

## STEM (Science-Technology-Engineering-Math)

Students in Thornton Academy's STEM program acquire hands-on skills in several areas including:

- research,
- experimental design,
- data analysis,
- problem solving.

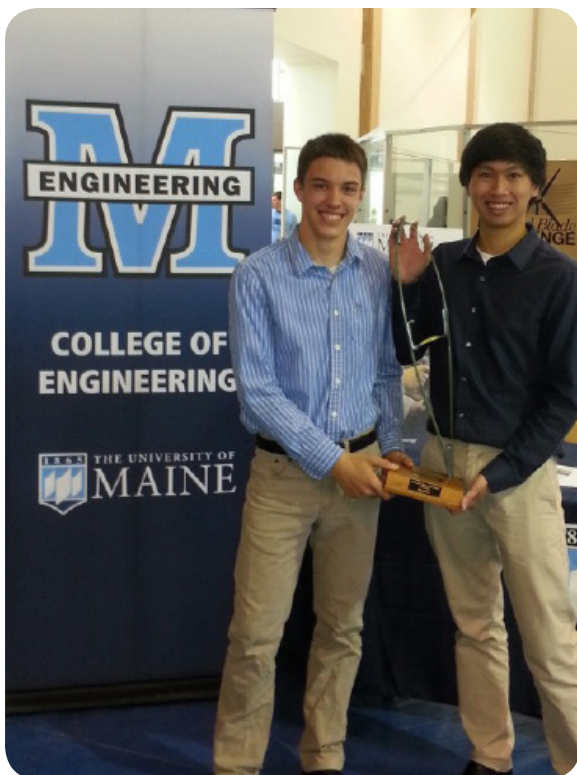
Honors courses encourage creative and critical thinking for students who want to push their knowledge of a subject to a higher level. Honors courses are offered in all four of the hard sciences, engineering, and in six mathematics fields.

AP courses include: Biology, Calculus AB, Calculus BC, Chemistry, Computer Science A, Economics, Environmental Science, Physics 1, Physics 1 & 2, Physics C, Statistics



- A STEM laboratory supports the “guide on the side” style of teaching. Students have the opportunity for hands-on innovation and design-testing experiences, exactly the skills expected of 21st Century workers.
- 150 students participate in off-campus job shadows and internships with local businesses, health and educational services, and manufacturers.
- Thornton Academy became the first high school in the country to partner with the National Tooling and Machining Association (NTMA) to offer an online training curriculum that promotes advanced workforce development.





TA students David Parran and Kent Seneres won 3rd place for the Wind Blade Challenge in the 2014 state-wide engineering competition, held at the University of Maine.

## *Diploma Endorsement*

College admissions have become more competitive and the applicant pool continues to expand. In response to this trend, TA has initiated a unique and challenging diploma endorsement program to allow ambitious students to call attention to academic strengths and goals for future study. Students who successfully complete a challenging curriculum of STEM courses at TA may earn a STEM Endorsed Diploma or an Applied STEM Diploma.

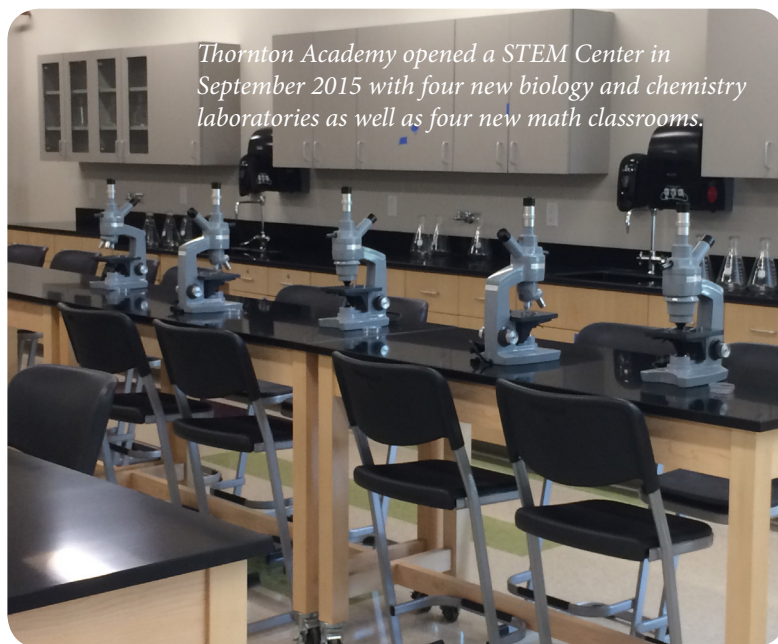
## *Earning College Credits*

Motivated, engineering-bound students may challenge themselves in high school while working to earn advanced placement in college. A groundbreaking articulation with the University of Maine allows students who complete TA's rigorous STEM sequence to gain admission to the flagship university's renowned College of Engineering program with sophomore standing.

## Preparing Students For A Changing World

### *After-School Activities*

- **Academic Decathlon:** A statewide competition with seven subject tests.
- **Robotics Club:** An opportunity to build and program a TA robot to compete in FIRST robotics competitions.
- **Engineering Competition:** This contest matches high school teams with Maine-based advanced composites manufacturers to research, design, and manufacture model wind blades.
- **Math Team:** A way to practice and enhance math skills through regional competitions. TA has consistently won distinctions at the state level.



*This school is authorized under Federal law to enroll nonimmigrant students.*