California State Polytechnic University, Pomona
Degree Curriculum Sheet

Plan (Major) **AEROSPACE ENGINEERING** Catalog Year **2012-2013** Name _____ TGA _____
Subplan/Option _____ Minimum Units Required **198** Student ID _____ GWT Satisfied _____Yes ____No

Required Core Courses

Course		Units
Introduction to Aeronautics Lab	ARO 101L	1
Introduction to Astronautics Lab	ARO 102L	1
Introduction to Aerospace Propulsion Lab	ARO 103L	1
Fundamentals of Aeronautics Lab	ARO 202L	1
Fundamentals of Astronautics Lab	ARO 203L	1
Fluid Dynamics	ARO 301	4
Low-Speed Aerodynamics and Performance	ARO 305	4
Astronautics	ARO 309	3
Gas Dynamics	ARO 311	3
Aircraft Jet Propulsion	ARO 312	4
Aerospace Feedback Control Systems	ARO 322/322L	3/1
Aerospace Structural Mechanics I	ARO 326/326L	3/1
Aerospace Structural Mechanics II	ARO 327	3
Aerospace Structures	ARO 329	3
Fluid Dynamics & Heat Transfer Lab	ARO 351L	1
High Speed Aerodynamics Lab	ARO 352L	1
Aerospace Structures Lab	ARO 357L	1
Heat, Mass & Momentum Transfer	ARO 401	4
High-Speed Aerodynamics	ARO 404	3
Aircraft Stability & Control	ARO 405	4
Advanced Dynamics & Vibrations of Aerospace Systems	ARO 406	4
Low Speed Aerodynamics Lab	ARO 435L	1
Senior Project	ARO 461	2
Senior Project	ARO 462	2
Aerosciences Lab	ARO 490L	1
Aerospace Vehicle Design I Lab	ARO 491L	2
Aerospace Vehicle Design II Lab	ARO 492L	2
Aerospace Vehicle Design III Lab	ARO 493L	2
	Total Units	**67**

Elective Core Courses

Course	Units
Approved Technical Electives	12
Total Units	**12**

Required Support Courses

Course		Units
Fundamentals of Systems Engineering Lab	ARO 201L	1
CHE Thermodynamics I	CHE 302	4
or Thermodynamics I	ME 301	(4)
General Chemistry	CHM 121	3
General Chemistry Lab (B3)	CHM 121L	1
Elements of Electrical Engineering	ECE 231/231L	3/1
Ethical Consideration in Tech & App Sci (C4)	EGR 402	4
Analytical Geometry/Calculus 1 (B4)	MAT 114	4
Analytical Geometry/Calculus II	MAT 115	4
Analytical Geometry/Calculus III	MAT 116	4
Calculus of Several Variables I	MAT 214	3
Calculus of Several Variables II	MAT 215	3
Differential Equations	MAT 216	4
or Elem Linear Algebra Diff Equations	MAT 224	(4)
Math Analysis of Engineering Problems	MAT 318	3
Vector Statics	ME 214	3
Vector Dynamics	ME 215	4
Materials Science and Engineering	MTE 207	3
General Physics (B1, B3)	PHY 131/131L	3/1
General Physics	PHY 132/132L	3/1
General Physics	PHY 133/133L	3/1
	Total Units	**64**

General Education Requirements

Area	Units	IGE (G.E. Alternative)	
Area A Communication & Critical Thinking	**12**	IGE 120	4
1 Oral Communication		IGE 121	4
2 Written Communication		IGE 122	4
3 Critical Thinking		IGE 220	4
Area B Mathematics & Natural Sciences	**16**	IGE 221	4
Select at least one lab course from sub-area 1 or 2.		IGE 222	4
1 Physical Science		IGE 223	4
2 Biological Science		IGE 224	4
3 Laboratory Activity		Area A1	4
4 Math/Quantitative Reasoning		Area A3	4
5 Science & Technology Synthesis		Area B	16
Area C Humanities	**16**	Area C1, C2 or C3	4
1 Visual and Performing Arts		Area C4	4
2 Philosophy and Civilization		Area D4	4
3 Literature and Foreign Language			
4 Humanities Synthesis			
Area D Social Sciences	**20**	See University Catalog for information on how IGE meets G.E. requirements.	
1 U.S. History, Constitution, American Ideals			
2 History, Economics and Political Science			
3 Sociology, Anthropology, Ethnic & Gender Studies			
4 Social Science Synthesis			
Area E Lifelong Understanding & Self Development	**4**		
Total Units	**68**		

American Institutions Courses that satisfy this requirement may also satisfy G.E. Area D1	8

American Cultural Perspectives Requirement Refer to catalog for list of courses that satisfy this requirement. Course may also satisfy major, minor, GE, or unrestricted elective requirements.	4

The following required support courses should be taken to satisfy the indicated GE Requirements to achieve the minimum units to degree listed at the top of this sheet.

Course		GE Area
General Physics	PHY 131/131L	B1, B3
and General Chemistry Lab	CHM 121L	B3
Analytical Geometry/Calculus 1	MAT 114	B4
Ethical Consideration in Tech & App Sci	EGR 402	C4

The remaining GE requirements may be satisfied by any course approved for that area.

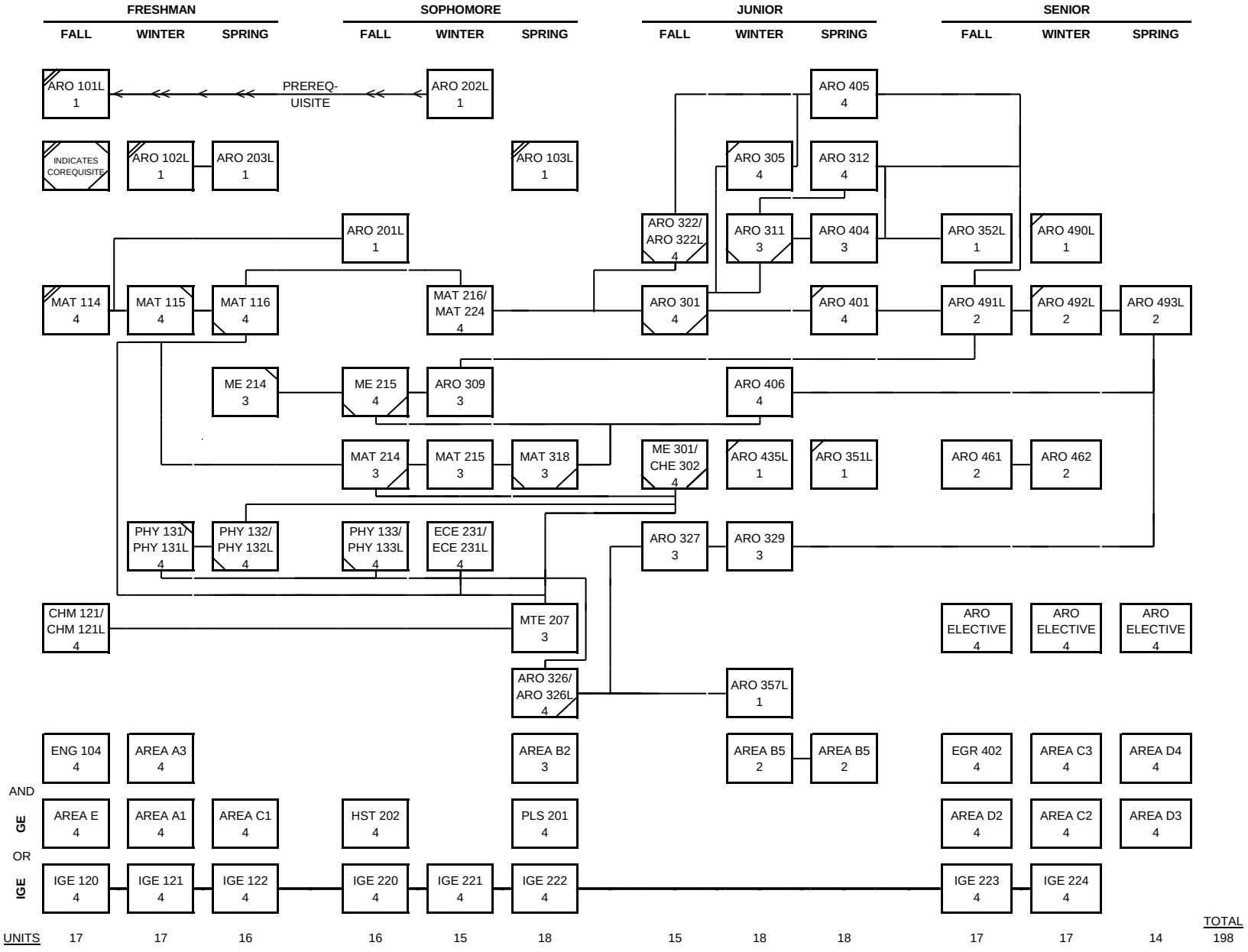
No more than 105 community college quarter units or 36 extension credit quarter units may be applied toward a Bachelor's degree.
A minimum 2.0 cumulative GPA is required in core (including option) courses, Cal Poly Pomona courses, and overall work completed in order to receive a degree in this major.

CALIFORNIA STATE POLYTECHNIC UNIVERSITY, POMONA
AEROSPACE ENGINEERING

NAME: _____

CPID: _____

CURRICULUM FLOWSHEET, 2012-13



Revised: 11/7/11