UNIVERSITY OF WEST GEORGIA

Mathematics, B.S. (Pure and Applied Mathematics Track)

Core IMPACTS Curriculum	HRS	GR
Core IMPACTS Area I - Institutional Priorities	**4-5**	
1. Written and Oral Communication One of the following is required of all majors. Choose from the following: ART 2000, ANTH 110, COMM 1100, COMM 1110, ENGL 2000, ENGL 2050 (or) THEA 2050, PHIL 2020, or any internationl language 1001, 1002	3	
2. Other Institutional Options ANTH 1100, BUSA 1900, CS 1000, LIBR 2100, MUSC 1110, XIDS 2001, XIDS 2002	1-2	
Core IMPACTS Area M - Mathematics and Quantitative Skills	**3**	
Advised to take MATH 1113	3-4	
Core IMPACTS Area P - Political Science and U.S. History (Citizenship)	**6**	
1. American / United States History HIST 2111 or 2112	3	
2. American / Georgia Government POLS 1101	3	
Core IMPACTS Area A - Arts, Humanities & Ethics (Humanities)	**6**	
1. Fine Arts XIDS 2100, ART 1201, ART 2201, ART 2202, FILM 2080, MUSC 1100, MUSC 1120, THEA 1100	3	
2. Humanities XIDS 2100, COMM 1154,ENGL 2110, ENGL 2120, ENGL 2130, ENGL 2180, ENGL 2190, FREN 1001, GRMN 1001, SPAN 1001, FREN 1002, GRMN 1002, SPAN 1002, FREN 2001, GRMN 2001, SPAN 2001, FREN 2002, GRMN 2002, SPAN 2002, FORL 2200, FORL 2300, PHIL 2010, PHIL 2030	3	
Core IMPACTS Area C - Communicating in Writing	**6**	
ENGL 1101	3	
ENGL 1102	3	
Core IMPACTS Area T - Technology, Mathematics, and Sciences (STEM)	**10-11**	
1. Science Courses ANTH 1105, ASTR 2313(L), BIOL 1010(K)(L), BIOL 1012, BIOL 1013, BIOL 1014, BIOL 1015, BIOL 1107(L), BIOL 1108(L), CHEM 1100(L), CHEM 1151(L), CHEM 1152(L), CHEM 1211(K)(L), CHEM 1212(K)(L), CHEM 1230K, GEOG 1111, GEOG 1112(L), GEOG 1113(L), GEOG 2202(L), GEOG 2553, GEOL 1121(L), GEOL 1122(L), GEOL 1123(L), GEOL 2503, GEOL 2523, GEOL 2553, PHYS 1111(L), PHYS 1112(L), PHYS 2211(L), PHYS 2212(L), XIDS 2202	7-8	
2. Mathematics, Science, and Quantitative Technology Courses Advised to take MATH 1634	3-4	
Core IMPACTS Area S - Social Sciences	**6**	
1. World History HIST 1111 or 1112	3	
2. Social Science Elective Courses ANTH 1004, ANTH 1102, CRIM 1100, ECON 2100, ECON 2105, ECON 2106, GEOG 1013, GEOG 2503, PHIL 2130, POLS 2201, PSYC 1101, SOCI 1101, SOCI 1160, XIDS 2300, XIDS 2301	3	

Field of Study	HRS	GR
MATH 2009 (Sophomore Seminar)	2	
MATH 2644 (Calculus II)	4	
MATH 2654 (Calculus III)	4	
MATH 2853 (Elementary Linear Algebra)	3	
CS 1300 (Introduction to Computing)	4	

Major Course Options	HRS	GR
MATH 3003 (Transition to Advanced Mathematics)	3	
MATH 3203 (Mathematical Probability)	3	
MATH 3243 (Advanced Calculus)	3	
MATH 3303 (Ordinary Differential Equations)	3	
MATH 4043 (Number Theory)	3	
MATH 4233 (College Geometry)	3	
Numerical Analysis or Real Analysis: Choose one of MATH 4013 or MATH 4253	3	
Abstract Algebra or Linear Algebra: Choose one of MATH 4413 or MATH 4513	3	
Combinatorics or Graph Theory: Choose one of MATH 4473 or MATH 4483	3	
Pathway: (Choose 9 additional hours of credit from one of the following pathways)	**9**	
Pure: *9 hours of 3XXX or 4XXX MATH, (excluding MATH 3703, 3803, 4713, 4753, 4773, 4863)*: MATH 3873, MATH 4013, MATH 4043, MATH 4213, MATH 4233, MATH 4253, MATH 4353, MATH 4363, MATH 4413, MATH 4423, MATH 4473, MATH 4483, MATH 4513, MATH 4523, MATH 4613, MATH 4803, MATH 4813, MATH 4823, MATH 4833, MATH 4843, MATH 4873, MATH 4885, MATH 4986	9	
Applied: 9 hours of directed electives consisting of 2XXX or higher courses selected from one of the lists below. *Note: For students taking directed electives, at least 9 credit hours from the combined general electives and directed electives must be at the 3000 level or above.* ACCT, ECON, FINC, MGMT, MKTG, SPMG, BIOL, CHEM, PHYS, GEOL, CS, COMP, PHIL, PSYC, SOCI	9	
Accelerated BS to MAT: Three graduate level courses that will count toward both the BS and MAT degrees. • CEPD 6101 Psychology of Classroom Learning • MEDT 6401 Instructional Technology • Graduate Math Course (Choose one course from: MATH 5013, MATH 5253, MATH 5413, MATH 5473, MATH 5483, MATH 5513, MATH 5823, MATH 5833	9	
General Electives: For students taking directed electives, at least 9 credit hours from the combined general electives and directed electives must be at the 3000 level or above.	**21**	
High-Impact Practice & Professional Preparation: If a student takes both courses, the Math Internship will count as a Math Elective or as an Additional Stats Course. • MATH 4983 (Senior Project) • MATH 4986 (Internship)	**3**	
Total	**120**	

UNIVERSITY OF WEST GEORGIA

Mathematics, B.S. (Applied Statistics and Data Analytics Track)

Core IMPACTS Curriculum	HRS	GR
Core IMPACTS Area I - Institutional Priorities	4-5	
1. Written and Oral Communication One of the following is required of all majors. Choose from the following: ART 2000, ANTH 110, COMM 1100, COMM 1110, ENGL 2000, ENGL 2050 (or) THEA 2050, PHIL 2020, or any internationl language 1001, 1002	3	
2. Other Institutional Options ANTH 1100, BUSA 1900, CS 1000, LIBR 2100, MUSC 1110, XIDS 2001, XIDS 2002	1-2	
Core IMPACTS Area M - Mathematics and Quantitative Skills	3	
Advised to take MATH 1113	3-4	
Core IMPACTS Area P - Political Science and U.S. History (Citizenship)	6	
1. American / United States History HIST 2111 or 2112	3	
2. American / Georgia Government POLS 1101	3	
Core IMPACTS Area A - Arts, Humanities & Ethics (Humanities)	6	
1. Fine Arts XIDS 2100, ART 1201, ART 2201, ART 2202, FILM 2080, MUSC 1100, MUSC 1120, THEA 1100	3	
2. Humanities XIDS 2100, COMM 1154,ENGL 2110, ENGL 2120, ENGL 2130, ENGL 2180, ENGL 2190, FREN 1001, GRMN 1001, SPAN 1001, FREN 1002, GRMN 1002, SPAN 1002, FREN 2001, GRMN 2001, SPAN 2001, FREN 2002, GRMN 2002, SPAN 2002, FORL 2200, FORL 2300, PHIL 2010, PHIL 2030	3	
Core IMPACTS Area C - Communicating in Writing	6	
ENGL 1101	3	
ENGL 1102	3	
Core IMPACTS Area T - Technology, Mathematics, and Sciences (STEM)	10-11	
1. Science Courses ANTH 1105, ASTR 2313(L), BIOL 1010(K)(L), BIOL 1012, BIOL 1013, BIOL 1014, BIOL 1015, BIOL 1107(L), BIOL 1108(L), CHEM 1100(L), CHEM 1151(L), CHEM 1152(L), CHEM 1211(K)(L), CHEM 1212(K)(L), CHEM 1230K, GEOG 1111, GEOG 1112(L), GEOG 1113(L), GEOG 2202(L), GEOG 2553, GEOL 1121(L), GEOL 1122(L), GEOL 1123(L), GEOL 2503, GEOL 2523, GEOL 2553, PHYS 1111(L), PHYS 1112(L), PHYS 2211(L), PHYS 2212(L), XIDS 2202	7-8	
2. Mathematics, Science, and Quantitative Technology Courses Advised to take MATH 1634	3-4	
Core IMPACTS Area S - Social Sciences	6	
1. World History HIST 1111 or 1112	3	
2. Social Science Elective Courses ANTH 1004, ANTH 1102, CRIM 1100, ECON 2100, ECON 2105, ECON 2106, GEOG 1013, GEOG 2503, PHIL 2130, POLS 2201, PSYC 1101, SOCI 1101, SOCI 1160, XIDS 2300, XIDS 2301	3	

Field of Study	HRS	GR
MATH 2009 (Sophomore Seminar)	1	
MATH 2644 (Calculus II)	4	
MATH 2654 (Calculus III)	4	
MATH 2853 (Elementary Linear Algebra)	3	
CS 1300 (Introduction to Computing)	4	

Major Course Options	HRS	GR
Track Requirements	27	
MATH 1401 (Elementary Statistics)	3	
MATH 3203 (Mathematical Probability)	3	
MATH 3873 (Statistical Programming)	3	
MATH 4213 (Mathematical Statistics)	3	
MATH 4803 (Analysis of Variance)	3	
MATH 4813 (Regression Analysis)	3	
MATH 4843 (Introduction to Sampling)	3	
MATH 4873 (Advanced Data Analytics)	3	
Additional Stats Course: Choose one of MATH 4823, 4883, 4885, OR 4986	3	
Pathway: (Choose 9 additional hours of credit from one of the following pathways)	9	
Directed Electives: Three courses numbered at or above the 2000-level from one of the lists below. (At least 12 credit hours from the combined general electives and directed electives must be at the 3000 level or above.) ACCT, ECON, FINC, MGMT, MKTG, SPMG BIOL, CHEM, PHYS, GEOL, CS, COMP, PHIL, PSYC, SOCI	9	
Accelerated BS to MAT: Three graduate level courses that will count toward both the BS and MAT degrees. • CEPD 6101 Psychology of Classroom Learning • MEDT 6401 Instructional Technology • Graduate Math Course (Choose one course from: MATH 5013, MATH 5253, MATH 5413, MATH 5473, MATH 5483, MATH 5513, MATH 5823, MATH 5833	9	
General Electives: FAt least 12 credit hours from the combined general electives and directed electives must be at the 3000 level or above.	21	
High-Impact Practice & Professional Preparation: If a student takes both courses, the Math Internship will count as a Math Elective or as an Additional Stats Course. • MATH 4983 (Senior Project) • MATH 4986 (Internship)	3	
Total	120	