LAWRENCE TECHNOLOGICAL UNIVERSITY®
Your Future in the Making

Summer Technology Opportunities for High School Students

Lawrence Tech offers summer programs for high school students interested in technology and science. Students can choose from six week-long special interest camps or take an introductory engineering class.

SPECIAL INTEREST CAMPS

All camps are held on the Lawrence Tech campus, and the cost for each week-long session is $125. All camps meet Monday through Friday, 9 a.m.–4 p.m.

Special Interest Camps

AUTONOMOUS ROBOTICS CAMP

June 26–30

Students will use Lawrence Tech's laptop robot, L2Bot, to explore basic concepts in autonomous robotics, including control theories, image processing, and computer vision. They will learn how to program the L2Bot with object-oriented Java programming language using Eclipse IDE. Some knowledge of a programming language such as C, NQC, IC, PBasic, C++, VB, Python, JavaScript, or Java is required.

ALTERNATIVE ENERGY AND POWER GENERATION CAMP

July 10–14

In this overview of alternative energy technologies and their application, students will work in small groups on projects that introduce fuel cell, photovoltaic, biomass, and passive solar energy technologies. They will also learn about data collection.

TELECOMMUNICATIONS/COMMUNICATION SYSTEMS CAMP

July 10–14

This camp will introduce students to the varied aspects of telecommunications today. Students will be given hands-on experience in the use of telecommunications equipment and will investigate career opportunities in the areas of television, radio, and the Internet.

GAMING CAMP

July 17–21

This intensive program focuses on the dynamic world of video game development. Students will be introduced to the concepts of game design, will learn the basics of 3D graphics production, including modeling, texturing, and animating, and will be required (!) to play games. Students will create their own mini game portfolio.

BIOTECHNOLOGY CAMP

July 24–28

In a research lab setting, students will learn how to work with bacteria and viruses, how to grow mammalian cells, and how to identify and clone genes. There will be no boring lectures! Students will have lots of time to perform experiments and pursue their own research projects.

BIOMEDICAL ENGINEERING CAMP

July 31–August 4

Students will explore the role of the biomedical engineer in designing procedures and equipment that assist in the diagnosis and treatment of disease and injury, make medical testing less intrusive, enhance the quality of life for people with disabilities, and otherwise improve the practice of medicine. Team projects will focus on the use of basic engineering tools, such as mathematical modeling, and the principles of graphic design.

INTRODUCTION TO ENGINEERING

June 19–August 2
Monday and Wednesday,
9–10:30 a.m.
Cost: $500

This dual-enrollment class is the first course taken by students who are majoring in engineering. It is open to high school students who have met the course's prerequisites. Upon successful completion, students receive college credit.

Prerequisites: *High school algebra and trigonometry (or permission of the instructor)*

LAWRENCE TECHNOLOGICAL UNIVERSITY®

Summer Technology Opportunities for High School Students

To register, please complete the registration form and mail it to:

Lisa Kujawa
Lawrence Technological University
21000 West Ten Mile Road
Southfield, MI 48075

For more information contact:

Lisa Kujawa
248.204.2403
kujawa@ltu.edu

Student's Name_____

Address_____

Home phone_____Cell phone_____

Email_____

Name of High School_____

Age_____ Grade Level_____

Name of camp(s)/course _____

_____

_____

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PAYMENT

Number of camps_____ x $125 each = _____
Introduction to Engineering $500

❑ Enclosed is my check payable to Lawrence Technological University in the amount of _____

❑ Please bill my credit card
❑ VISA ❑ MasterCard ❑ Discover

Card No. _____ Expiration Date _____

Name on Card (please print) _____

Signature _____

Comments_____

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