PROGRAM OF STUDY

Mathematics (AS-T) Associate in Science Degree for Transfer

The Associate in Science Degree in Mathematics for Transfer prepares students for transfer into four-year mathematics programs. A strong mathematics background allows students to pursue studies in fields such as mathematics education, engineering, information technology, statistical analysis, physical science and advanced mathematics.

Upon completion of the Reedley College Mathematics program, a student will be able to:

· Communicate mathematics with understanding (read, write, listen, speak).

- Use critical thinking and mathematical reasoning to solve a variety of problems.
- · Apply mathematical models to real world situations.
- · Use technology, when appropriate, to enhance their mathematical understanding, critical thinking, and problem solving skills.
- Demonstrate the ability to use symbolic, graphical, numerical and written representations of mathematical ideas.

The program is suited to the needs of students who will complete their education at Reedley College with an A.S. degree, as well as those students who will complete their Reedley College Associate in Science Degree in Mathematics for Transfer who transfer to a four year institution to complete their bachelor's degree. Successful completion of the Associate in Science Degree in Mathematics for Transfer guarantees the student acceptance to a California State University (but does not guarantee acceptance to a particular campus or major) to pursue a baccalaureate degree, in preparation to pursue a career in the field of mathematics, engineering, statistics, actuarial science, business and management, law enforcement, government, and education.

To obtain the Associate in Science Degree in Mathematics for Transfer, students must complete the following:

· Completion of the following major requirements with grades of 2.0 or better

• A minimum of 60 CSU-transferable units with a grade point average (GPA) of 2.0 or better.

• Certified completion of either the California State University General Education Breadth pattern (CSU GE), or the Intersegmental General Education Transfer Curriculum (IGETC-CSU) pattern general education requirements.

| Math Core - 17 units | | Units |
|---------------------------------------|---|-------|
| MATH5A | MATH ANALYSIS I | 5 |
| MATH5B | MATH ANALYSIS II | 4 |
| MATH6 | MATH ANALYSIS III | 4 |
| MATH7 | DIFFERENTIAL EQUATIONS AND LINEAR ALGEBRA | 4 |
| Select one (1) course | from Group A - 4 units | Units |
| Group A | | Units |
| CSCI26 | DISCRETE MATHEMATICS FOR COMPUTER SCIENCE | 4 |
| CSCI40 | PROGRAMMING CONCEPTS AND METHODOLOGY I | 4 |
| ENGR40 | Programming for Scientists and Engineers | 4 |
| MATH11 | ELEMENTARY STATISTICS | 4 |
| MATH11H | HONORS ELEMENTARY STATISTICS | 4 |
| PHYS4A | PHYSICS FOR SCIENTISTS AND ENGINEERS | 4 |
| STAT7 | ELEMENTARY STATISTICS | 4 |
| CSU GE or IGETC - 39-41 units | | Units |
| CSU electives to reach 60 units total | | Units |
| Total Units | | Units |
| Total Units | | 60 |
| Effective Term: Fall 2012 | | |