# SECONDARY EDUCATION, **MASTER OF EDUCATION**

This program leads to the T-5 certification in mathematics education (6-12), science education (6-12), Science with Initial Certification, and Mathematics with Initial Certification. This program also provides knowledge and skills for teachers to serve in leadership roles in curriculum development, supervision and research in the fields of Secondary Education.

The purpose of the M.Ed. Secondary Education is to promote leadership for all populations. Candidates complete 36 hours of courses designed to augment resourceful and imaginative problem-solving skills for all populations. All classes implement the Department of Teacher Education's conceptual framework: Reflective transformative practitioner, culturally-responsive practitioner, technologically-competent practitioner. Candidates have to be admitted by the Graduate Admissions Office before being admitted into the program.

# **Objectives of the Program**

The basic objective of the Master's of Education program in Secondary Education is to provide teachers with the opportunity to:

- 1. Compare their teaching practices with current research based practices and make changes where necessary;
- 2. Extend their knowledge and skills in a chosen area of educational interest;
- 3. Present intellectually challenging thoughts and practices to students;
- 4. Integrate new materials and methods of teaching into students' teaching repertoire;
- 5. Encourage interest in conducting research;
- 6. Increase competencies in research techniques; and
- 7. Increase students' ability to recognize relevant research, which they can use to become more effective in their classrooms.

# **Capstone Research Project**

The purpose of the capstone research project is to assess the student's knowledge of educational theory and applied research in a real-world classroom setting. The research project is a culminating assessment of a student's competency and skills as an advanced-level candidate in teacher education.

In partial fulfillment of the Masters in Education, students are required to successfully complete a research project. This research project is completed in the research course, EDUC 5592 Applied Research in Teacher Education. A student must earn a grade of "B" or higher in the course to signify their successful completion of the research project.

# Admission to the Program

Admission to the Secondary Education Program requires an undergraduate degree in one of the areas, or the equivalent, from an accredited college, and satisfactory scores on the Graduate Record Examination or Miller Analogies Test. When students lack a sufficient background in Secondary Education, they may be required to take additional undergraduate courses before beginning the M.Ed. program in Secondary Education. Students are also governed by the general admission procedures and requirements for the M.Ed. degree program, and they may matriculate in the Secondary Education program under the same categories of admission.

#### Area C Grades

Candidates must earn a B or better in all Area C courses (teaching field) to earn course credit for graduation.

### Science Education Broadfield Concentration

| Code              | Title   | Semester<br>Hours |
|-------------------|---|-------------------|
| AREA A: Nature    | of the Learner and Behavior (minimum 3 hrs)             | 3                 |
| SPED 5501         | Exceptional Child <sup>1</sup>                          |                   |
| SPED 5542         | Behavior Modification for Special Education<br>Students |                   |
| PSYC 5515         | Educational Psychology                                  |                   |
| AREA B: Program   | ns and Problems of the School (minimum 3 hrs            | ) 3               |
| EDUC 5504         | History of Education                                    |                   |
| EDUC 5509         | Philosophy of Education                                 |                   |
| EDUC 5540         | Curriculum Principles in STEM                           |                   |
| AREA C: Teachin   | g Field <sup>2</sup>                                    |                   |
| EDUC 5199         | Orientation to Adv Prof Educ <sup>3</sup>               | 0                 |
| Select 18 hours   | from the Science Education Broadfield Concent           | ration 18         |
| Courses           |   |                   |
| EDUC 5570         | Strategies of Instruction in Science                    |                   |
| BIOL 5501         | Selected Topics in Botany                               |                   |
| BIOL 5502         | Selected Topics in Zoology                              |                   |
| BIOL 5504         | Ecology   |                   |
| BIOL 5506         | Genetics  |                   |
| BIOL 5514         | Biology Chemistry                                       |                   |
| ISCI 5515         | Selected Topics in Biology                              |                   |
| or BIOL 551       | ESelected Topics in Biology                             |                   |
| BIOL 5519         | Plant Biology   |                   |
| ISCI 5500         | Integrated Earth Science                                |                   |
| ISCI 5501         | Integrated Found of Phys Scien                          |                   |
| or BIOL 551       | I5Selected Topics in Biology                            |                   |
| ISCI 5530         | Integrated Physical Science I                           |                   |
| ISCI 5531         | Integrated Physical Science II                          |                   |
| ISCI 5564         | Integrated Science Concepts                             |                   |
| AREA D: Action F  | Research and Statistics (minimum 3 hrs)                 | 3                 |
| EDUC 5500         | Educational Statistics, Research, & Analysis            |                   |
| EDUC 5502         | Action/Classroom Research                               |                   |
| EDUC 5592         | Applied Research in Teacher Education                   |                   |
| AREA E: Related   | Areas (9 hrs)   |                   |
| SPED 5501         | Exceptional Child <sup>1</sup>                          | 3                 |
| 6 additional hour | rs to be chosen with advisor                            | 6                 |
| Total Semester H  | lours   | 36                |

# Programming, Planning, and Advisement

This program is to be used in conjunction with the guidance from an advisor. Advisors and advanced candidates have a mutual responsibility to ensure advisement occurs and is maintained throughout the program. Both must maintain ongoing contact with each other. A planned

program must include the 36 hours of graduate level course work listed

above, with a GPA of 3.0. If an advanced candidate wishes to obtain an additional endorsement, such as reading, this will increase the number of hours and may not be covered by financial aid. This program is designed for advanced-level students who seek State of Georgia T-5 Certification in the identified content area. The credits that constitute this individualized program should be determined by the corresponding program coordinator or advisor and signed by the student before initial registration for this program. The following criteria must be met to be admitted to this program:

- 1. The student must have a baccalaureate degree from an approved program,
- 2. a minimum graduate grade point average of 3.0 on a 4.0 scale,
- 3. full or provisional admission to ASU's graduate school, and
- 4. meet PSC admission requirements.

All credits for the completion program must be obtained within 6 years of the candidate's date of admission into the program.

- If a student is working toward initial certification, SPED 5501 requires a grade of B or better in compliance with House Bill 671 and PSC rules.
- Candidates must earn a B or better in all Area C courses (teaching field) to earn course credit for graduation.
- **Required course**

#### **Secondary Mathematics Broadfield** Concentration

| Code             | Title   | Semester<br>Hours |
|------------------|---|-------------------|
| AREA A: Nature o | of the Learner and Behavior (minimum 3 hrs)             | 3                 |
| SPED 5501        | Exceptional Child <sup>1</sup>                          |                   |
| SPED 5542        | Behavior Modification for Special Education<br>Students |                   |
| PSYC 5515        | Educational Psychology                                  |                   |
| AREA B: Program  | ns and Problems of the School (minimum 3 hrs)           | 3                 |
| EDUC 5504        | History of Education                                    |                   |
| EDUC 5509        | Philosophy of Education                                 |                   |
| EDUC 5540        | Curriculum Principles in STEM                           |                   |
| AREA C: Teachin  | g Field <sup>2</sup>                                    |                   |
| EDUC 5199        | Orientation to Adv Prof Educ <sup>3</sup>               | 0                 |
| MATH 5112        | Linear Algebra  | 3                 |
| MATH 5113        | Modern Algebra I & II                                   | 3                 |
| MATH 5211        | Fundamental Concept of Analysis I                       | 3                 |
| MATH 5214        | Differential Equations                                  | 3                 |
| MATH 5311        | Geometry of Teachers***                                 | 3                 |
| EDUC 5531        | Mathematics Concepts in Secondary Schools               | 3                 |
| AREA D: Action F | Research and Statistics (minimum 3 hrs)                 | 3                 |
| EDUC 5500        | Educational Statistics, Research, & Analysis            |                   |
| EDUC 5502        | Action/Classroom Research                               |                   |
| EDUC 5592        | Applied Research in Teacher Education                   |                   |
| AREA E: Related  | Areas (9 hrs)   |                   |
| MATH 5202        | <b>Technology</b> -Oriented Mathematics                 | 3                 |
| MATH 5412        | Methods of Statistical Analysis                         | 3                 |
| MATH 5511        | History of Mathematics                                  | 3                 |
| Total Semester H | lours   | 36                |

# Programming, Planning, and Advisement

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- 4. meet PSC admission requirements.

All credits for the completion program must be obtained within 6 years of the candidate's date of admission into the program.

- <sup>1</sup> If a student is working toward initial certification, SPED 5501 requires a grade of B or better in compliance with House Bill 671 and PSC rules.
- Candidates must earn a B or better in all Area C courses (teaching field) to earn course credit for graduation.
- <sup>3</sup> Required course

### **Science with Initial Certification** Concentration

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| Code             | Title   | Semester<br>Hours |
|------------------|---|-------------------|
| Area A: Nature o | of the Learner and Behavior Problems (3 hrs)              |                   |
| SPED 5501        | Exceptional Child <sup>1</sup>                            | 3                 |
| Area B: Progran  | ns and Problems of the School (3 hrs)                     |                   |
| EDUC 5509        | Philosophy of Education                                   | 3                 |
| Area C: Teachin  | g Field (18 hrs) <sup>2</sup>                             |                   |
| EDUC 5199        | Orientation to Adv Prof Educ <sup>3</sup>                 | 0                 |
| EDUC 5570        | Strategies of Instruction in Science                      | 3                 |
| ISCI 5564        | Integrated Science Concepts                               | 3                 |
| EDUC 5443        | Educational Assessment in STEM                            | 3                 |
| EDUC 5540        | Curriculum Principles in STEM                             | 3                 |
| EDUC 5550        | Foundation Principles in Education, Growth<br>Development | 3                 |
| EDUC 5000        | Professional Development for Accomplished<br>Educators    | 3                 |
| Area D: Educatio | onal Research (3 hrs)                                     |                   |
| EDUC 5592        | Applied Research in Teacher Education                     | 3                 |
| Area E: Field an | d Clinical (9 hrs)  |                   |
| EDUC 5590        | Practicum I: Internship K-12                              | 3                 |
| EDUC 5591        | Practicum II: Internship                                  | 3                 |

| Total Semester | Hours                          | 36 |
|----------------|--------------------------------|----|
| EDUC 5441      | Culturally Responsive Teaching | 3  |

### **Programming, Planning, and Advisement**

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- 4. meet PSC admission requirements.

All credits for the completion program must be obtained within 6 years of the candidate's date of admission into the program.

- <sup>1</sup> If a student is working toward initial certification, SPED 5501 requires a grade of B or better in compliance with House Bill 671 and PSC rules.
- <sup>2</sup> Candidates must earn a B or better in all Area C courses (teaching field) to earn course credit for graduation

<sup>3</sup> Required course

### Mathematics with Initial Certification Concentration

| Code              | Title   | Semester<br>Hours |
|-------------------|---|-------------------|
| Area A: Nature of | the Learner and Behavior Problems (3 hrs)                 |                   |
| SPED 5501         | Exceptional Child <sup>1</sup>                            | 3                 |
| Area B: Programs  | and Problems of the School (3 hrs)                        |                   |
| EDUC 5509         | Philosophy of Education                                   | 3                 |
| Area C: Teaching  | Field (18 hrs) <sup>2</sup>                               |                   |
| EDUC 5199         | Orientation to Adv Prof Educ <sup>3</sup>                 | 0                 |
| EDUC 5531         | Mathematics Concepts in Secondary Schools                 | ; 3               |
| MATH 5670         | Special Topics in Mathematical Sciences                   | 3                 |
| EDUC 5443         | Educational Assessment in STEM                            | 3                 |
| EDUC 5540         | Curriculum Principles in STEM                             | 3                 |
| EDUC 5550         | Foundation Principles in Education, Growth<br>Development | 3                 |
| EDUC 5000         | Professional Development for Accomplished Educators       | 3                 |
| Area D: Education | al Research and Statistics (3 hrs)                        |                   |
| EDUC 5592         | Applied Research in Teacher Education                     | 3                 |
| Area E: Field and | Clinical (9 hrs)  |                   |
| EDUC 5590         | Practicum I: Internship K-12                              | 3                 |

| Total Semester Hours |                                | 26 |
|----------------------|--------------------------------|----|
| EDUC 5441            | Culturally Responsive Teaching | 3  |
| EDUC 5591            | Practicum II: Internship       | 3  |

Total Semester Hours

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- <sup>2</sup> Candidates must earn a B or better in all Area C courses (teaching field) to earn course credit for graduation
- <sup>3</sup> Required course