

**BACHELOR OF SCIENCE IN MATHEMATICS – Dual Degree
CURRICULUM GUIDE
AND PROGRAM REQUIREMENTS CHECKLIST (2013-2014)**

Student:	Major: Mathematics – Dual Degree
Laker ID:	Semester: Fall
Advisement Dates:	Catalog Year:

A total of 120 credit hours are required for the Bachelor of Science in Mathematics.

All MATH courses must be with a grade of C or better. (A grade of S will satisfy this condition.)

No more than 3 credits of a grade of D can be used.

Area A – Essential Skills (9 Credits)						
A1	Complete Both Courses (6 credits)		Sem.	Grade	Credit	Comments
	ENGL 1101	English Comp. I			3	
	ENGL 1102	English Comp. II			3	
A2	Complete One Course (3 Credits)					
	MATH 1112	Trig & Anal. Geo.			3	
	MATH 1113	Pre-Calculus			3	
	MATH 1501	Calculus I			3*	
* MATH 1501 is a 4 credit course. The remaining 1 credit will be applied to Area F.						
Area B – Critical Thinking & Communication Skills (4 Credits)						
B1	Critical Thinking (3 Credits)					
	CRIT 1101	Critical Thinking			3	
B2	Complete one course (1 Credit)					
	COMM 1001	Pres. Speaking			1	
	COMM 1002	Pres. Applications			1	
	COMM 1110	Spoken Comm.			1**	
	FREN 1002	Elem. French II			1	
	SPAN 1002	Elem Spanish II			1	
** COMM 1110 is a 3 credit course. The remaining 2 credits will be applied to the General Electives						
AREA C – Humanities (6 Credits)						
C1	Complete one course (3 Credits)				3	
	ENGL 2111	World Literature			3	
	ENGL 2112	World Literature			3	
	ENGL 2121	British Literature I			3	
	ENGL 2122	British Literature II			3	
	ENGL 2131	American Literature I			3	
	ENGL 2132	American Literature II			3	
	FREN 2001	Inter. French I			3	
	FREN 2002	Inter. French II			3	
	PHIL 2010	Intro to World Philosophy			3	
	PHIL 2030 Recommended	Ethics/Hist/Cntmpry Pers.			3	
	SPAN 2001	Inter.Spanish I			3	
	SPAN 2002	Intermediate Spanish II			3	

C2	Complete one course (3 Credits)		Sem.	Grade	Credit	Comments
	ART 2301	Art of the Pre-Modern World			3	
	ART 2302	Art of the Modern World			3	
	CMS 2100	Introduction to Film			3	
	FREN 2001	Intermediate French I			3	
	FREN 2002	Intermediate French II			3	
	MUSC 2101	Music Appreciation			3	
	MUSC 2103	Introduction to World Music			3	
	PHIL 2040	Introduction to Aesthetics			3	
	SPAN 2001	Intermediate Spanish I			3	
	SPAN 2002	Intermediate Spanish II			3	
	THEA 1100	Theater Appreciation			3	
Area D - Natural Sciences and Mathematics (11 hours)						
D1	Complete 1 Science Sequence with Labs (B, C, or P) (8 hours)		Sem.	Grade	Credit	Comments
B	BIOL 1107	Principles of Biology I			3	
B	BIOL 1107L	Principles of Biology Lab I			1	
B	BIOL 1108	Principles of Biology II			3	
B	BIOL 1108L	Principles of Biology Lab II			1	
C	CHEM 1211	Principles of Chemistry I			3	
C	CHEM 1211L	Principles of Chemistry Lab I			1	
C	CHEM 1212	Principles of Chemistry II			3	
C	CHEM 1212L	Principles of Chemistry Lab II			1	
P	PHYS 2211	Principles of Physics I			3	
P	PHYS 2211L	Principles of Physics Lab I			1	
P	PHYS 2212	Principles of Physics II			3	
P	PHYS 2212L	Principles of Physics Lab II			1	

D2	Mathematics (3 Credits)		Sem.	Grade	Credit	Comments
	MATH 1501 ¹	Calculus I			3*	
	MATH 2502	Calculus II			3*	
1. MATH 1501 cannot be used in Area D2 if used in Area A2						
* MATH 1501 and MATH 2502 are 4 credit courses. The remaining 1 credit will be applied to Area F.						
Area E – Social Sciences (12 Credits)						
E1	American Government (3 Credits)		Sem.	Grade	Credit	Comments
	POLS 1101	Amer. Government			3	
E2	World History (3 Credits)					
	HIST 1111	Survey Pre-Modern World History			3	
	HIST 1112	Survey Modern World History			3	
	HIST 2750	Critical Trends and Issues in World His.			3	
	POLS 2401	Intro. To Global Issues			3	
E3	American History (3 Credits)					
	HIST 2111	Survey U.S. History to 1877			3	
	HIST 2112	Survey U.S. Hist. Since Reconst.			3	
E4	Behavioral Sciences (3 Credits)					
	SOCI 1101	Intro. to Soc.			3	
	PSYC 1101	Intro. to Psych.			3	
	WST 2010	Intro. to Women's Studies			3	
	AFAM 2010	Intro. to African-Amer. Studies			3	
Area F. Courses Related to Major (18 Credits)						
Required Course (9 or 12 Credits)			Sem.	Grade	Credit	Comments
	MATH 1501	Calculus I			1	
	MATH 2140	Intro. to Linear Alg.			3	
	MATH 2502	Calculus II			1 or 4	
	MATH 2503	Calculus III			4	
One Programming Class (3 Credits)						
	CSCI 1371	Computing for Engineers			3	
Other Courses (3 or 6 Credits) (So long as not used in previous Area)						
	CHEM 1211	Prin. of Chem. I			3	
	CHEM 1212	Prin. of Chem II			3	
	PHYS 2211	Prin. of Physics I			3	
	PHYS 2212	Prin. of Physics II			3	
	BIOL 1107	Prin. of Biology I			3	
	MATH 1231	Intro. to Statistics			3	
	MATH 2020	Intro. to Discrete Mathematics			3	

Upper Division Mathematics Classes (25-28 Hours)						
Required (13 Credits)			Sem.	Grade	Credit	Comments
	MATH 3005	Transitions to Higher Mathematics			3	
	MATH 3006	Communications in Mathematics			1	
	MATH 3110	Survey of Algebra			3	
	MATH 3303	ODE			3	
	MATH 3520	Intro. to Analysis			3	
Electives Group A (9 Credits)						
	MATH 3220	Applied Statistics			3	
	MATH 4231	Modern Geometry			3	
	MATH 4250	Elem. Number Theory			3	
	MATH 4303	PDE			3	
	MATH 4320	Numerical Anal.			3	
	MATH 4350	Graph Theory			3	
	MATH 4360	Combinatorics			3	
Electives Group B (3-6 Credits, 6 if Calc 1 in Area A) - check with Tony- is this an error on the Math sheet?						
	MATH 3003	Applied Math. Modeling			3	
	MATH 4800	Special Topics:			3	
	MATH xxxx	Course from Group A's list not used previously.			3	
Additional Requirements (5-11 Credits)						
The 22xx/22xxL Physics sequence is required for every engineering program at Georgia Tech except ISyE. Two additional science classes are required. The additional science requirements should be carefully chosen to satisfy the requirements of the particular engineering discipline at Georgia Tech. See Transfer Requirements by Engineering Discipline						
Economics Requirement (3 credits)						
	ECON 2105	Prin. of Macroecon.			3	
	ECON 2106	Prin. of Microecon.			3	
Science Requirement (2-8 credits, depending on Area F selections)						
	PHYS 2211	Prin. of Physics I			3	
	PHYS 2211L	Prin. of Phys. I Lab			1	
	PHYS 2212	Prin. of Physics II			3	
	PHYS 2212L	Prin. of Phys. II Lab			1	
	CHEM 1211	Prin. of Chem, I			3	
	CHEM 1211L	Prin. of Chem I Lab			1	
	CHEM 1212	Prin. of Chem II			3	
	CHEM 1212L	Prin. of Chem II Lab			1	
	BIOL 1107	Prin. of Biology I			3	
	BIOL 1107L	Prin. of Bio. I Lab			1	
	Science Electives	May be chosen from Chemistry, Biology, or Physics				

Total Core Curriculum Hours:	60
Upper Division Major Courses:	25-28
Additional Requirements:	5-11
Upper Division Engineering Electives:	24-27

IMPORTANT NOTES:

All MATH courses and Area F courses require a grade of “C” or better.

(A grade of “S” will satisfy this condition.)

A student may use at most one course with a grade of “D”.

Individual with disabilities who need to request accommodations should contact the Disability Resource Center, Student Center 255, (678) 466-5445, or DisabilityResourceCenter@Clayton.edu

DOCUMENTATION FOR COURSE SUBSTITUTIONS FOR ABOVE COURSES

AREA	REQ. COURSE	SUBSTITUTION	CR. HRS	COMMENTS

**A grade of C or better is required for all mathematics courses applied towards the major.
TOTAL CREDIT HOURS: 120**

Student Signature: _____
Date: _____

Advisor Signature: _____