

Cleveland State University
College of Sciences and Health Professions
Bachelor of Science in Mathematics

First Year

Fall Semester	Credits	Major	Gen Ed	Spring Semester	Credits	Major	Gen Ed
ASC 101 Introduction to University Life	1		INTRO	ENG 102 English II	3		W/C
ENG 101 English I	3		W/C	MTH 182 Calculus II	4	X	M/QL
MTH 181 Calculus I	4	X	M/QL	PHY 241 University Physics I (or PHY 243)	5	X	NS
Social Science Elective**	3		SS	Arts & Humanities Elective**	3		A&H
Science Elective^	3	X		General Elective*	2		
<i>Semester Total</i>	<i>14</i>			<i>Semester Total</i>	<i>17</i>		

Second Year

Fall Semester	Credits	Major	Gen Ed	Spring Semester	Credits	Major	Gen Ed
MTH 281 Multivariable Calculus	4	X		MTH 286 Intro to Differential Equations	3	X	
MTH 288 Linear Algebra	3	X		MTH 220 Intro to Discrete Mathematics	3	X	
PHY 242 University Physics II (or PHY 244)	5	X	NS	US Diversity Elective	3		DIV
Social Science Elective**	3		SS	Science Elective^	3	X	
				General Elective*	3		
<i>Semester Total</i>	<i>15</i>			<i>Semester Total</i>	<i>15</i>		

Third Year

Fall Semester	Credits	Major	Gen Ed	Spring Semester	Credits	Major	Gen Ed
MTH 300-Level Course^^	3	X		MTH 396 Junior Seminar	2	X	
MTH 300-Level Course^^	3	X		MTH 358 Abstract Algebra (Recommended as 300-level elective)	3	X	WAC
Science Elective^	3	X		MTH 300-Level Course^^	3	X	
Arts & Humanities Elective**	3		A&H	African American Experience Elective	3		DIV
Upper-Division General Elective*	3			Science Elective^	3	X	
<i>Semester Total</i>	<i>15</i>			<i>Semester Total</i>	<i>14</i>		

Fourth Year

Fall Semester	Credits	Major	Gen Ed	Spring Semester	Credits	Major	Gen Ed
MTH 400-Level Course^^	3	X		MTH 400-Level Course^^	3	X	
MTH 400-Level Course^^	3	X		MTH 496 Senior Project	3	X	WAC; CAP
Writing Across the Curriculum Elective	3		WAC	Upper-Division General Elective*	3		
Upper-Division General Elective*	3			Upper-Division General Elective*	3		
Upper-Division General Elective*	3			General Elective*	3		
Apply for Spring graduation by the middle of this term							
<i>Semester Total</i>	<i>15</i>			<i>Semester Total</i>	<i>15</i>		
<i>Degree Total (as listed in above sample): 120 (120 hours minimum required to earn degree)</i>							

Assumptions: college-level readiness in MTH & ENG; no Foreign Language Deficiency

College/ Program Notes:

The plan above is a suggested guide to ensure that all General Education, College, University, and Major requirements are met within 4 years of study. Students may deviate from the suggested placement of Gen Ed courses, although the M/QL and W/C requirements should be completed during the first year of study.

*Electives ensure that a student accumulates the minimum credit hour totals needed for graduation. Students must have a **minimum of 120 total credit hours**, of which a **minimum of 42 credit hours** must be upper division (300 or 400-level courses). Depending upon other elective choices made, students may not need as many electives as indicated above, or may need additional electives.

^Science Electives should be chosen from one or any combination of the following fields (courses numbered 200-level or higher): BIO, GEO, EVS, CHM, PHY, and CIS **OR** from STA 347,421,431,435,436,467. Please refer to the Undergraduate Catalog for more details.

^^STA 323 and 424/425 can be used to satisfy the MTH 300 or 400 level electives requirement

^^300/400 Math offerings are on annual rotations and consultation with an advisor is highly recommended to plan them accordingly

University Notes:

Gen Ed Key:

INTRO = Introduction to University Life (one course)

W/C = Writing/Composition (two courses; C or better required)

M/QL = Mathematics/Quantitative Literacy (two courses)

NS = Natural Sciences (two courses, one of which must have a lab)

SS = Social Sciences (two courses from different departments)**

A&H = Arts & Humanities (two courses from different departments)**

DIV = Social Diversity (two courses; one US Diversity and one African American Experience)

WAC/SPAC = Writing/Speaking Across the Curriculum (three courses, one in the major; C or better required)

CAP = Capstone

** of the four total SS and A&H courses, one must be focused on Africa, Latin America, Asia or the Middle East (ALAAME)

Cleveland State University
College of Sciences and Health Professions
 Bachelor of Science in Mathematics
CSUteach (license in Education)

First Year										
Fall Semester	Credits	Major	License	Gen Ed	Spring Semester	Credits	Major	License	Gen Ed	
ASC 101: Intro to University Life	1			Intro	EDC 200: Diversity in Educational Settings	3		x	DIV	
ENG 101: College Writing I	3			W/C	ENG 102: College Writing II	3			W/C	
Science Elective (200 or above)	3	x		NS	PHY 241/243/H: University Physics I	5	x		NS	
PSY 221: Adolescent Psychology	3		x	SS	Social Science Elective (**ALAAME)	3			SS	
MTH 181: Calculus I	4	x	x	M/QL	MTH 182: Calculus II	4	x	x	M/QL	
<i>Semester Total</i>	14				<i>Semester Total</i>	18				

Second Year										
Fall Semester	Credits	Major	License	Gen Ed	Spring Semester	Credits	Major	License	Gen Ed	
EUT 201: Step 1: Inquiry Approaches to Teaching	1		x		EDB 242: Introduction to Education	3		x	DIV	
MTH 288: Linear Algebra	3	x	x		MTH 286: Differential Equations	3	x			
MTH 281: Multivariable Calculus	4	x	x		MTH 220: Discrete Mathematics	3	x	x		
Arts & Humanities Elective (**ALAAME)	3			A&H	Science Elective (200 or above)	3	x			
PHY 242/244/H: University Physics II	5	x		NS	African American Experience Elective	3			DIV	
<i>Semester Total</i>	16				<i>Semester Total</i>	15				

Third Year										
Fall Semester	Credits	Major	License	Gen Ed	Spring Semester	Credits	Major	License	Gen Ed	
EDB 302: Psychological Foundations of Education	3		x	WAC	EUT 305: Classroom Interactions	3		x		
MTH 301: Introduction to Number Theory	3	x	x		MTH 358: Abstract Algebra	3	x	x	WAC	
MTH 333: Geometry	3	x	x		MTH 4xx Elective	3	x			
EDL 305: Content Area Literacy	3		x		MTH 201: Functions & Modeling	3		x		
STA 323: Statistical Methods	3	x	x		MTH 396: Junior Seminar	2	x	x		
<i>Semester Total</i>	15				<i>Semester Total</i>	17				

Fourth Year										
Fall Semester	Credits	Major	License	Gen Ed	Spring Semester	Credits	Major	License	Gen Ed	
EUT 415: Project Based Instruction in Mathematics	3		x		EST 499: <i>CSUteach</i> STEM Apprentice Teaching II	6		x		
EST 399: <i>CSUteach</i> STEM Apprentice Teaching I	1		x		EUT 210: Perspectives on Science & Math	3		x	A&H/WAC	
EUT 311: Research Methods	3		x	WAC	MTH 496: Senior Project	3	x		WAC/CAP	
STA 424: Probability Theory & Application	3	x	x							
ESE 400: Introduction to Special Education	3		x	WAC						
MTH 4xx Elective	3	x								
Apply for Spring graduation prior to Sep 9th										
<i>Semester Total</i>	16				<i>Semester Total</i>	12				
Degree Total: 123										

Assumptions: college-level readiness in MTH & ENG; no Foreign Language Deficiency

123

College/ Program Notes:

The plan above is a suggested guide to ensure that all General Education, College, University, and Major requirements are met within 4 years of study. Students may deviate from the suggested placement of Gen Ed courses, although the M/QL and W/C requirements should be completed during the first year of study.

*Electives ensure that a student accumulates the minimum credit hour totals needed for graduation. Students must have a **minimum of 120 total credit hours**, of which a **minimum of 42 credit hours** must be upper division (300 or 400-level courses). Depending upon other elective choices made (3 credit hour vs. 4 credit hour courses), students may not need as many general electives as indicated above, or may need additional electives.

University Notes:

Gen Ed Key:	
INTRO = Introduction to University Life (one course)	SS = Social Sciences (two courses from different departments)
W/C = Writing/Composition (two courses; C or better required)	A&H = Arts & Humanities (two courses from different departments)
M/QL = Mathematics/Quantitative Literacy (two courses)	DIV = Social Diversity (two courses; one US Diversity and one African American Experience)
NS = Natural Sciences (two courses, one of which must have a lab)	WAC/SPAC = Writing/Speaking Across the Curriculum (three courses, one in the major; C or better required)
	CAP = Capstone
	** of the SS and A&H courses, one must be focused on Africa, Latin America, Asia or the Middle East (ALAAME)

This information is provided solely for the convenience of the reader, and the University expressly disclaims any liability which may otherwise be incurred. This publication is neither a contract nor an offer to make a contract. While every effort has been made to ensure the accuracy of the information, the University reserves the right to make changes at any time with respect to course offerings, degree requirements, services provided, or any other subject addressed herein.

Cleveland State University
College of Sciences and Health Professions
 Bachelor of Science in Mathematics
 CSUteach (minor in Physics, license in Education)

First Year														
Fall Semester	Credits	Major	License	Gen Ed	Spring Semester	Credits	Major	License	Gen Ed	Summer Semester	Credits	Major	License	Gen Ed
ASC 101: Intro to University Life	1			Intro										
ENG 101: College Writing I	3			W/C	ENG 102: College Writing II	3			W/C					
Arts & Humanities Elective (**ALAAME)	3			A&H	PHY 241/243/H: University Physics I	5	x	x	NS					
PSY 221: Adolescent Psychology	3		x	SS	BIO 380/381: BIO Content Mid Sch Teach & Lab	4		x						
MTH 181: Calculus I	4	x	x	M/QL	MTH 182: Calculus II	4	x	x	M/QL					
<i>Semester Total</i>	14				<i>Semester Total</i>	16				<i>Semester Total</i>	0			

Second Year														
Fall Semester	Credits	Major	License	Gen Ed	Spring Semester	Credits	Major	License	Gen Ed	Summer Semester	Credits	Major	License	Gen Ed
EUT 201: Step 1: Inquiry Approaches to Teaching	1		x		EDB 242: Introduction to Education	3		x	DIV	STA 323: Statistical Methods	3	x	x	
MTH 288: Linear Algebra	3	x	x		MTH 286: Differential Equations	3	x			EDC 200: Div in Edu Settings	3		x	DIV
MTH 281: Multivariable Calculus	4	x	x		MTH 220: Discrete Mathematics	3	x	x						
EVS 206: Intro to Environmental Science	3		x	NS	MTH 201: Functions & Modeling	3		x						
PHY 242/244/H: University Physics II	5	x	x	NS	PHY 330: Modern Physics	3		x						
<i>Semester Total</i>	16				<i>Semester Total</i>	15				<i>Semester Total</i>	6			

Third Year														
Fall Semester	Credits	Major	License	Gen Ed	Spring Semester	Credits	Major	License	Gen Ed	Summer Semester	Credits	Major	License	Gen Ed
EDB 302: Psychological Foundations of Education	3		x	WAC	EUT 305: Classroom Interactions	3		x		EDL 305 Content Area Literacy	3		x	
MTH 301: Introduction to Number Theory	3	x	x		MTH 358: Abstract Algebra	3	x	x	WAC	Social Science Elective (**ALAAME)	3		x	
MTH 333: Geometry	3	x	x		MTH 4xx Elective	3	x							
African American Experience Elective	3			DIV	CHM 380: Prin of Chem Mid Sch Teachers	3		x						
PHY 470: Environmental Physics	3	x	x		ESE 400: Introduction to Special Education	3		x	WAC					
					MTH 396: Junior Seminar	2	x							
<i>Semester Total</i>	15				<i>Semester Total</i>	17				<i>Semester Total</i>	6			

Fourth Year														
Fall Semester	Credits	Major	License	Gen Ed	Spring Semester	Credits	Major	License	Gen Ed	Summer Semester	Credits	Major	License	Gen Ed
EUT 415: Project Based Instruction in Mathematics	3		x		EST 499: CSUteach STEM Apprentice Teaching II	6		x						
EUT 417: Project Based Instruction in Science	3		x		EUT 210: Perspectives on Science & Math	3		x	A&H/WAC					
EST 399: CSUteach STEM Apprentice Teaching I	1		x		MTH 496: Senior Project	3	x		WAC					
STA 424: Probability Theory & Application	3	x	x		MTH 4xx Elective	3	x							
EUT 311: Research Methods	3		x	WAC	PHY 498: Capstone Senior Project	1	x		CAP					
PHY 474: Thermal Physics	3	x	x											
Apply for Spring graduation prior to Sep 9th														
<i>Semester Total</i>	16				<i>Semester Total</i>	16				<i>Semester Total</i>	0			
<i>Degree Total: 137</i>														

Assumptions: college-level readiness in MTH & ENG; no Foreign Language Deficiency

137

College/ Program Notes:

The plan above is a suggested guide to ensure that all General Education, College, University, and Major requirements are met within 4 years of study. Students may deviate from the suggested placement of Gen Ed courses, although the M/QL and W/C requirements should be completed during the first year of study.

*Electives ensure that a student accumulates the minimum credit hour totals needed for graduation. Students must have a **minimum of 120 total credit hours**, of which a **minimum of 42 credit hours** must be upper division (300 or 400-level courses). Depending upon other elective choices made (3 credit hour vs. 4 credit hour courses), students may not need as many general electives as indicated above, or may need additional electives.

University Notes:

Gen Ed Key:	SS = Social Sciences (two courses from different departments)
INTRO = Introduction to University Life (one course)	A&H = Arts & Humanities (two courses from different departments)
W/C = Writing/Composition (two courses; C or better required)	DIV = Social Diversity (two courses; one US Diversity and one African American Experience)
M/QL = Mathematics/Quantitative Literacy (two courses)	WAC/SPAC = Writing/Speaking Across the Curriculum (three courses, one in the major; C or better required)
NS = Natural Sciences (two courses, one of which must have a lab)	CAP = Capstone
** of the SS and A&H courses, one must be focused on Africa, Latin America, Asia or the Middle East (ALAAME)	

This information is provided solely for the convenience of the reader, and the University expressly disclaims any liability which may otherwise be incurred. This publication is neither a contract nor an offer to make a contract. While every effort has been made to ensure the accuracy of the information, the University reserves the right to make changes at any time with respect to course offerings, degree requirements, services provided, or any other subject addressed herein.