

GEOMATICS ENGINEERING MAJOR (2008 - 2009) INTELLECTUAL FOUNDATIONS PROGRAM (IFP) AND FOREIGN LANGUAGE REQUIREMENTS

ENGLISH COMPOSITION (6 credits, 2 courses, **must get a C or better**)

ENC 1101	College Writing 1 (Gordon Rule Writing) (3 credits)
ENC 1102	College Writing 2 (Gordon Rule Writing) (3 credits)

MATHEMATICS (12 credits, 3 courses) (Gordon Rule, **must get a C or better**) Calculus requires a solid background in algebra and trigonometry. This background, if not attained in high school, can be attained at FAU by taking College Algebra (MAC 1105), Trigonometry (MAC 1114) and Pre-calculus Algebra (MAC 1140) or Pre-calculus Algebra and Trigonometry (MAC 1147). (**Must take a placement test before registering for math courses**)

MAC 2253	Calculus for Engineers 1 (4 credits)
MAC 2254	Calculus for Engineers 2 (4 credits)
MAC 2313	Calculus with Analytic Geometry 3 (4 credits)

SOCIAL SCIENCES (9 credits, 3 courses, from 3 different departments)

OR	ANT 2000 (D)	Introduction to Anthropology (3 credits)
	ANT 2410	Culture and Society (3 credits)
	GEA 2000 (D)	World Geography (3 credits)
	ECO 2023	Microeconomic Principles (3 credits) Sophomore standing is a prerequisite
OR	ECO 2013	Macroeconomic Principles (3 credits) Sophomore standing is a prerequisite
OR	ECP 2002	Contemporary Economic Issues (3 credits) for Non-Business majors
	PAD 2258	Changing Environment of Society, Business & Govt. (3 credits)
OR	POS 1041	The Government of the United States (3 credits)
	INR 2002	Introduction to World Politics (3 credits)
OR	PSY 1012	General Psychology (3 credits)
	SYG 1000	Introductory Sociology (3 credits)
	SYG 2010	Social Problems (3 credits)

HUMANITIES (9 credits, 3 courses) Choose **one** from the following 6 courses.

ARC 2208	Culture and Architecture: Master Builder (3 credits)
ARH 2000	Art Appreciation (3 credits) (Cannot take for P/F for Geomatics Engineering major)
DAN 2100	Appreciation of Dance (3 credits)
FIL 2000 (D)	Film Appreciation (3 credits)
MUL 2010	History and Appreciation of Music (3 credits)
THE 2000	Appreciation of Theater (3 credits)

AND choose **2** courses, from **2** different departments. (**must get a C or better**)

	LIT 2010	Interpretation of Fiction (Gordon Rule Writing, C or better) (3 credits)
OR	LIT 2030	Interpretation of Poetry (Gordon Rule Writing, C or better) (3 credits)
OR	LIT 2040	Interpretation of Drama (Gordon Rule Writing, C or better) (3 credits)
	WOH 2012 (D)	History of Civilization (Gordon Rule Writing, C or better) (3 credits)
OR	PHI 2010 (D)	Introduction to Philosophy (Gordon Rule Writing, C or better) (3 credits)

SCIENCE (12 credits from two departments, ALL 3 courses required)

CHEMISTRY (C or better required)

CHM 2045&L	General Chemistry I w/lab (4 credits)
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PHYSICS (C or better required)

PHY 2043 & PHY 2048 L	Physics for Engineers I (3 credits) & General Physics I lab (1 credit)
(MAC 2311 is prereq. & MAC 2312 is recommended as coreq.)	
PHY 2044 & PHY 2049 L	Physics for Engineers II (3 credits) & General Physics II lab (1 credit)

FOREIGN LANGUAGE - NONE REQUIRED, but **must meet Foreign Language ADMISSION Requirement - see catalog.**

For questions related to this requirement, consult an academic advisor.

CLAST: Satisfy the College Level Academic Skills Test (CLAST). See catalog.

ELECTIVES (0 cr. required) - Free Electives in any college or subject, (0 cr minimum) - *needed to meet the 120 cr minimum for the degree*

◆NOTE: Honors Seminars SHALL BE ACCEPTED AS MEETING THE GORDON RULE WRITING REQUIREMENT. See the Freshman Academic Advising Services for details.

D = Course has discussion section. Must register and attend both lecture and discussion.

MAJOR COURSES AND IN/OUT OF COLLEGE REQUIREMENTS

NON-MAJOR, IN AND OUT OF COLLEGE REQUIREMENTS (18 credits, 6 courses)

Communication (3 credits)

SPC 2601 Public Speaking (3 credits)

Math Core (6 credits, 2 courses)

MAP 3305 Engineering Math 1 (3 credits) – **MAC 2254 Calculus for Engineers 2 is a prereq**

STA 4032 Probability and Statistics for Engineers (3 credits - **MAC 2254 Calculus for Engineers 2 is a prereq**)

Geosciences Core (9 credits, 3 courses)

GIS 3015C Introduction to Maps and GIS w/Lab (3 credits)

GIS 4043C Principles of Geographic Information Systems (3 credits)

GIS 4035C Remote Sensing of the Environment (3 credits)

GEOMATICS ENGINEERING (54 credits minimum, 17 courses, **must get a “C” or better in each course**)

MAJOR CORE (51 credits, 16 courses) **ALL REQUIRED - Must get “C” or better in all courses.**

EGN 1002 Fundamentals of Engineering (3 credits) (to be taken 1st or 2nd semester)

SUR 2034 Introduction to Geomatics Engineering (3 credits)

SUR 2101L Plane Surveying w/Lab (4 credits)

SUR 3643C Surveying Data Analysis (3 credits)

SUR 3331L Photogrammetry w/Lab (3 credits)

SUR 3141C Automated Surveying and Mapping (4 credits)

SUR 3530 Introduction to Geodesy (3 credits)

SUR 3205L Engineering and Construction Surveying w/Lab (3 credits)

SUR 3463L Land Subdivision and Platting w/Lab (3 credits)

SUR 4670 Geomatics Engineering Design I (3 credits)

SUR 4403 Legal Aspects of Surveying (3 credits)

SUR 4536L Positioning with GPS w/Lab (3 credits)

EGN 4613 Engineering Economics (3 credits)

SUR 4672 Geomatics Engineering Design II (3 credits)

SUR 4430 Surveying Business Practices (3 credits)

PROFESSIONAL ELECTIVES -- (6 credits, 2 courses, **a grade of “C” or better required in each course**) Consult with an advisor for appropriate courses. Departmentally approved professional electives, selected in conjunction with your advisor.

Professional Elective (1) (3 credits)

Professional Elective (2) (3 credits)

48 credits Core Curriculum and Out of College Requirements

18 credits In and Out of College Requirements

6 credits Professional Electives

48 credits Geomatics Engineering Major core

120 CREDITS TOTAL

NOTE: See the catalog for specific requirements, course descriptions, and additional information. The requirements for some core curriculum & other courses may be satisfied by passing the appropriate AP or CLEP exam. Check with your advisor and college.

Geomatics Engineering majors have specific **GPA requirements** regarding math, science and major courses, check with department for specific information. No major course can be taken pass/fail.

All course selections should be made in consultation with an advisor.

STUDENTS ASSUME ALL RESPONSIBILITY FOR MEETING ALL GRADUATION REQUIREMENTS. (5/08)