & Anal. of Aero. Struct. (pr: ECS 325)	(4)____							4		
AEE472	Syn. of Aerospace Systems (pr: AEE 427)	(4)____								4	
AEE577	Space Flight (pr: ECS 222)	(3)____								3	
MAE251	Thermodynamics (pr: PHY 211)	(4)____				4					
MAE284	Intro to CAD (pr: ECS 101)	(3)____				3					
MAE312	Engineering Analysis (pr: ECS 104, MAT 485)	(3)____					3				
MAE315	Mech/Aero Lab I (pr: ECS 325, co: MAE 341)	(3)____					3				
MAE321	Dynamics of Mech. Systems (pr: ECS 325, ECS 222, MAT 485)	(3)____						3			
MAE322	Control Systems for MAE (pr: MAT414 or 485, co: MAE321)	(3)____						3			
MAE341	Fluid Mechanics (pr: ECS 221, MAT 397, PHY 211)	(4)____					4				
TOTAL CREDITS		**128**	**17**	**17**	**17**	**17**	**17**	**16**	**14**	**13**	

*See reverse side for all notes

AEROSPACE ENGINEERING
Curriculum Notes
2017-2018

1. There are a total of 24 elective credits in the B.S. AEE program. These credits may be distributed in one of the following two ways:

   Option 1: A student may complete any University minor or second major that requires at least 12 credit hours beyond the core AEE curriculum. In addition to, or as part of, this minor or second major, at least 9 credit hours must be taken from the social sciences or humanities (SS/H). Excluding those courses that count towards the minor or second major, a maximum of 6 credit hours that are neither SS/H nor technical electives may be taken as part of the 24 elective credits.

   Option 2: A student who does not complete a University minor or second major must take at least 9 credits from the social sciences or humanities (SS/H), at least 6 credits of technical electives, and a maximum of 6 credit hours that are neither SS/H nor technical electives.

2. Technical electives consist of all 300 level and above courses offered by any department within the college of engineering and computer science or by the math or physics departments, except for ECS 391, ECS 392 and any course numbered 300, 400 or 500 that is offered outside of the MAE department. However, in some instances, these courses may be approved by petition. In addition, no more than 3 credit hours of technical electives may be taken outside of the MAE department.

3. Many technical electives in the MAE Department are scheduled on a 2-year rotation, so students should make themselves aware of technical elective offerings starting in their third year.

4. Social science or humanities (SS/H) courses are to be selected from the “Humanities List”, the “Social Sciences List”, or any foreign language course, as published in the SU Course Catalog.

5. Only courses taken (1) for a letter grade, (2) at the 300-level or greater, or (3) offered by the physical education department may be used to satisfy the requirements for the elective credits that are neither SS/H nor technical electives.