# **MATHEMATICS**

Program Code: M.MAT.AS

## Associate in Science (A.S.)

Graduation requirement — 60 semester hours

The following curriculum emphasizes scientific and theoretical applications and is designed for students interested in transferring to a four-year institution to pursue a bachelor's degree in computer science or mathematics.

Students should plan their transfer programs with a Parkland academic success advisor and the catalog of the four-year college or university they plan to attend.

#### **Program Notes\***

- MAT 124 and MAT 125 are prerequisites for MAT 128.
- General Education Core Curriculum requirements for the Associate in Science (A.S.) degree do not fully satisfy the IAI General Education Core Curriculum (GECC) requirements. Additional courses to complete the GECC may be taken at Parkland or after transferring.
- Recommended courses are designed to facilitate completion of the A.S. degree and transfer into a four-year college or university with junior standing in a chosen academic path. Students are advised to follow the recommendations.

#### **Suggested Full-time Sequence**

| FALL<br>1st Semester<br>MAT 128<br>ENG 101<br>Soc/Beh Sci elec<br>Hum/FA elec | SPRING<br>2nd Semester<br>MAT 129<br>COM 103<br>ENG 102<br>Soc/Beh Sci elec<br>Phys/LS elec |
|---|---|
| FALL  | SPRING  |
| 3rd Semester  | 4th Semester  |
| MAT 228   | MAT 229   |
| CSC 123 or Gen elec   | MAT 220   |
| Phys/LS elec  | Hum/FA elec   |
| General elec  | Phys/LS elec  |

# General Education Core Courses (32–36 hours)

| ur <i>3)</i>                  | CI. 1113.  |
|-------------------------------|--|
| tions (9)                     |  |
| Introduction to Public Speal  | king3  |
| Composition I                 |  |
| Composition II                |  |
| Fine Arts electives           | 6  |
| hoose one course from Huma    | nities and one from  |
| ts                            |  |
| vioral Sciences electives     | 6  |
| h Sci courses must be from at | t least two  |
| nes                           |  |
| urse from Hum/Fine Arts or S  | Soc/Beh Sci must   |
| ie non-Western culture requii | rement   |
| s elective                    |  |
| ended: MAT 128 Calculus and A | Analytical   |
|                               | tions (9)<br>Introduction to Public Speal<br>Composition I<br>Composition II<br>Fine Arts electives<br>noose one course from Huma<br>ts<br>vioral Sciences electives<br>h Sci courses must be from at<br>nes<br>urse from Hum/Fine Arts or S<br>re non-Western culture requin<br>s elective<br>ended: MAT 128 Calculus and a |

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| Geometry I (5)                                    |
|---|
| Life Sciences (laboratory-based) elective 4-5     |
| Physical Sciences (laboratory-based) elective 4-5 |

#### A.S. Degree Requirement (7-8 hours)

Must include one additional mathematics and one additional physical or life science course.

Any AST, BIO, CHE, ESC, PHY, or SCI courses numbered 100 through 289 whose second digit is even, beyond the general education requirements in science, may fulfill the additional science course requirement.

Recommended: MAT 129 Calculus and Analytic Geometry II (4)

## **Recommended Courses (14 hours)**

| CSC 123               | Computer Science I                   | 1 |  |
|-----------------------|--------------------------------------|---|--|
| MAT 220               | Linear Algebra                       |   |  |
| or MAT 200            | Introduction to Discrete Mathematics | 3 |  |
| MAT 228               | Calculus and Analytic Geometry III   | 1 |  |
| MAT 229               | Differential Equations               | 3 |  |
| Electives (2–7 hours) |                                      |   |  |
| Select course         | es as needed to meet 60-hour degree  |   |  |
| requirement.          |                                      |   |  |
| Elective              |                                      | 7 |  |
| Total Semest          | er Credit Hours 60                   | ) |  |