Mathematics

**Bachelor of Science**

**Area A: Essential Skills**
- **ENGL 1101** English Composition I 3
- **ENGL 1102** English Composition II 3
- **MATH 1113** Precalculus Mathematics 3

**Area B: Institutional Options**
- **COMM 1110** Fundamentals of Speech 3
- One of the following electives: 1
  - **COMM 1120** Argumentation and Advocacy
  - **ENGL 1105** Intro to Greek Mythology
  - **ENGL 1110** Creative Writing
  - **GEOL 1000** Natural Hazards
  - **HIST 1050** Appalachian Hist-Special Topic
  - **HIST 1051** Sports Hist & Amer Character
  - **HUMN 1000** Mystery Fiction in Pop Culture
  - **HUMN 1100** Political and Social Rhetoric
  - **HUMN 1300** Christian Fiction/Pop Culture
  - **PHED 1030** Health & Wellness Concepts
  - **SOCI 1000** Race and Ethnicity in America

**Area C: Humanities/Fine Arts**
- Choose one to two ENGL course(s): 3-6
  - **ENGL 2111** World Literature I
  - **ENGL 2112** World Literature II
  - **ENGL 2120** British Literature I
  - **ENGL 2121** British Literature II
  - **ENGL 2130** American Literature I
  - **ENGL 2131** American Literature II
  - **ENGL 2201** Intro to Film as Literature
- If only one ENGL course chosen, add one of the following: 0-3
  - **ARTS 1100** Art Appreciation
  - **HUMN 1201** Expressions of Culture I
  - **HUMN 1202** Expressions of Culture II
  - **MUSC 1100** Music Appreciation
  - **MUSC 1110** World Music
  - **MUSC 1120** American Music
  - **THEA 1100** Theatre Appreciation

**Area D: Science/Mathematics/Technology**
- **MATH 2253** Calculus and Analytic Geom I 4
- One of the following Laboratory Science Sequences: 8
  - **BIOL 1107K** Principles of Biology I & **BIOL 1108K** Principles of Biology II
  - **CHEM 1211K** Principles of Chemistry I & **CHEM 1212K** Principles of Chemistry II
  - **PHYS 1111K** Introductory Physics I & **PHYS 1112K** Introductory Physics II
  - **PHYS 2211K** Principles of Physics I & **PHYS 2212K** Principles of Physics II

**Area E: Social Sciences**
- **HIST 2111** United States History to 1877 3
- or **HIST 2112** United States History since 1877
- **POLS 1101** American Government 3
- Two of the following electives: 6
  - **ANTH 1103** Intro to Cultural Anthropology
  - **ECON 2105** Principles of Macroeconomics
  - **ECON 2106** Principles of Microeconomics
  - **GEOG 1100** Introduction to Geography
  - **GEOG 1101** Intro to Human Geography
  - **GEOG 1111** Intro to Physical Geography
  - **HIST 1111** World Civilization to 1650 CE
  - **HIST 1112** World Civilization since 1650
  - **HIST 2111** United States History to 1877
  - **HIST 2112** United States History since 1877
  - **PHIL 2010** Intro to Philosophical Issues
  - **PHIL 2020** Logic and Critical Thinking
  - **PHIL 1103** Intro to World Religions
  - **POLS 2101** Intro to Political Science
  - **POLS 2201** State and Local Government
  - **POLS 2301** Comparative Politics
  - **POLS 2401** International Relations
  - **PSYC 1101** Introduction to Psychology
  - **PSYC 2101** Psychology of Adjustment
  - **PSYC 2103** Human Development
  - **SOCI 1101** Introduction to Sociology
  - **SOCI 1160** Social Problems

**Area F: Major Related**
- **CMPS 1301** Principles of Programming I 3
- **MATH 2254** Calculus and Analytic Geom II 4
- **MATH 2255** Calculus and Analytic Geom III 4
- **MATH 2256** Introduction to Linear Algebra 3
- **MATH 2403** Differential Equations 4

**Required Math**
- **MATH 3101** Intro to Advanced Mathematics 3
- **MATH 3201** Geometry 3
- **MATH 4101** Abstract Algebra I 3
- **MATH 4102** Abstract Algebra II 3
- **MATH 4601** Real Analysis I 4
- **MATH 4602** Real Analysis II 3
- **MATH 4701** Probability and Statistics I 3

**Upper Level Math Electives**
- **MATH 3301** Combinatorics
- **MATH 3401** Linear Algebra
- **MATH 4001** History of Mathematics
- **MATH 4201** Number Theory
- **MATH 4301** Graph Theory
- **MATH 4401** Operations Research
- **MATH 4511** Numerical Analysis I
- **MATH 4512** Numerical Analysis II
- **MATH 4611** Complex Analysis
- **MATH 4702** Probability and Statistics II
- **MATH 4800** Topology
- **MATH 4900** Special Topics in Mathematics
Mathematics

MATH 4960  Research in Mathematics

General Electives  16

Any 3000-4000 level MATH not used elsewhere except MATH 3703, MATH 3803, MATH 4713.
CHEM 1211K  Principles of Chemistry I
CHEM 1212K  Principles of Chemistry II
CHEM 3211K  Organic Chemistry I
CHEM 3212K  Organic Chemistry II
CMPS 1302  Principles of Programming II
CMPS 1371  Computing for Science & Engineer
CMPS 2313  Intro to Software Engineering
CMPS 2720  Data Structures
ECON 2105  Principles of Macroeconomics
ECON 2106  Principles of Microeconomics
ENGR 2205  Statics
ENGR 2240  Dynamics
PHYS 2211K  Principles of Physics I
PHYS 2212K  Principles of Physics II

Physical Education

PHED Activity Elective  1

Total Hours  121-122

* One hour from MATH 2253 may be used toward the upper level curriculum.
** Students who use Chemistry or Physics in Area D are not allowed to use here.
*** MATH 4900 (Special Topics in Math) can be taken multiple times when topic has changed.
**** MATH 4960: repeatable for maximum 3 credit hours.

Mathematics Minor

A minor in Mathematics must include 15 credit hours of mathematics course work, with at least 9 hours at the 3000-level or above. Please see / minors/mathematics/ (http://catalog.daltonstate.edu/minors/mathematics)