

MATHEMATICS PROGRAMS

OVERVIEW OF THE PROGRAM:

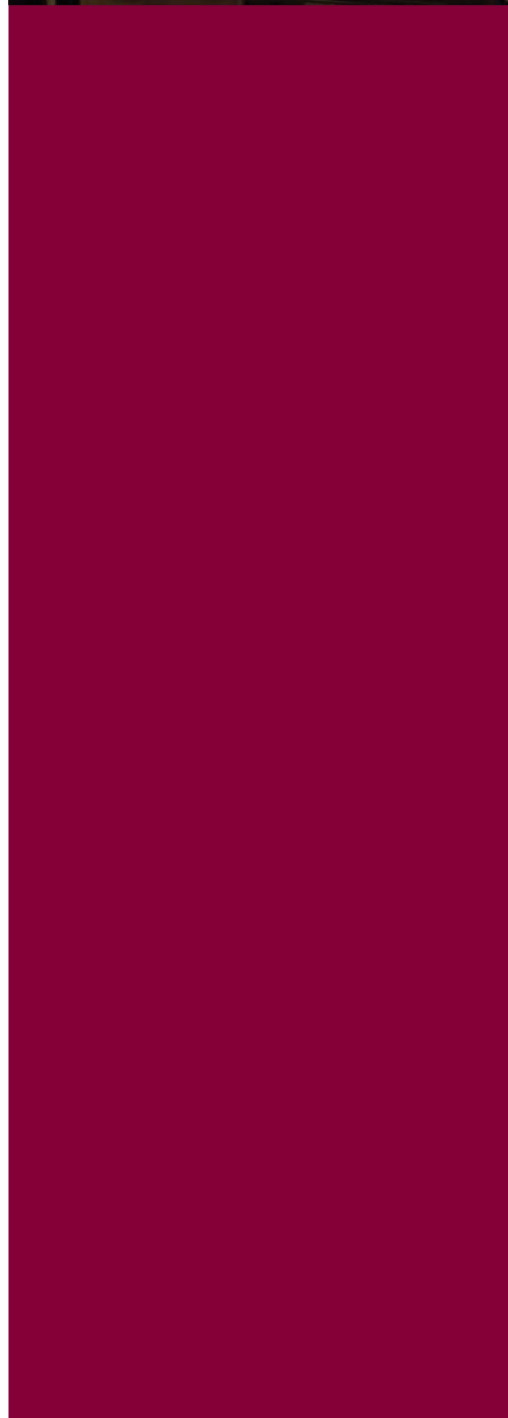
The mission of the mathematics degree program is to equip students with analytical and problem-solving skills for careers in education, academia, and industry. This will be done by providing training to apply the universal language of mathematical methods and reasoning to local and global issues, to address problems in mathematics and other fields, to become self-reliant learners, and to communicate ideas effectively.

The department cooperates fully with the School of Education in meeting its mission for candidates for a B.A. degree in education with mathematics teaching specialization for either the 5-9 or the 5-Adult grade levels. Degrees offered are B.S. in Mathematics, B.A. in Mathematics Education 5-Adult, and a 5-9 Math specialization attached to any other education degree. Students receiving a B.A. in Math Education also satisfy the degree requirements for the B.S. in Mathematics.

All students majoring in Mathematics must complete a minor. Recommended minors are Computer Science, Business, or Science. Students who are receiving a teaching certificate use Education to fulfill this requirement. All students are encouraged to take Foreign Language courses as electives.

EMPLOYMENT OPPORTUNITIES:

Graduates of the Fairmont State Mathematics Program are employed by such diverse employers as the U.S. Census Bureau, the U.S. Navy, banking, manufacturing, chemical, computer, and engineering firms. Of recent graduates, approximately two-thirds of the B.S. recipients and half of the B.A. recipients have completed or are working toward advanced degrees. The national annual median wage for a mathematician with a B.S. degree is \$90,870.



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**FAIRMONT STATE
UNIVERSITY™**

College of Science & Technology

MATHEMATICS PROGRAM

DUAL DEGREES: BACHELOR OF ARTS IN EDUCATION 5-ADULT AND BACHELOR OF SCIENCE IN MATHEMATICS

FRESHMAN FIRST SEMESTER	
MATH 2501 CALCULUS I (CC)	4
MATH 1561 MATHEMATICAL REASONING	3
ENGL 1101 WRITTEN ENGLISH I (CC)	3-4
EDUC 2200 INTRO TO EDUCATION	3
SOAR 1100 FIRST YEAR SEMINAR (CC)	1
TOTAL 14-15	14
FRESHMAN SECOND SEMESTER	
MATH 2502 CALCULUS II	4
ENGL 1102 WRITTEN ENGLISH II (CC)	3
COMP 1110/1120 INTRODUCTION TO PROGRAMMING/ PRINCIPLES OF PROGRAMMING I	3
EDUC 2201 INSTRUCTIONAL TECHNOLOGY (CC)	3
MATH 1550 APPLIED STATISTICS	3
TOTAL 16	16
SOPHOMORE FIRST SEMESTER	
MATH 3503 CALCULUS III	4
MATH 2563 TRANSITION TO HIGHER MATHEMATICS	3
EDUC 2203 HUMAN GROWTH & DEVELOPMENT	3
COMM 2200 INTRO TO COMMUNICATION (CC)	3
CHEMISTRY OR PHYSICS OR BIOLOGY OR GEOLOGY (CC)	4-5
TOTAL 17-18	17
SOPHOMORE SECOND SEMESTER	
MATH 3550 PROBABILITY	3
HUMANITIES	3
EDUC 2240 HIGH INCIDENCE DISABILITIES	3
CITIZENSHIP	3
GROUP B MATH ELECTIVE	3
TOTAL 15	15
JUNIOR FIRST SEMESTER	
MATH 2562 INTRODUCTION TO DISCRETE MATH	3
MATH 3520/3570 LINEAR ALGEBRA/MODERN GEOMETRY	3
EDUC 2260 INSTRUCTIONAL DESIGN I	3
SOCIAL SCIENCE	3
EDUC 2265 FIELD EXP II	1
ELECTIVE	3
TOTAL 16	16
JUNIOR SECOND SEMESTER	
MATH 2554 TOPICS IN MATH HISTORY	2
MATH 4520 ABSTRACT ALGEBRA (WRITING INTENSIVE)	3
MATH 4580/4590 TOPOLOGY/REAL ANALYSIS	3
FINE ARTS	3
EDUC 3331 READING IN CONTENT AREA	3
ELECTIVE	2
TOTAL 16	16
SENIOR FIRST SEMESTER	
MATH 4531 MATH METHODS	3
MATH 3520/3570 LINEAR ALGEBRA/MODERN GEOMETRY	3
EDUC 3340 INSTRUCTIONAL DESIGN II	3
EDUC 3351 INCLUSIVE PRACTICES	3
EDUC 3365 FIELD EXP III	2
TOTAL 14	14
SENIOR SECOND SEMESTER	
EDUC 4485 ACTION RESEARCH	1
EDUC 4486 PORTFOLIO	1
EDUC 4496 STUDENT TEACHING	10
TOTAL 12	12

BACHELOR OF SCIENCE IN MATHEMATICS MODEL SCHEDULE

FRESHMAN FIRST SEMESTER	
MATH 2501 CALCULUS I (CC)	4
MATH 1561 MATHEMATICAL REASONING	3
ENGL 1101 WRITTEN ENGLISH I (CC)	3
CITIZENSHIP	3-4
MINOR/ELECTIVE	3
SOAR 1100 FIRST YEAR SEMINAR (CC)	1
TOTAL 17-18	17
FRESHMAN SECOND SEMESTER	
MATH 2502 CALCULUS II	4
MATH 1550 APPLIED STATISTICS (CC)	3
ENGL 1102 WRITTEN ENGLISH II (CC)	3
COMP 1110/1120 INTRODUCTION TO PROGRAMMING/ PRINCIPLES OF PROGRAMMING I	3
TOTAL 13	13
SOPHOMORE FIRST SEMESTER	
MATH 3503 CALCULUS III	4
MATH 2563 TRANSITION TO HIGHER MATHEMATICS	3
COMM 2200 INTRO TO COMMUNICATION (CC)	3
HUMANITIES	3
MINOR/ELECTIVE	3
TOTAL 16	16
SOPHOMORE SECOND SEMESTER	
MATH 3550 PROBABILITY	3
FINE ARTS	3
SOCIAL SCIENCE	3
MINOR/ELECTIVE	3
MINOR/ELECTIVE	3
TOTAL 15	15
JUNIOR FIRST SEMESTER	
MATH 3520 LINEAR ALGEBRA	3
GROUP B MATH ELECTIVE	3
MINOR/ELECTIVE	3
MINOR/ELECTIVE	3
CHEMISTRY OR PHYSICS OR BIOLOGY OR GEOLOGY (CC)	4-5
TOTAL 16-17	16
JUNIOR SECOND SEMESTER	
MATH 4520 ABSTRACT ALGEBRA (WRITING INTENSIVE)	3
GROUP B MATH ELECTIVE	3
MINOR/ELECTIVE	3
MINOR/ELECTIVE	3
MINOR/ELECTIVE	3
TOTAL 15	15
SENIOR FIRST SEMESTER	
GROUP B MATH ELECTIVE	3
MINOR/ELECTIVE	3
MINOR/ELECTIVE	3
MINOR/ELECTIVE	3
MINOR/ELECTIVE	3
TOTAL 15	15
SENIOR SECOND SEMESTER	
MATH 4580/4590 TOPOLOGY/REAL ANALYSIS	3
MINOR/ELECTIVE	3
MINOR/ELECTIVE	3
MINOR/ELECTIVE	2
MINOR/ELECTIVE	2
TOTAL 13	13

Items marked with CC fulfill one of the eleven categories in the Core Curriculum which is required for graduation.



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CONTACT INFORMATION

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