

Bachelor of Science in Applied Mathematics

<p>Wright State Core – 42 hours</p> <p>Element 1 Communications ENG 1100 Academic Writing and Reading ENG 2100 Research and Argument</p> <p>Element 2 Mathematics MTH 2300 Calculus I</p> <p>Element 3 Global Traditions Choose one interdisciplinary course: AFS 2000 (IW, MC) CST 2430 (IW, MC) RST 2620 (IW, MC) ATH 2500 CST 2510 (IW, MC) RST 2710 (IW, MC) CS 1000 EC 2100 RST 2810 (IW, MC) CST 2210 (IW, MC) EC 2500 (IW, MC) RST 2910 (IW, MC) CST 2310 (IW, MC) EC 2900 (IW, MC) RST 2920 (IW, MC) CST 2320 (IW, MC) ED 2100 (MC) URS 2000 (IW, MC) CST 2410 (MC) ML 2030 CST 2420 (IW, MC) RST 2610 (IW, MC)</p> <p>Choose one History course: CLS 1500 HST 1100 HST 1200</p> <p>Element 4 Arts/Humanities Choose one course: ART 2140 ENG 2050 (IW, MC) PHL 2040 (IW) CLS 2040 (IW) MP 1310 PHL 2100 CST 2310 (IW) MUS 1210 REL 2040 (IW) CST 2420 (IW) MUS 2140 TH 2140 ENG 2040 (IW) MUS 2900 (IW, MC) UH 2010 (IW)</p> <p>Element 5 Social Science Choose two (2) courses from different disciplines ATH 2200 EC 2500 (IW,MC) SOC 2000 (IW) EC 2000 (IW) EC 2900 (IW,MC) SW 2720 (IW,MC) EC 2040 FIN 2050 UH 2020 (IW) EC 2050 PLS 2000 WMS 2000(IW,MC) EC 2100 PSY 1010</p> <p>Element 6 Natural Science PHY 2400/2400L PHY 2410/2410L</p> <p>Additional Core Courses MTH 2310 Calculus II One additional approved Wright State Core course from any of the Elements</p> <p>Multicultural Competence Two Multicultural Competence (MC) courses from the Wright State Core, Study Abroad, or Service Learning courses</p> <p>Writing Across the Curriculum Two Integrated Writing (IW) courses from the Wright State Core.</p>	<p>Departmental Requirements – 40 hours</p> <p>Required Core Courses (16 - 17 hours) MTH 2320 Calculus III (4 hours) MTH 2330 Differential Equations (3 hours) OR MTH 2350 Differential Equations w/ Matrix Algebra (4 hours) MTH 2530 Elementary Linear Algebra (3 hours) MTH 2800 Writing Mathematical Proofs (3 hours) MTH 4310 Real Variables I (3 hours)</p> <p>Electives (24 hours) MTH 4810 Applied Mathematics I (3 hours) Three of the following courses: MTH 3060 Mathematical Modeling (3hours) MTH 3260 Numerical Methods (3hours) MTH 3320 Complex Variables (3hours) MTH 3330 Partial Differential Equations (3hours) STT 3600 Applied Statistics I (3hours) Four (4) additional department approved electives, including at least one (1) at the 4000-level.</p> <p>Related Course Requirements – 16 hours CS 1160 or CS 1180 or CEG 2170 (4 hours) PHY 3710 or ME 2210 (3 hours) Nine (9) hours of advanced technical electives</p> <p>General Electives – 24 hours Choose from the Wright State University Undergraduate Catalog. Foreign language study is recommended.</p> <p>Department Approved Elective Courses MTH 4070 Optimization Techniques (3 hours) MTH 4150 Introduction to Scientific Computation (3 hours) MTH 4240 Coding Theory (3 hours) MTH 4260 Matrix Computations (3 hours) MTH 4290 Cryptography and Data Security (3 hours) MTH 4320 Real Variables II (3 hours) MTH 4510 Modern Algebra I (3 hours) MTH 4520 Modern Algebra II (3 hours) MTH 4550 Advanced Linear Algebra (3 hours) MTH 4570 Combinatorics and Graph Theory (4 hours) MTH 4710 Geometry (3 hours) MTH 4810 Applied Mathematics I (3hours) MTH 4820 Applied Mathematics II (3 hours) MTH 4920 Undergraduate Mathematics Seminar (3hours) STT 3610 Applied Statistics II (3hours) STT 4610 Theory of Statistics I (4 hours) STT 4620 Theory of Statistics II (4 hours) STT 4660 Statistical Methods I (4 hours) STT 4670 Statistical Methods II (4 hours)</p>
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