

MATHEMATICAL SCIENCES ACADEMIC MAP: DEGREE BS (120 CREDIT HOURS)

This degree map is a semester-by-semester sample course schedule for students majoring in Mathematical Sciences. 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.

The basic curriculum in mathematics affords the students sufficient time to explore several areas related to mathematics. Because this is very long list of opportunities the department keeps an up to date folder on the current job market and graduate opportunities. Our majors are monitored on a semester basis. By the end of the 2nd year each major will have a plan that maps out the major course schedule as well as a potential plan for a career path.

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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Department Web Address: <http://www.tnstate.edu/mathematics/index.aspx>

Fall Schedule		Milestones
Semester 1	Hrs.	Semester 1
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.
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.
COMM 2200	3	
Humanities Elective*	3	
UNIV 1000**	1	
Total Hours	14	

*Students must take a 3 credit hour course from the following list of approved general education Humanities courses:
 AREN 2310, ART 1010, HIST 1000, MUSC 1010, PHIL 1030, RELS 2010, or THTR 1020.

A Orientation course taken at another University does **NOT meet this requirement. Students with less than 6 credit hours must take UNIV 1000 at TSU.

Spring Schedule		Milestones
Semester 2	Hrs.	Semester 2
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.
MATH 1920	4	Pre-requisite course: Must be taken before MATH 2110, 2600, 3120, 3610; Minimum Grade of "C" Required.
Social Sciences*	3	
Humanities Elective**	3	
Elective***	3	
Total Hours	16	

*The following courses can meet the Social Science requirement: AFAS 2010, ANTH 2300, ECON, 2010, GEOG 1010, HPSS 1510, POLI 1010 PSYC 2010, URBS 2010, and WMST 2000.

**Students must take a 3 credit hour course from the following list of approved general education Humanities courses: AREN 2310, ART 1010, HIST 1000, MUSC 1010, PHIL 1030, RELS 2010, or THTR 1020.

***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.

Fall Schedule		Milestones
Semester 3	Hrs.	Semester 3
HIST 2010*	3	
Natural Science Elective**	4	Pre-requisite course: Must be taken before BIOL 1120/1121, CHEM 1120/1121, or PHYS 2120/2121 respectively.
ENGL 2110***	3	
MATH 2110	4	Pre-requisite course: Must be taken before MATH 4410; Minimum Grade of "C" Required.
Total Hours	14	

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

**The following courses can meet the Natural Science requirement: BIOL 1110/1111, CHEM 1110/1111, and PHYS 2110/2111.

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

Spring Schedule		Milestones
Semester 4	Hrs.	Semester 4
HIST 2020*	3	
Natural Science Elective**	4	
MATH 2600	3	Pre-requisite Course: Must be taken before MATH 3200, 3210, 3640, 3810, 441, 4750; Minimum Grade of "C" required.
MATH 3120	3	Pre-requisite course: Must be taken before MATH 3130; Minimum Grade of "C" Required.
Elective***	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 previous semester.

**The following courses can meet the Natural Science requirement: BIOL 1120/1121, CHEM 1120/1121, and PHYS 2120/2121.

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

Fall Schedule		Milestones
Semester 5	Hrs.	Semester 5
MATH 3610	3	Minimum Grade of "C" Required.
MATH 3640	3	Pre-requisite course: Must be taken before MATH 3650; Minimum Grade of "C" Required.
MATH 3200	3	Minimum Grade of "C" Required.
MATH 3810	3	Minimum Grade of "C" Required.
Social Science Elective*	3	
Total Hours	15	

*The following courses can meet the Social Science requirement: AFAS 2010, ANTH 2300, ECON 2010, GEOG 1010, HPSS 1510, POLI 1010, PSYC 2010, URBS 2010, and WMST 2000.

Spring Schedule		Milestones
Semester 6	Hrs.	Semester 6
MATH 3100	3	Minimum Grade of "C" Required.
MATH 3210	3	Minimum Grade of "C" Required.
MATH 3650	3	Minimum Grade of "C" Required.
MATH 3130	3	Minimum Grade of "C" Required.
MATH 4750	3	Minimum Grade of "C" Required.
Total Hours	15	

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Fall Schedule		Milestones
Semester 7	Hrs.	Semester 7
MATH 4500	3	Senior Standing is a pre-requisite for this course; Minimum Grade of "C" Required.
MATH 4410	3	Pre-requisite course: Must be taken before MATH 4420 Minimum Grade of "C" Required.
MATH 3000-4000 Upper Level Elective*	3	Minimum Grade of "C" Required.
Elective**	3	
Elective**	3	
Total Hours	15	

*Students may select an upper level (3000-4000) Math elective.

**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 any level (1000-4000) elective during this semester.

Spring Schedule		Milestones
Semester 8	Hrs.	Semester 8
		Take Senior Exit Exam and Apply for Graduation
MATH 4420	3	Minimum Grade of "C" Required.
Elective*	3	
Elective*	3	
Elective*	3	
MATH Upper Level (3000-4000) Elective**	3	
Total hours	15	

*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 any level (1000-4000) elective during this semester.

**Students may select an upper level (3000-4000) Math elective.

Employment Information:

The Mathematics Program is designed to enable graduates to be employed by any of a number of private industries, government agencies, foundations, and institutions requiring high-level quantitative skills and a highly developed ability to think critically and logically; and (2) to provide training to enable graduates to enter graduate school in mathematics or related areas.

Representative Job Titles Related to this Major:

Instructor, Editor, Economist, Stockbroker, Insurance Underwriter, Statistician, Actuary, Operations Research Analysis, Pharmaceutical Manufacturer

Representative Employers:

Insurance Companies, Aviation Companies, Federal Government, Consulting Groups, Community Colleges/Universities, Financial Services, Engineering Research Organizations

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.

This map is not intended to be a contract, either expressed or implied, between the University and the students, but represents a flexible program of the current curriculum which may be altered from time to time to carry out the academic objectives of the University. TSU specifically reserves the right to change, delete or add to any map at any time within the student's period of study at the University.