SOUTHINGTON HIGH SCHOOL
PROJECT LEAD THE WAY
APPLICATION

STUDENT NAME *(print legibly)*: _____

STUDENT MAILING ADDRESS *(street)*: _____

***(city, state, zip)*:** _____

HOME TELEPHONE : _____

PARENT SIGNATURE: _____

CURRENT MIDDLE SCHOOL: _____

(Please return this cover sheet with the essay part of your application)

Selection committee cut here

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For Selection Committee Use Only:

PLTW Applicant #: _____

Essay Evaluation: _____

Science Evaluation: _____

Math Evaluation: _____ Algebra: Yes___ No____

Counselor Recommendation: _____

Absences 7th Grade: _____

Absences 8th Grade: _____

Comments: Yes____ No____

SOUTHINGTON HIGH SCHOOL
PROJECT LEAD THE WAY

Southington High School offers a **pre-engineering curriculum** for students who plan to enter a college upon graduation to seek a degree in engineering or related science, technology, engineering and math (STEM) area.

Program: intended to meet the educational needs of academically strong students in mathematics and science and who have demonstrated an interest in and aptitude for technologies. This program is a four-year, five course sequential curriculum.

Admission: Admission into this program will be on a selective basis with a total of **36** students admitted from the entering grade 9 class. Students will be notified directly by SHS regarding their acceptance status.

College Credits: All SHS students in PLTW have the opportunity to earn college credit with Rochester Institute of Technology or the University of New Haven.

Questions about the program can be answered by contacting:
Mrs. Napolitano at SHS at 860-628-3229 x 11238 or x 11244.

PLTW COURSE DESCRIPTIONS:

The five sequential high school courses in the PLTW program are as follows:

Introduction to Engineering Design – Grade 9- Honors
This is a course that teaches problem solving skills using a design development process. Models of product solutions are created, analyzed and communicated using solid modeling computer design software.

Digital Electronics – Grade 10- Honors
A course in applied logic that encompasses the application of electronic circuits and devices. Computer simulation software is used to design and test digital circuitry prior to the actual construction of circuits and devices.

Computer Integrated Manufacturing – Grade 11- Honors
This course applies principles of robotics and automation. The course builds on computer solid modeling skills developed in Intro to Engineering Design. Students use CNC equipment to produce actual models of their three-dimensional designs. Fundamental concepts of robotics used in automated manufacturing and design analysis are included.

Principles of Engineering - Grade 11- Honors
A course that helps students understand the field of engineering. Exploring various technology systems and manufacturing process help students learn how engineers use math, science and technology in an engineering problem solving process to benefit people. The course also explores concerns about social/political consequences to technological change.

Engineering Design and Development – Grade 12- Honors
A research course in which students work in teams to research, design and construct a solution to an engineering problem. Students apply the principles developed in the preceding courses. Students submit their final project at the end of the school year in a public forum.

The* PLTW *Application Process:

Information about **Project Lead the Way** is included annually in the SHS Program of Studies booklet. Completed applications are due back to the student's middle school Guidance Office by the specified due date. Consult the middle school guidance office if you have inquiries about the due date. Students not currently attending Southington public schools can send their completed applications directly to Mrs. Miller in the SHS Guidance Office. The PLTW selection committee consists of both middle school and high school teachers and school counselors.

Criteria used for acceptance to the PLTW program include:

- Mathematics & Science grades in middle school
- Recommendations from the middle school math & science teachers and student's school counselor
- School attendance history
- Level of interest in working with technology and engineering as determined by the student's recommendations and application essay

Admission to the **Project Lead the Way** program is competitive. Students in the program are expected to maintain at least an 80 average in each PLTW course and continue to exhibit those characteristics which earned them their acceptance to the program. Failure to do so will be grounds for dismissal from the program. All PLTW courses are at an honors level.

If you have any questions please call Southington High Guidance **at 860-628-3229**.

All JFK and JAD students should choose *other elective credit* on their 9th Grade Registration Course Selection sheet. Upon acceptance to the program changes to the PLTW elective will be made for them.

DIRECTIONS TO THE STUDENT APPLYING FOR PLTW:

Your parents need to sign the cover page of the application before returning it to your Middle School Guidance Office.

PART 1:
Part 1 consists of two short essay questions that give you the opportunity to let us know of your interest and talents in math, science, engineering and related technology. Interest level is an important factor for success in the PLTW Program.

PART 2:
Part 2 is for teacher and counselor recommendations.
Please distribute a recommendation form to your math and science teachers and your school counselor as soon as possible. Faculty members will return the recommendations directly to your guidance office. The selection process is completed without the committee seeing student names.

Southington High School PLTW Application
PART 1 – Student Essays

Directions: You must answer both of the following questions, separately from one another. You can neatly hand-write or type your responses. You must attach your essays to your completed application. DO NOT WRITE YOUR NAME ON THE ESSAY. Each response should be 200 words or less. Please complete a "word count" using your word processing software.

QUESTION 1

Why are you interested in engineering as a future career possibility? What has directly inspired you to consider an engineering career? Please be specific and provide support for your response. Experiences may include, but are not limited to, activities such as Lego League, Science Fair, Invention Convention, VEX Robotics, personal hobbies, etc.

QUESTION 2

Engineers work in multidisciplinary teams where they apply the principles of mathematics and science to solve problems and improve our quality of life. What personal traits do you have that make you well suited for the field of engineering and acceptance into the PLTW program? Please provide specific examples which demonstrate these traits and why they would be beneficial for someone working in the field of engineering.

Student Name _____

Student # _____

PART 2a: MATH RECOMMENDATION – Student Evaluation Sheet

Southington High School Project Lead the Way

Evaluator's Name ____ _____

	No basis for evaluation	Below Average	Good	Excellent Top 10%	Outstanding Top 2% (of your team for current year)
Intellectual potential					
Ability to analyze/problem solve					
Creativity and imagination					
Communication skills-oral					
Communication skills-written					
Ability to work with others					
Maturity					
Motivation for advanced study					
Analytical ability					
Disciplined work habits					
Leadership					
Reaction to setbacks					
Integrity					
Initiative/self motivation					
Overall promise					

Additional comments (Brief) :

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Student Name _____

Student # _____

PART 2b: SCIENCE RECOMMENDATION – Student Evaluation Sheet

Southington High School Project Lead the Way

Evaluator's Name ____ _____

	No basis for evaluation	Below Average	Good	Excellent Top 10%	Outstanding Top 2% (of your team for current year)
Intellectual potential					
Ability to analyze/problem solve					
Creativity and imagination					
Communication skills-oral					
Communication skills-written					
Ability to work with others					
Maturity					
Motivation for advanced study					
Analytical ability					
Disciplined work habits					
Leadership					
Reaction to setbacks					
Integrity					
Initiative/self motivation					
Overall promise					

Additional comments (Brief) :

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Student Name _____

Student # _____

PART 2c: GUIDANCE RECOMMENDATION – Student Evaluation Sheet

Southington High School Project Lead the Way

Evaluator's Name _____

	No basis for evaluation	Below Average	Good	Excellent Top 10%	Outstanding Top 2% (of your team for current year)
Intellectual potential					
Maturity					
Communication skills - oral					
School Attendance					
Disciplined work habits					
Leadership					
Reaction to setbacks					
Integrity					
Initiative/self-motivation					
Overall promise					

Additional comments (Please explain if you believe this student is a good fit for the PLTW program):

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