

# COLLEGE OF ARTS AND SCIENCES PROGRAM CHANGE FORM

	Chair's Signature	Recommendation	Review Date
Department	<u>Kevin Charlwood</u>	<u>Approve</u>	<u>2017-11-28</u>
Division	<u>Jennifer Wagner</u>	<u>Approve</u>	<u>2017-11-28</u>
Dept. of Educ. <small>(If relates to teacher certification program.)</small>	<u>Cherry Steffen</u>	<u>Approve</u>	<u>2017-12-01</u>
Dean	<u>Laura Stephenson</u>	<u>Approve</u>	<u>2017-12-04</u>
Curriculum Committee	<u>Linzi Gibson</u>	<u>Approve</u>	<u>2018-01-18</u>
Accepted by CFC	<u>Julie Velez</u>	<u>Approve</u>	<u>2018-02-20</u>
CAS Faculty	<u>Julie Velez</u>	<u>Approve</u>	<u>2018-03-01</u>

Approved By:      **Faculty Senate** \_\_\_\_\_      **University Faculty** \_\_\_\_\_      **WU Board of Regents** \_\_\_\_\_

Program: Bachelor of Science in Mathematics (CIP: )

1. Reason for this program change?

Re-doing program changes made to all three tracks in two earlier sessions, same as for the BA degree just submitted.

2. Complete revised description.

**Mathematics**

Calculus (MA 151, 152, 253), Discrete Mathematics (MA 207), Linear Algebra (MA 301), one of the following three courses ANOVA/Design of Experiments (MA 340); Nonparametric Tests/Quality Control (MA 341); or, Regression Analysis (MA 346), Abstract Algebra (MA 354), Introduction to Real Analysis I (MA 371), Introduction to Real Analysis II (MA 372), Logic for Programming (PH 110) or Logic (PH 220), Mathematical Statistics (MA 344), a minimum of two hours of Problem Solving Strategies (MA 380), and Capstone Research (MA 388). In addition, 10-15 hours of correlated courses approved by the department are required. The correlated course requirement will be one of the following: Physics 261 and 262; Physics 281 and 282; EC 200, EC 201, BU 342, and BU 347; EC 200, EC 201, AC 224, AC 225, and BU 381; or a specially designed sequence to be approved by the Department Chair.

**Mathematics (Secondary Education Specialization)**

Statistics (MA 140), Calculus (MA 151, 152, 253), Number Theory and Discrete Math for Middle School and Secondary Teachers (MA 204), Discrete Mathematics (MA 207), Mathematics for Middle and Secondary Teachers (MA 230), Linear Algebra (MA 301), Abstract Algebra (MA 354), Modern Geometry (MA 367), Introduction to Real Analysis I (MA 371), a minimum of two hours of Problem Solving Strategies (MA 380), History of Mathematics (MA 381), and Capstone Research (MA 388). Students seeking certification to teach mathematics must also be formally admitted to

the University's Professional Teacher Education Programs. For admission requirements, see EDUCATION in this catalog.

Mathematics (Actuarial Science Specialization)

Calculus (MA 151, 152, 253), Linear Algebra (MA 301), one of the following two courses ANOVA/Design of Experiments (MA 340); Nonparametric Tests/Quality Control (MA 341), Mathematical Statistics (MA 344, MA 345), Regression Analysis (MA 346), Time Series Analysis (MA 348), Stochastic Processes (MA 347), Mathematical Theory of Interest (MA 384), Actuarial Mathematics (MA 385), Accounting (AC 224, AC 225), Economics (EC 200, EC 201), Business/Insurance - BU 374, BU 381, and BU 483.

3. Describe the nature of the proposed change.

Changes are the same as for the BA degree just submitted. MA 343 Applied Statistics is being replaced by a choice of MA 340 or 341 for actuarial science students, a choice of MA 340, 341 or 346 for pure math, and by MA 140 for secondary education students. MA 153 Calculus III is now numbered MA 253. MA 250 Theory of Interest is now numbered MA 384. MA 204 and MA 230 are new courses, now required in math for secondary education; MA 204 replaces the PH 110 or PH 220 Logic requirement.

4. Do you currently have the equipment and facilities to teach the classes within the proposed change.

Yes.

5. Does this change affect any other departments? Yes

Education, as our math for secondary education students are education majors.