# **DESCRIPTION OF THE MATHEMATICS PROGRAM**

The Associate in Science (A.S.) degree in Mathematics is a 60-credit program that will provide students with the tools to test infinite series for convergence or divergence, allow them to manipulate and interpret matrix notations, while analyzing graphs for paths and circuits. The program offers a wide variety of mathematical courses to choose from, starting with basic arithmetic and algebra, and leading up to calculus, differential equations, logic and set theory. For non-STEM majors, we offer math classes that emphasize the role of mathematics in other disciplines.

### SKILLS

**Communication skills.** Actuaries must be able to explain complex technical matters to those without an actuarial background. They must also communicate clearly through reports and memos that describe their work and recommendations.

**Interpersonal skills.** Actuaries serve as leaders and members of teams, so they must be able to listen to other people's opinions and suggestions before reaching a conclusion. **Problem-solving skills.** Mathematicians and statisticians must devise new solutions to problems encountered by scientists or engineers.

# **CAREER INFORMATION**

Operations research analysts use advanced mathematical and analytical methods to help organizations solve problems and make better decisions. Mathematicians and statisticians analyze data and apply mathematical and statistical techniques to help solve real-world problems in business, engineering, healthcare, or other fields. Mathematicians and statisticians work in many fields, such as education, marketing, psychology, sports, or any other field that requires the collection and analysis of data. In particular, government, healthcare, and research and development companies employ many statisticians.

# **EMPLOYMENT OUTLOOK**

KINGSBOROUGH

★ DREAMS BEGIN HERE ★

Employment of operations research analysts is projected to grow 23 percent from 2021 to 2031, much faster than the average for all occupations. Overall employment of mathematicians and statisticians is projected to grow 31 percent from 2021 to 2031, much faster than the average for all occupations.

**Career Development Center** Monday - Friday | 9:30am - 5pm Room C-102 | 718-368-5115

### **CAREER PATH**

The median annual wage for operations research analysts was \$82,360 in May 2021. Almost all operations research analysts work full time.

The median annual wage for mathematicians was \$108,100 in May 2021.

The median annual wage for statisticians was \$95,570 in May 2021.

#### **CAREER COACH – SEARCH CAREER INFORMATION & CURRENT LOCAL WAGE DATA**

https://kingsborough.emsicc.com/programs/mathematics-as/190619?

INFORMATION ON HOW TO APPLY: www.cuny.edu/apply or 718-368-4600



04-2023