

## MATHEMATICS MAJORS (Suggested Associate in Science Degree Curriculum)

This worksheet is designed to help students select courses which are likely to apply to a major in **MATHEMATICS**. These suggested courses satisfy requirements in the Associate in Science degree program at Prairie State College and provide the basis for transferring to a four-year institution. This program meets the guidelines of the **IAI (Illinois Articulation Initiative) Baccalaureate Major Panel for Mathematics**. Students should obtain a copy of the Prairie State College **Associate in Science Degree Worksheet** and should visit the IAI website at [www.iTransfer.org](http://www.iTransfer.org) for more information.

Bachelor's degree programs in mathematics prepare students with diverse career goals by developing rigorous, logical thinking; an appreciation and familiarity with complex structures and algorithms; and the ability to learn technical material and abstract concepts. Community and junior college students seeking a bachelor's degree in mathematics are strongly encouraged to complete an Associate in Science (A.S.) degree prior to transfer. A minimum of 60 semester credits is required for transfer as a junior into a baccalaureate mathematics program. Since admission is competitive, completing the courses recommended below does not by itself guarantee admission. A grade of C or better may be required for chemistry, mathematics, and engineering science courses to transfer.

**Teaching Mathematics:** Students planning to teach high school mathematics should also consider the Associate of Arts in Teaching Mathematics degree. Students planning to teach in the elementary schools should pick up a copy of the Associate in Arts Degree Teacher Education Worksheet.

### SUGGESTED CURRICULUM

*Each senior institution has its own transfer policies. Therefore, we cannot guarantee the accuracy of this information in regard to every individual school. Consult the school of your choice and/or the Prairie State College Advising Center to discuss the transferability of courses.*

#### TRANSFERABLE GENERAL EDUCATION CORE (39-40 credits)

##### Area A: Communications ( 9 credits)

ENG 101 (3)	[C1 900]*	Composition I (Prereq. ENG 099, C or better, or qualifying score on English Placement Test)
ENG 102 (3)	[C1 901R]*	Composition II (Prereq. ENG 101, C or better)
COMM 101(3)	[C2 900]	Principles of Communication (Prereq. Placement in ENG 099 or above)

\*Must have a C or better in ENG 101 & 102 to receive credit for the degree.

##### Area B: Humanities and Fine Arts ( 9 credits)

Select three courses with at least one course selected from the humanities area and one course from the fine arts area. Refer to the Associate in Science Degree Worksheet, Area B, for a listing of approved course choices.

Humanities Course (3)	Select any Area B Humanities Course (Prereq. Placement in ENG 099 or above)
Fine Arts Course (3)	Select any Area B Fine Arts Course (Prereq. Placement in ENG 099 or above)
Humanities/Fine Arts Course (3)	Select any Area B Course (Prereq. Placement in ENG 099 or above)

##### Area C: Mathematics ( 5 credits)

MATH 171 (5)	[M1 900-1]	Calculus with Analytic Geometry I (Prereq. MATH 165 with C or better)
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##### Area D: Physical and Life Sciences ( 7-8 credits)

Select one life science and one physical science course. One course must have a lab component. Refer to the Associate in Science Degree Worksheet, Area D, for a listing of approved course choices.

Life Science Course (3-4)	
PHYSI 210 (4)	[P2 900L1] University Physics I (Prereq. MATH 171 & high school physics)

##### Area E: Social and Behavioral Sciences ( 9 credits)

Select three courses in at least two different disciplines. Refer to the Associate in Science Degree Worksheet, Area E, for a listing of approved course choices.

Social/Behavioral Sci Course (3)	Select any Area E Social/Behav Sci Course (Prereq. Placement in ENG 099 or above)
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#### MATHEMATICS MAJOR COURSE RECOMMENDATIONS ( 22-23 credits)

Check with the school to which you plan to transfer to verify transferability of courses for this major

Select 22-23 credits from the "suggested" course recommendations listed below:

**Suggested IAI Mathematics Core courses include:**

MATH 172 (5) [MTH 902] Calculus with Analytic Geometry II (Prereq. MATH 171)  
MATH 173 (5) [MTH 903] Calculus with Analytic Geometry III (Prereq. MATH 172)

*It is highly advised that students complete the entire calculus sequence at a single institution. Course content may vary widely among institutions depending on the credits assigned to each course, and completing the sequence at a single institution is the best way to assure that neither credit nor content is lost in transfer.*

**(Choose from MATH 216 or 220. MATH 220 is preferred by IAI Math Panel)**

MATH 220 (3) Linear Algebra (Prereq. MATH 172) **OR**  
MATH 216 (3) [MTH 912] Differential Equations (Prereq. MATH 172)  
MATH 201 (3) [MTH 922] Engineering Computer Programming (Prereq. MATH 171)

**Other suggested courses that satisfy the PSC AS degree requirements may include electives such as:**

Any additional general education courses selected from Areas B, C, D, or E

Any entry level majors course in a transferable major area

Any foreign language courses\*

Up to four credits of physical education courses

Additional courses recommended as transferable by the school to which you plan to transfer.

**\*Foreign Language Requirement:** Some universities have a foreign language requirement. Generally, four years of a single foreign language in high school, or four semesters in college, will fulfill this requirement. It is recommended that students complete the entire sequence at one institution.

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## 62 CREDITS REQUIRED FOR AN ASSOCIATE IN SCIENCE DEGREE

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**FOR FURTHER INFORMATION CONTACT:**

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**FOR TRANSFER INFORMATION:**

Course Applicability System (CAS): [www.transfer.org](http://www.transfer.org)

Illinois Articulation Initiative (IAI): [www.iTransfer.org](http://www.iTransfer.org)

Links to Articulation Tables for Illinois Colleges: <http://www.itransfer.org/IAI/Other/Articulationlinks.taf>

Visit the web sites of colleges and universities to which you plan to transfer.

**FOR CAREER INFORMATION:**

Occupational Outlook Handbook, U.S. Department of Labor: <http://www.bls.gov/oco/home.htm>

American Academy of Actuaries: <http://www.actuary.org>

American Mathematical Society: <http://www.ams.org>

Association for Women in Mathematics: <http://www.awm-math.org>

National Council of Teachers of Mathematics: <http://www.nctm.org>

Society for Industrial and Applied Mathematics: <http://www.siam.org>