Secondary Education, B.S.Ed.

Program Description

These single field programs are designed to prepare teachers of adolescents, largely at the secondary school level (grades 6 through 12). They lead to 6-12 teacher certification in the teaching fields of mathematics, broad field science (with a biology emphasis), chemistry, and physics in Georgia.

This program is a part of the Clarice C. and Leland H. Bagwell College of Education.

Admission, Enrollment, and Graduation Policies

Admission Requirements

Admission to teacher education is separate from Admissions to Kennesaw State University. Students must meet the admission retention and graduation requirements outlined in the Teacher Education Admission, Enrollment, and Graduation Requirements catalog page to pursue this degree program.

Graduation Requirements

Each student is expected to meet the requirements outlined in Academic Policies: 5.0 PROGRAM REQUIREMENTS & GRADUATION.

Program Course Requirements

Core IMPACTS Curriculum (42 Credit Hours)

General Education Core IMPACTS Curriculum

Core IMPACTS Curriculum Requirements Specific to This Major

Science Majors: Must take MATH 1113 or higher in Mathematics & Quantitative Skills and MATH 1179 or higher in Applied Math.

Science and Engineering Majors: Must take two four-hour laboratory sciences in the Natural Sciences. Students must choose from CHEM 1211/1211L , CHEM 1212/1212L , PHYS 1111/1111L *, PHYS 1112/1112L , PHYS 2211/2211L *, PHYS 2212/2212L, BIOL 1107/1107L , or BIOL 1108/1108L.

*Students cannot take both PHYS 1111/L and PHYS 2211/L nor PHYS 1112/L and PHYS 2212/L.

Core Field of Study (18 Credit Hours)

Students must earn a grade of "C" or better in these courses.

Required Courses (9 Credit Hours)

- EDUC 2110: Investigating Critical & Contemporary Issues in Education
- EDUC 2120: Exploring Socio-Cultural Perspectives on Diversity in Educational Contexts
- EDUC 2130: Exploring Teaching & Learning

Teaching Field Courses (9 Credit Hours)

Select 8 credit hours in the teaching field from the following list of courses:

One (1) credit hour carried over from Technology, Mathematics, and Sciences.

***Biology Teaching Field*:**

- BIOL 1107: Principles of Biology I
- BIOL 1107L: Principles of Biology I Laboratory
- BIOL 1108: Principles of Biology II
- BIOL 1108L: Principles of Biology II Laboratory

***Chemistry Teaching Field*:**

- CHEM 1211: Principles of Chemistry I
- CHEM 1211L: Principles of Chemistry Laboratory I
- CHEM 1212: Principles of Chemistry II
- CHEM 1212L: Principles of Chemistry Laboratory II

***Mathematics Teaching Field*:**

- MATH 2202: Calculus II
- MATH 2203: Calculus III

***Physics Teaching Field*:**

- PHYS 2211: Principles of Physics I
- PHYS 2211L: Principles of Physics Laboratory I
- PHYS 2212: Principles of Physics II
- PHYS 2212L: Principles of Physics Laboratory II

Major Requirements (28-29 Credit Hours)

Students must earn a grade of "C" or better in these courses.

Professional Education Required Courses (9 Credit Hours)

- EDUC 4610: Introduction to the Yearlong Clinical Experience
- INED 3300: Educating Students with Exceptionalities in Inclusive Settings
- INED 4431: Foundations for Teaching Multilingual English Learners
- ITEC 3300: Improving Learning with Technology in High School Classrooms

Teaching Field Professional Education (19-20 Credit Hours)

Select 19-20 credit hours in the teaching field from the following list of courses:

***Biology, Chemistry, and Physics Teaching Fields*:**

- SCED 4414: Methods of Teaching Secondary Science I
- SCED 4416: Methods of Teaching Secondary Science II
- SCED 4424: Teaching Secondary Science- Practicum I
- SCED 4426: Teaching Secondary Science- Practicum II
- SCED 4650: Yearlong Clinical Experience I
- SCED 4651: Yearlong Clinical Experience I Seminar
- SCED 4660: Yearlong Clinical Experience II
- SCED 4661: Yearlong Clinical Experience II Seminar

***Mathematics Teaching Field*:**

- MAED 4414: Pedagogical Content Knowledge for Mathematics I
- MAED 4416: Pedagogical Content Knowledge for Mathematics II
- MAED 4418: Pedagogical Content Knowledge for Mathematics III
- MAED 4424: Teaching Secondary Mathematics- Practicum I
- MAED 4426: Teaching Secondary Mathematics- Practicum II
- MAED 4650: Yearlong Clinical Experience I
- MAED 4660: Yearlong Clinical Experience II
- MAED 4661: Yearlong Clinical Experience II Seminar

Major Concentrations - Teaching Field Requirements (31-32 Credit Hours)
Students must earn a grade of "C" or better in these courses.

Biology Teaching Field

Teaching Field Courses (31 Credit Hours)

- BIOL 3300: Genetics
- BIOL 3300L: Genetics Laboratory
- BIOL 3340: Microbiology
- BIOL 3340L: Microbiology Laboratory
- BIOL 3370: Ecology
- BIOL 3370L: Ecology Laboratory
- CHEM 1211: Principles of Chemistry I
- CHEM 1211L: Principles of Chemistry Laboratory I
- CHEM 1212: Principles of Chemistry II

- CHEM 1212L: Principles of Chemistry Laboratory II
- SCI 3360: Earth Science
- STAT 3125: Biostatistics

  Select 3 credit hours of 3000-4000 level BIOL coursework

  One (1) credit hour carried over from Technology, Mathematics, and Sciences.

Chemistry Teaching Field

Teaching Field Courses (31 Credit Hours)

- PHYS 2211: Principles of Physics I
- PHYS 2211L: Principles of Physics Laboratory I
- PHYS 2212: Principles of Physics II
- PHYS 2212L: Principles of Physics Laboratory II
- CHEM 2800: Quantitative Analytical Chemistry
- CHEM 2800L: Quantitative Analytical Chemistry Laboratory
- CHEM 3361: Modern Organic Chemistry I
- CHEM 3361L: Modern Organic Chemistry Lab I
- CHEM 3362: Modern Organic Chemistry II
- CHEM 3362L: Modern Organic Chemistry Lab II
- CHEM 3601: Quantum Chemistry and Spectroscopy
- MATH 2202: Calculus II
- CHEM 3700: Environmental Chemistry

  or
- CHEM 4400: Directed Study

One (1) credit hour carried over from Technology, Mathematics, and Sciences.

Mathematics Teaching Field

Teaching Field Courses (32 Credit Hours)

- EDSM 3360: Classroom Management in the Middle Grades and Secondary Education
- MATH 2390: Introduction to Logic, Set Theory, and Proofs
- MATH 3260: Linear Algebra I
- MATH 4361: Modern Algebra I
- MAED 3295: Mathematics for Middle Grades and Secondary Teachers
- MAED 3395: Geometric Proofs and Applications

- MAED 3475: Historical and Modern Approaches to Mathematics
- MAED 3495: Advanced Perspectives on School Mathematics I
- MAED 3713: Data Science for Secondary Mathematics Teachers
- MAED 4495: Advanced Perspectives on School Mathematics Part II
- STAT 2332: Probability and Data Analysis

One (1) credit hour carried over from Technology, Mathematics, and Sciences.

Physics Teaching Field

Teaching Field Courses (31 Credit Hours)

- MATH 2306: Ordinary Differential Equations
- PHYS 2213: Principles of Physics III
- PHYS 3210: Mechanics I
- PHYS 3220: Electromagnetism 1
- PHYS 3260: Mathematical Physics
- PHYS 3710: Modern Physics
- PHYS 3720L: Modern Physics Laboratory
- PHYS 4230: Thermal Physics
- MATH 2202: Calculus II
- MATH 2203: Calculus III

One (1) credit hour carried over from Technology, Mathematics, and Sciences.

Program Total (120 Credit Hours)