

MATHEMATICAL SCIENCES CONCENTRATION-TEACHER CERTIFICATION FOR GRADES 7-12 ACADEMIC MAP: DEGREE BS (120CREDIT HOURS)

This degree map is a semester-by-semester sample course schedule for students majoring in **Mathematical Sciences** with a concentration in **Teacher certification for Grades 7-12**. The milestones listed to the right of each semester are designed to keep a student on track to graduate in four years. The schedule serves as a general guideline to help build a full schedule each semester. Milestones are courses and special requirements necessary for timely progress to complete a major. When one or more milestones are missed, students should consult with an academic advisor to determine if another degree path would be more suitable.

Students seeking teacher certification must apply in writing to the College of Education, usually in the sophomore year. At the time of applying they must have a 2.75 cumulative grade point average and must have passed the Praxis I Exams-Reading, Writing and Math. Students who have previously earned a 21 on the ACT, 22 on the Enhanced ACT, or a combined 990 on the verbal and mathematics portions of the SAT are exempt from the Praxis I. Formal admission to the Teacher Education Program is a prerequisite for enrolling in upper-division certification courses. Students must pass PRAXIS II exam before they can enroll in student teaching. Students must complete nine semester hours of enhanced student teaching with an eight-week placement at the secondary level and a seven-week placement at the middle school level. Successful completion of the program results in licensure to teach grades 7-12. For a complete list of requirements for admission to and retention in the Teacher Education Program, see the College of Education section.

Tennessee State University recognizes that students have diverse learning, life, and professional experiences. The University provides opportunities for students to earn college credit toward the degree through a number of assessment options that evaluate their learning experiences. These paths are grouped under the category "Prior Learning Assessment" (PLA). Various means of earning PLA credit at TSU are the following: Advanced Placement Program, American Council of Education (ACE) Military Credit, College Level Exam Program (CLEP), DSST Credit by Examination Program (includes DANTES Examination), Institutional Course Challenge Exams (Departmental Exams), International Baccalaureate Credit, Other Military Service, Portfolio Assessment. To learn more about PLA contact your academic advisor or the Office of Student Support Services for Adult and Distance Learners at (615) 963-7001 or adultstudentsupport@tnstate.edu.

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Fall Schedule		Milestones
Semester 1	Hrs.	Semester 1
MATH 1910	4	MATH 1710 and/or MATH 1720 must be taken prior to MATH 1910 or an ACT score of 25 or above; Pre-requisite course: Must be taken before MATH 1920 and ECON 2010; Minimum Grade of "C" Required.
ENGL 1010	3	Pre-Requisite Course: Must be taken before ENGL 1020, and HIST 2010, HIST 2020, HIST 2030, HIST 2060, HIST 2070, or HIST 2700; Minimum grade "C" Required.
Humanities Elective*	3	
COMM 2200	3	
UNIV 1000**	1	
Total Hours	14	

^{*}Students must take credit hour course from the following list of approved general education Humanities courses: AREN 2310, ART1010, HIST 1000, MUSC 1010, PHIL 1030, THTR 1020, or RELS 2010.

^{**}An Orientation course taken at another University does **NOT** meet this requirement. Students with less than 60 credit hours must take UNIV 1000 at TSU.

Spring Schedule		Milestones
Semester 2	Hrs.	Semester 2
MATH 1920	4	Pre-requisite course: Must be taken before MATH 2110, 2600, 3120, 3610; Minimum Grade of "C" Required.
ENGL 1020	3	Pre-Requisite Course: Must be taken before taking HIST 2010, HIST 2020, HIST 2030, HIST 2060, HIST 2070, or HIST 2700; Minimum Grade "C" Required.
Humanities Elective*	3	
SOC SCI ELECTIVE	3	
Elective**	3	
Total Hours	16	

^{*}Students must take a 3 credit hour course from the following list of approved general education Humanities courses: AREN 2310, ART 1010, THTR 1020, MUSC 1010, PHIL 1030, HIST 1000 or RELS 2010. Remember not to duplicate course option from a previous semester.

^{**} It is strongly recommended that the students enroll in Electives in areas of interest; suggested electives include courses for pre-medicine, pre-law, computer science, philosophy, actuarial science, political science; it is further suggested that a student select a lower level (1000-2000) elective during this semester.

	Milestones
Hrs.	Semester 3
	Students should meet with an academic advisor and declare
	Mathematics with Teacher Education as a major. If a minimum ACT
	(22) or SAT (1020) is not met then Praxis® Core is required-
	Reading 5712 (qualifying score 156), Writing 5722 (qualifying score
	162), Math 5732 (qualifying score 150) before applying for
	admission to Teacher Education in Semester 4.
4	Pre-requisite course: Must be taken before MATH 4410, 4750;
	Minimum Grade of "C" Required.
3	
3	Pre-requisite course: Must be taken before MATH 4720;
	Minimum Grade of "C" Required
4	Pre-requisite course: Must be taken before BIOL 1120/1121,
	CHEM 1120/1121, or PHYS 2120/2121 respectively
3	
17	
	4 3 3 4 3

^{*}Courses within the range of ENGL 2012-2320 will meet this requirement.

^{**}The Department recommends HIST 2010; however, HIST 2020, HIST 2030, HIST 2060, HIST 2070 or HIST 2700 satisfy this requirement.

Spring Schedule		Milestones
Semester 4	Hrs.	Semester 4
		Apply for Admission to Teacher Education/Pre-Residency Block 1. To do so, students must have a minimum GPA of 2.75, satisfactory report on Criminal Background Check, successful interview, and satisfactory writing sample.
MATH 2600	3	Pre-requisite Course: Must be taken before MATH 3200, 3210, 3640, 3810, 441, 4750; Minimum Grade of "C" required.
EDSE 3330	3	Pre-requisite course: Must be taken before MATH 4720.
PSYC 2420	3	Pre-requisite course: Must be taken before MATH 4720.
Natural Science Elective**	4	
HIST 2020*	3	
Total Hours	16	

^{*}The Department recommends HIST 2020; however, HIST 2010, HIST 2030, HIST 2060, HIST 2070 or HIST 2700 satisfy this requirement. Students must remember not to duplicate course option from a previous semester.

**The following courses can meet the Natural Science requirement: BIOL 1120/1121, CHEM 1120/1121, and PHYS

2120/2121.		
Fall Schedule		Milestones
Semester 5	Hrs.	Semester 5
		Block 1-Pre-Residency
		Pre-requisite: Take the Praxis® II Subject Assessment Exam: 5161
		Math Education: Content Knowledge (7-12) (qualifying score 148).
		At the beginning of this semester, students must make application
		to the Teacher Education Program (Pre-Residency). A GPA of 2.75 is
		required and must be maintained throughout the program.
MATH 4410	3	Pre-requisite course: Must be taken before MATH 4420
		Minimum Grade of "C" Required.
MATH 3200	3	Minimum Grade of "C" Required
MATH 3640	3	Pre-requisite course: Must be taken before 3650; Minimum Grade of
		"C" Required.
MATH 3610	3	Minimum grade of "C" Required.
MATH 3810	3	Minimum Grade of "C" Required.
Total Hours	15	Note: Junior and senior students must enroll in Teacher Education/Blocked
		courses during the semesters indicated on this map.

^{*}The Department recommends that students take STAT 1530.

Spring Schedule		Milestones
Semester 6	Hrs.	Semester 6
		Block 2 - Pre-Residency
		Pre-requisite: Complete Intent to Enter Residency I Form and
		submit to the Office of Teacher Education and Student Services.
		Students must be admitted to Pre-Residency Block 2 in order to
		enroll in the courses listed for this semester. During this semester,
		students must apply for admission to Residency I.
MATH 3120	3	Minimum Grade of "C" Required.
MATH 3130	3	Minimum Grade of "C" Required.
MATH 4750	3	Pre-requisite course: Must be taken before MATH 4720;
		Co-requisite courses: (EDCI 3870; EDLI 4910); Minimum Grade of "C"
		Required.
EDCI 3870*	3	Pre-requisite course: Must be taken before MATH 4720;
		Co-requisite courses: (MATH 4750; EDLI 4910); Minimum Grade of
		"C" Required.
EDLI 4910*	3	Pre-requisite course: Must be taken before MATH 4720;
		Co-requisite courses: (EDCI 3870; MATH 4750); Minimum Grade of
		"C" Required.
Total Hours	15	

^{*}All Teacher Education courses are required and will only be offered during the indicated semesters of the third and fourth years.

Fall Schedule		Milestones
Semester 7	Hrs.	Semester 7
		Block 3–Residency I Pre-requisites: admission to Residency I, CPR Certification, and Praxis® I Exam: 5624-Principles of Learning and Teaching (7-12) (qualifying score 155). During this semester, students must apply for admission to Residency II (full-time teaching.
MATH 3710	3	Co-requisite courses: EDCI 4620; Minimum Grade of "C" Required.
MATH 4500	3	Minimum Grade of "C" Required.
MATH 3100	3	Minimum Grade of "C" Required.
EDCI 4620*	6	Co-requisite course: MATH 3710; As a part of Residency I, Teacher Licensure students must complete 90-100 hours of co- teaching/field placement in EDCI 4620. Minimum Grade of "C" Required.
Total Hours	15	

^{*}All Teacher Education courses are required and will only be offered during the indicated semesters of the third and fourth years.

Spring Schedule		Milestones
Semester 8	Hrs.	Semester 8
		Block 4 – Residency II
		Pre-Requisite: Students must be admitted to Residency II. Students
		must have successfully completed all requirements for Block 3
		Residency I, and passed all Praxis exams. All Co-Requisite courses in
		Residency II block 4 must be taken in semester 8 or student will
		have to wait for the next course rotation. Students must engage in
		full time teaching co-teaching (100% clinical experience). Students
		should apply for teacher licensure in the last month of semester 8.
		Take Senior Exit Exam and Apply for Graduation
EDCI 4705*	3	Co-Requisite Course: MATH 4720; Minimum Grade of "C" Required.
MATH 4720*	9	Co-Requisite Course: (EDCI 4705; Minimum Grade of "B" Required.
		A student who earns a grade of "C" or "D" in Student Teaching
		may graduate from the University, however, they will not be
		recommended for licensure.
		Student Teaching lasts 16 weeks/Mon-Fri.
Total Hours	12	NOTE: At the end of Student Teaching, students must complete the
		edTPA (portfolio) with a minimum score of 37 out of 75 and
		Teacher Education Exit Interview.

^{*}All Teacher Education courses are required and will only be offered during the indicated semesters of the third and fourth year.

Employment Information:

The Mathematics Program is designed to enable graduates to assume careers as teachers of mathematics in secondary schools.

Representative Job Titles Related to this Major:

Teacher (7-12), Actuarial Science, Mathematician, Meteorologist

Representative Employers:

Secondary Private and Public Schools

International study is available for all TSU students and may include opportunities for internships or taking course work towards various minors. International study may have an impact on the academic map; therefore, it is important to consult with the academic advisor for this major before participating in an international program opportunity. Students interested in study abroad opportunities should contact the Office of International Programs and consult with their academic advisor.