



SCHOOL OF EDUCATION ADVISING GUIDE

Mathematics Major with a Concentration in Mathematics Education for Secondary Math Licensure (For students under the 2011-2012 catalog or earlier)

Name: _____ 900#: _____



Use this document to learn about specific requirements for your major and accompanying teacher licensure courses, and to work with your academic advisors to plan your course of study and track your progress. Please keep an updated copy of this form and leave the original on file in the School of Education Student Services Office.

For general requirements pertaining to Secondary Education licensure, see the Program Overview in the School of Education Student Services Office, WC 162, or online at www.msudenver.edu/education, and **be sure to talk with your advisors.**

Visit your advisors. If you major in Mathematics and seek licensure in Secondary Education, you will have two advisors:

- One in the Department of Mathematical and Computer Sciences
- One in Secondary Education

Before you can register for most education courses:

- Apply to School of Education.
- Obtain provisional and/or formal admission to the program. Some courses require provisional admission, while most advanced courses require formal admission.

There are three parts to this program (described in detail below):

1. GENERAL STUDIES COURSES

The following courses meet Colorado content standards for teachers and are the first courses to focus on completing. You need a total of **30 credit hours** from the following list. **All courses required for licensure (notated with a “§” symbol) must be passed with a grade of C or better.**

Course	Substitute Course # / Title / College	Credit Hours	When?	Grade	Advisor Initials
§ ENG 1010-3	Composing Arguments				
§ ENG 1020-3	Freshman Composition II: Analysis, Research & Documentation				
§ SPE 1010-3	Public Speaking				
MTH XXXX-3	General Studies Mathematics (satisfied by major requirements; see advisor in Math)				
HIS XXXX-3	General Studies History				
Arts & Letters-6	General Studies Arts and Letters				
Social Science-6	General Studies Social Sciences				
Natural Science-6	General Studies Natural Sciences				
GENERAL STUDIES TOTAL		30			

2. MATHEMATICS MAJOR COURSES

The following are the course requirements for your major. Please track progress on your major and other graduation requirements on your CAPP report and **see your Math advisor regularly**. Your major should be declared with the Mathematics Education Concentration (MTH3 or MTA3). **Courses required for licensure (notated with a “§” symbol) must be passed with a grade of C or better.** These content area courses also factor in to your Content Area GPA for student teaching. Visit www.msudenver.edu/education for more info.

MATHEMATICS CORE

You need all courses, a total of **15 hours**, from the following list.

Course	Substitute Course	Credits	When?	Grade
§ MTH 1410-4	Calculus I			
§ MTH 2410-4*	Calculus II			
§ MTH 2420-4	Calculus III			
§ MTH 3100-3	Introduction to Mathematical Proofs			
MATHEMATICS CORE COURSES TOTAL		15		

* Please note: Completion of Calculus II allows you to take the following courses: MTH 2420, MTH 3100, MTH 3210, MTH 3470

ADVANCED MATHEMATICS

You need all courses, a total of **22 hours**, from the following list.

§ MTH 3110-3	Abstract Algebra			
§ MTH 3140-4**	Linear Algebra			
§ MTH 3210-4	Probability and Statistics			
§ MTH 3470-3	Introduction to Discrete Mathematics and Modeling			
§ MTH 3650-3	Foundations of Geometry			
§ MTH 4600-1	Seminar in Problem Solving			
§ MTH 4640-4***	History of Mathematics			
ADVANCED MATHEMATICS COURSES TOTAL		22		

** MTH 3130 and one of the following—MTH 4110 or MTH 4150 or MTH 4410 or MTH 4660—may substitute for MTH 3140.

*** Senior Experience Course

COMPUTER SCIENCE

You need a total of **4 hours** selected from the following list (select one course).

§ CSI 1050-4	Computer Science I			
§ CSS 1247-4	Introduction to Programming Visual Basic			
§ MTH 1510-4	Computer Programming FORTRAN			
COMPUTER SCIENCE COURSE TOTAL		4		

Summary of Mathematics Major Courses:

Mathematics Core 15 hours
Computer Science 4 hours

Advanced Mathematics 22 hours

MATHEMATICS MAJOR COURSES TOTAL

41 HOURS

3. TEACHER EDUCATION COURSES

All the courses in the following list (**42-43 credit hours total**) are required for Math licensure. Courses listed with heavy outlines must be taken together; **please see an advisor in the School of Education** for more detail on recommended sequence. **All letter-graded courses required for licensure (notated with a “§” symbol) must be passed with a grade of C or better.** You should complete your General Studies and at least half of your major courses before beginning Education courses, if possible.

Course	Substitute Course # / Title / College	Credit Hours	When?	Grade	Advisor Initials
§ EDS 3130-4*	Foundation of Educational Psychology and Philosophy				
EDS 3140-1*	First Field Experience in Secondary Education (60-hour field experience)				
§ EDS 3150-3 <i>(satisfies Multicultural graduation requirement)</i>	Issues in Multicultural Education in Secondary Schools <i>(Must be taken concurrently with or after completion of EDS 3130 and EDS 3140)</i>				
§ EDT 3610-2 Or § EDT 3010-3	Applications of Educational Technology Or Instructional Development for Interactive Learning Environments				
§ SED 3600-3	The Exceptional Learner in the Classroom				
§ EDS 3210-3**	Classroom Management, Planning, and Assessment in Secondary Schools				
EDS 3240-1**	Field Experience: Classroom Mgmt. Planning, and Assessment in Sec. Schools (60-hour field experience)				
§ MTL 3620-4	Mathematics of the Secondary Curriculum				
§ RDG 3280-4**	Teaching Content Literacy Skills				
§ MTL 3630-3**	Teaching Secondary Mathematics <i>(take this the semester before student teaching)</i>				
§ MTL 3638-2**	Secondary Mathematics Field Experience (80 hours)				
MTL 4690-12**	Student Teaching and Seminar: Secondary 7-12				
TEACHER EDUCATION COURSES TOTAL		42-43			

* Requires at least provisional admission to the teacher licensure program.

** Requires formal admission to the teacher licensure program.

GRAND TOTAL FOR PROGRAM

120 CREDIT HOURS***

***** Students must have 120 credits to graduate. The total required hours for this program add up to 113-114. You must have 6-7 credit hours of general electives to meet the minimum requirement of 120 credits for graduation.**

Before you begin student teaching, you will need your education advisor's initials for all courses (except the courses in your major area) and signature below.

Based on my review, this student is eligible to apply for student teaching.

SIGNATURE OF EDUCATION ADVISOR: _____ Date _____

Please see the School of Education website for updated licensure exam requirements for Secondary Mathematics Education.