WILLIAM FREMD HIGH SCHOOL

MATH & COMPUTER SCIENCE

ELECTIVES AT-A-GLANCE



BUILD SKILLS FOR COLLEGE & CAREER

- **Understand the technology shaping your future:** As AI and automation change the workplace, build a foundation in programming, data, and logical thinking that helps you understand new tools and adapt as technology evolves.
- **Use data to inform your decisions:** Learn to evaluate claims, interpret data, test ideas, and explain your reasoning. These are skills that carry into college coursework and careers in business, healthcare, science, technology, and beyond.
- **Build practical experience:** Create websites, games, apps, and independent projects that demonstrate your creativity. Explore career interests and strengthen the critical thinking, problem-solving, and technology skills you can apply in any career.

MATH AND COMPUTER SCIENCE ELECTIVES

M256: INTRO TO COMPUTER SCIENCE ☐

Grade: 9, 10, 11, 12
This is a project-based course where students learn to program with the goal of creating websites and video games. No homework and no previous experience required!
Pre-Requisite(s): Open to all students!

M319: AP COMPUTER SCIENCE PRINCIPLES ☐

Grade: 9, 10, 11, 12
This AP course is a broad survey of computer science ideas and programming. Learn to create websites while you learn about cybersecurity, data science, & the internet!
Pre-Requisite(s): M256 or enrollment in honors math

M359: AP COMPUTER SCIENCE A ☐

Grade: 10, 11, 12
This AP course introduces students to object-oriented programming. Students learn Java and use algorithms to solve problems creatively with a variety of engaging projects.
Pre-Requisite(s): M256 or M319 or department approval

M448: MOBILE APP DEVELOPMENT ☐

Grade: 11, 12
Design and build your own mobile apps! Learn to create user-friendly interfaces, test and improve your ideas, and prepare apps to share with the public.
Pre-Requisite(s): M359

M468: INDEPENDENT STUDY ☐

Grade: 12
Take your computer science skills further with an independent project! Choose an idea that interests you, then design and build it.
Pre-Requisite(s): M448 and teacher recommendation

M419: AP STATISTICS ☐

Grade: 10, 11, 12
Use data to explore real-world questions! This AP math elective builds statistical reasoning as you evaluate claims and make predictions.
Pre-Requisite(s): Complete M436 or concurrent enrollment with either M408 or M438.







Questions? Contact Christopher Grattoni , Math Department Chair

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