

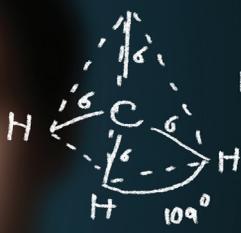
$= k \frac{q_1 q_2}{r^2}$
 $CH_4 + 2O_2 \rightarrow CO_2 + 2H_2O$
 $PV = nRT$
 $\frac{dy}{dx} \ln x = \frac{y}{x}$

$mc\Delta T$
 $\log_a(\frac{1}{x}) = -\log_a x$
 $v = v_0 + at$

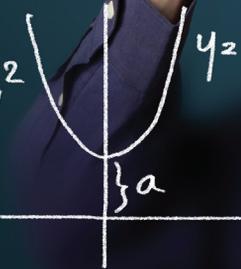
$\lim_{x \rightarrow 0} \frac{(1+x)^n - 1}{x} = n$
 $T = \frac{2\pi}{\omega}$
 $P = mV$

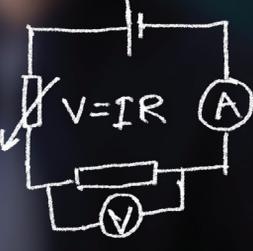
$v^2 - v_0^2 = 2a(x - x_0)$

 $v = \omega r$


 $\frac{\sin \alpha}{a} = \frac{\sin \beta}{b} = \frac{\sin \gamma}{c}$
 $a^2 + b^2 - 2ab \cos \gamma = c^2$

 $v = \omega r$

$E = mc^2$
 $F = \frac{\Delta P}{\Delta t}$
 $\sin^2 + \cos^2 = 1$

$\frac{1}{2}mv^2$
 $y = x^2 + a$


 $v = f\lambda$

 $P = IV$
 $V = IR$
 $= \frac{V^2}{R}$
 $= I^2 R$

$2H_2 + O_2 \rightleftharpoons 2H_2O$
 $w = 2\pi f$

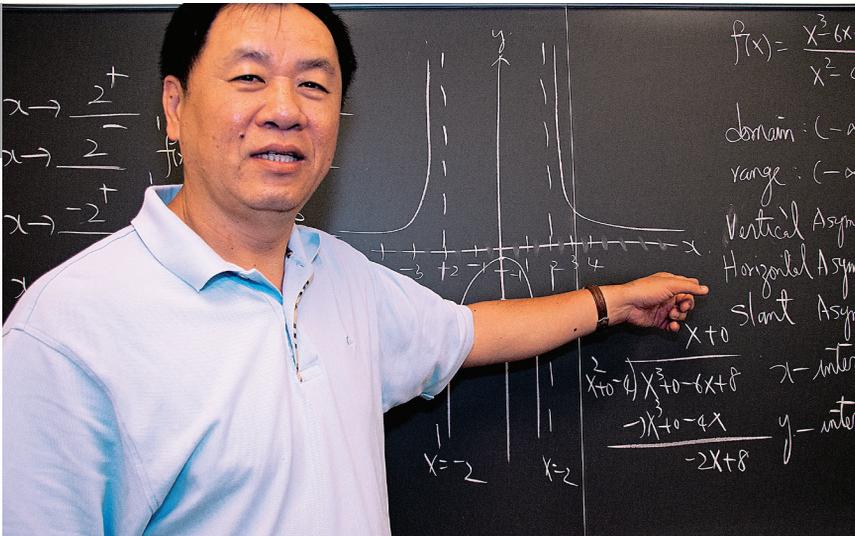
$K_{eq} = \frac{[H_2O]^2}{[H_2]^2 [O_2]}$
 $\Delta E = h\nu$
 $F = \frac{G m_1 m_2}{r^2}$

$\rho g \Delta h$

MATHEMATICS
Program

stockton.edu/nams

STOCKTON UNIVERSITY | SCHOOL OF NATURAL SCIENCES & MATHEMATICS



Mathematics Program | MATH

ABOUT THE PROGRAM

Stockton's Mathematics Program offers B.A. and B.S. degrees with several concentrations. Students are encouraged to take both pure and applied mathematics courses. The program offers weekly seminars with presenters from other colleges and industry, as well as students, faculty and alumni from the Stockton community. Mathematics faculty offer independent study projects for students who want to focus on a particular area or specialty.

Program Highlights

- Most courses taught by full-time faculty
- All program faculty hold doctoral degrees from respected institutions
- Small class sizes
- Opportunity for one-on-one assistance
- Math majors have program faculty as academic advisors
- B.A. in Mathematics with concentration in Education
- Graduates K-12 teaching, actuarial science graduate school and employment in both the private sector and government

Faculty Research Topics

- Geometric Group Theory
- Dynamical Systems
- Interconnections among branches of mathematics
- Modeling the HIV Epidemic
- Use of technology in math instruction
- Mathematics Education
- Quantitative reasoning across disciplines
- Mathematical Imaging
- Theory of Semifields

In addition to the University's general education requirements, Mathematics majors are expected to complete the following courses:

The BS requires 80 credits in Core Courses. The BA requires 64 credits in Core Courses.

These courses include:

- Calculus I, Calculus II, Calculus III, Linear Algebra, Foundations of Mathematics, Differential Equations, Physics I and Physics II, and Programming and Problem Solving I

Mathematics majors are also required to complete four of the following 10 advanced courses with at least one from Group I and one from Group II (Topics in Mathematics could count as Group for Group II depending upon that semester's topic):

Group I

Real Analysis
 Complex Analysis
 Abstract Algebra
 Topics in Geometry
 InnerConnections in Math
 Topics in Mathematics

Group II

Probability and Statistics I
 Probability and Statistics II
 Numerical Analysis
 Computer Algorithms
 Theory of Computation
 Topics in Mathematics
 Partial Differential Equations

Students may select from three concentrations in Mathematics: Actuarial Science, Computational Science and Secondary Education.

Depending on selected concentration, students choose additional courses to fulfill degree from recommended list including courses in Economics, Computer Science, Physics, Chemistry, Biology, Marine Science, Philosophy and General Natural Sciences and Mathematics.

Minor in Mathematics

Students may earn a minor in mathematics by completing the following courses: Calculus I, Calculus II, Calculus III, Linear Algebra and one additional advanced mathematics course.

FOR ADDITIONAL INFORMATION

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FOR INFORMATION ABOUT THE PROGRAM:

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Stockton is an AA/EO institution.