Academy of Engineering

Project Lead the Way @ Rockville High School

Project Lead the Way is a national non-profit organization established to help schools give students the knowledge they need to excel in high-tech fields

Program Goals

To attract student to attract students to engineering, and allow students while still in high school, to determine if engineering is the career they desire.

To better prepare students to enter college engineering programs

To expose students to the fundamental underlying principles involved in engineering problem-solving activities.

To develop skills involving the application of math and science concepts in conjunction with current technological practices to solve problems representing real-world situations

To teach students how to work successfully in groups to obtain an efficient and effective solution to given problems

Course of Studies at Rockville High School

Introduction to Engineering

Uses a design development process while enriching problem solving skills; students create and analyze models using specialized computer software.

Digital Electronics

Teaches applied logic through work with electronic circuitry, which students also construct and test for functionality.

Principles of Engineering

Explores technology systems and manufacturing processes; addresses the social and political consequences of technological change.

Aerospace Engineering

Expands horizons with Projects developed with NASA-aerodynamics, astronautics, space-life sciences, and systems engineering.

Engineering Design and Development

An engineering research course in which students work in teams to research, design and construct a solution to an openended engineering problem. Students apply principles developed in the four preceding courses and are guided by a community mentor. They must present progress reports, submit a final written report and defend their solution of a panel of outside reviewers at the end of the school year.

For more information about Engineering at Rockville High School

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Further information regarding Project Lead the Way can be found:

www.pltw.org