Mathematics

This template has been completed by the appropriate Academic Committee as a blueprint for guiding students who intend to major in this discipline. Students who successfully complete this course of study and who meet the requirements for admission to the participating state senior institution are eligible to apply for admission to the major with junior standing. Not all two-year colleges or universities will offer every course or program and course numbers and names may vary. Students desiring to transfer will be advised to refer to catalogs or to access details about courses and programs through world-wide web sites of colleges and universities.

Areas I-IV General Studies Curriculum Core
41 Hours (Could be 42 if a 4-SH Mathematics course is taken in Area III.)

Forty-one semester hours of credit in general studies core courses have been approved by the Articulation and General Studies Committee**.** The general studies curriculum core includes study in the areas of written composition, humanities and fine arts, natural sciences and mathematics, and history, social, and behavioral sciences.

Area I Written Communication
6 Semester Hours

Effective written communication skills are essential in a literate society. **Requirements include at least 6 semester hours in written composition.**

NOTE: English Composition I and II are the only courses available in AREA I.

Area II Humanities and Fine Arts
12 Semester Hours

Study in the humanities addresses the ability to deal with questions of values, ethics, or aesthetics as they are represented in literature, philosophy, religion, and the arts, and is fundamental to general education. **Minimum requirements include at least 12 semester hours in humanities with a minimum 3 semester hours in literature*, 3 semester hours in the arts, and the remaining semester hours from the humanities and/or fine arts.** In addition to literature, disciplines in the humanities include, but are not limited to, philosophy, religious studies, speech, foreign languages, art, music, theatre, and dance.

NOTE: Students must complete a 6 semester-hour sequence either in literature or in history in Area II or IV.

> **Discipline Specific Requirements for AREA II:**
>
> No specific requirements. See minimum AREA II requirements above.

Area III Natural Sciences and Mathematics
11 Semester Hours (Could be 12 if a 4-SH Mathematics course is taken in Area III.)

Study in the natural sciences and mathematics emphasizes the scientific method and applies quantitative or inductive reasoning.**Requirements include at least 11 semester hours with at least 3 semester hours in mathematics at the precalculus algebra level or higher (some degrees may allow Finite Mathematics) and at least 8 semester hours in the natural sciences which must include laboratory experiences.** Disciplines in the natural sciences include but are not limited to, astronomy, biology, chemistry, geology, and physics.

NOTE: Some mathematics courses are offered for 4 semester credit hours and some natural science laboratory courses are often 5 semester hours. Only minimum semester hour requirements are indicated.

> **Discipline Specific Requirements for AREA III:**
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> **If MTH 112 (Precalculus Algebra) is taken, it will be counted as a general elective at most universities.**
>
> **Students should take either:**
> *MTH 113 Precalculus Trigonometry

or
*MTH 115 Precalculus Algebra and Trigonometry

Students could also take:
MTH 125 Calculus I
MTH 126 Calculus II
MTH 227 Calculus III

*Both courses are acceptable as prerequisites for the Calculus I requirement in AREA V.

Area IV History, Social and Behavioral Sciences
12 Semester Hours

Study in history and the social and behavioral sciences deals primarily with the study of human behavior, social and political structures, and economics. **Requirements include 12 semester hours with at least a 3 semester hours course in history and at least 6 semester hours from among other disciplines in the social and behavioral sciences.** Disciplines include, but are not limited to, anthropology, economics, geography, political science, psychology, and sociology.

NOTE: Students must complete a 6 semester-hour sequence either in literature or in history in Area II or IV.

Discipline Specific Requirements for AREA IV:

No specific requirements. See minimum AREA III requirements above.

Area V Pre-Professional, Major and Electives
19-23 Semester Hours

Area V is designated for courses appropriate to the degree/major requirements of the individual student (it may also include electives). These courses are most often taken during the last part of the sophomore year to prepare a student to enter the four-year institution as a junior in their chosen major.

NOTE: Some institutions may include courses in wellness or physical education.

Discipline Specific Requirements for AREA V:

If not taken in Area III, students should take either MTH 113 (Precalculus Trigonometry) or MTH 115 (Precalculus Algebra and Trigonometry).

Required Courses:
MTH 125 Calculus I
MTH 126 Calculus II
MTH 227 Calculus III

Students may take:
MTH 237 Linear Algebra
MTH 238 Applied Differential Equations I

The remaining hours in Area V must be fulfilled by the requirements of the institution to which the student plans to transfer. Please refer to the institutional home page or catalog for a major in Math

Total Combined Hours for Areas I-V
60-64 Semester Hours (Could be 65 if a 4-SH Mathematics course is taken in Area III.)

NOTE: For institutions requiring 120 semester hours for graduation the maximum allowable hours for transfer from a

community college into a four-year baccalaureate degree program will be 60 semester hours. The primary goal of the template is to try to allow for 1/2 of the total degree hours to transfer from an Alabama public two-year community college to an Alabama public four-year university. The template sets the policy for the STARS TRANSFER GUIDE. If you are a transfer student, make sure you obtain and follow an official STARS TRANSFER GUIDE.

Total credits for degree: 0