

# Summer Camps 2012



FOR INCOMING HIGH SCHOOL SOPHOMORES, JUNIORS, AND SENIORS

**Interested in technology, design, or science?** Lawrence Technological University offers a variety of camps that will introduce you to the latest innovations in modern labs and studios using state-of-the-art equipment.

**Choose a day or residential camp option.** You can choose a day camp or opt for a residential camp and experience college life first hand. You'll live in student housing, eat in the cafeteria, and participate each evening in a fun selection of organized activities.

**Get a discount.** You can save \$100 by attending two, and \$200 by attending three design camps (designated with an asterisk\* below). Come to a Blue and White Day, scheduled throughout the year on Lawrence Tech's campus, and save another \$50 per camp ([www.ltu.edu/blueandwhitedays](http://www.ltu.edu/blueandwhitedays)).

**Win a scholarship.** The top students in each camp will be eligible for scholarships to Lawrence Tech.

**Register by June 1, 2012.** Additional information and all registration forms are found at [www.ltu.edu/summercamps](http://www.ltu.edu/summercamps). Early registration is recommended as the camps fill quickly.

**Questions?** Contact Lisa Kujawa at [summercamps@ltu.edu](mailto:summercamps@ltu.edu).

JUNE 25 - 29, 2012

## Automotive Engineering

9 a.m.-4 p.m., \$550 day camp/\$665 residential

Where better to learn about automotive engineering than at Lawrence Tech, whose alumni have helped design the GTO, the DeLorean, the Taurus, and countless other vehicles? This camp will introduce you to the complexity of today's cars, which contain over 100 computers that must work together and mesh with the vehicles' mechanical systems. You'll also explore the impact of global competition, new technologies, and the demand for more fuel-efficient vehicles.

## Entrepreneurial Discovery BizCamp

9 a.m.-4 p.m., \$200 day camp/\$300 residential

Offered through Lawrence Tech's Lear Entrepreneurial Center, BizCamp provides you an overview of the world of the entrepreneur. You'll learn about the challenges and rewards of running your own business, and you'll participate in hands-on activities that culminate with a business plan competition in which you'll compete for start-up capital. Local entrepreneurs will visit to talk about their experiences and the skills you need to compete in the marketplace.

## Forensic Summer Science Institute

9 a.m.-4 p.m., \$400 day camp/\$550 residential

*For sophomores and juniors. Cost includes a \$200 nonrefundable registration fee.* If you are a highly motivated student proficient in biology, chemistry, and physics, the Forensic Summer Science Institute is the camp for you. You will be given a crime scenario, which you'll solve using state-of-the-art lab equipment to explore DNA fingerprinting, drug testing, hair and fiber analysis, ballistics, gunshot-residue testing, and blood spatter analysis.

## Web Design\*

9 a.m.-5 p.m., \$500 day camp/\$665 residential

Do you want to build your own website? Ever wonder what's going on behind your Internet browser? Learn how to create HTML webpages with customized graphics and dynamic animations in Adobe Dreamweaver. You'll design animated menus, rollovers, image galleries, and much more. Prior experience with Adobe Illustrator and Photoshop is preferred.



JULY 9 - 13, 2012

## Basic Design\*

9 a.m.-5 p.m., \$500 day camp/\$665 residential

Explore the exciting world of design in architecture, the graphic arts, transportation, interior architecture, and product development. You'll be exposed to what makes good design and how designs visually relate to one another. Learn why some designs are more desirable than others. Understanding the basics can prepare you for a more serious study of the arts.

## Biomedical Engineering

9 a.m.-4 p.m., \$500 day camp/\$665 residential

Explore the role of a biomedical engineer in designing procedures and equipment that assist in the prevention, diagnosis, and treatment of disease and injury, make medical testing less intrusive, and enhance the quality of life for people with disabilities. Team projects will acquaint you with basic engineering design tools and the instrumentation used in medical settings.

## Civil Engineering

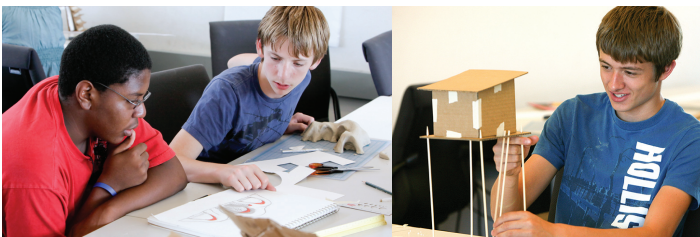
9 a.m.-4 p.m., \$550 day camp/\$665 residential

Do you want to design and construct energy-efficient, sustainable buildings? Bridges and highways? Airports or schools? Civil engineers do it all. Find out how these experts help solve the world's problems like supplying people with clean water and building safe structures and roads. With the help of current students and faculty, you'll build green structures and learn about the cutting-edge work being done in the field today.

## Gaming\*

9 a.m.-5 p.m., \$550 day camp/\$665 residential

In this camp, you'll focus on the dynamic world of video game development. You'll learn the concepts of game design and the basics of 3D graphics production, including modeling, texturing, and animating. You'll be *required* to play games and will create your own mini game portfolio.



JULY 16 – 20, 2012



## Architecture and Interior Design, Week 1\*

9 a.m.–5 p.m., \$500 day camp/\$665 residential

Have a great idea and some sketches? In this camp, you'll develop your ideas into realistic designs of buildings and interior spaces. You'll create plans and illustrations, along with a carefully crafted scale model. You'll organize interior spaces; coordinate materials, colors, and textures; and choose lighting. And during this process, you'll explore how your plan for the interior spaces can harmonize with the exterior architecture and still maintain a balance with nature. **Attendance of this camp is required in order to participate in Architecture and Interior Design Camp, Week 2.**

## Autonomous Robotics

9 a.m.–4 p.m., \$500 day camp/\$665 residential

Program Lego NXT robots with LeJos Java and assemble Lawrence Tech's vision centric laptop robot, L2Bot. You'll explore introductory concepts in autonomous robotics control, navigation, image processing, and computer vision while learning the basics of object-orientated Java programming and computer science. Some knowledge of a programming language is helpful, but not required. After the camp, you'll be able to participate in the Vision Centric Robot Challenge in May–June 2013. **Visit [robofest.net/collegiate](http://robofest.net/collegiate) for more information.**

## Biotechnology

9 a.m.–4 p.m., \$550 day camp/\$665 residential

In a research lab setting, you'll genetically engineer bacteria, purify and quantify proteins, and learn how to clone genes. You'll apply modern DNA profiling techniques to solve crimes and use high-tech tools to diagnose diseases and track infectious outbreaks. Your days will be filled with hands-on experimentation with just enough theory and background to make the experience meaningful.

## Electrical and Computer Engineering

9 a.m.–4 p.m., \$500 day camp/\$665 residential

Expand your knowledge of microprocessors, build robots and circuits, and work in teams to solve electrical and computer engineering challenges. You'll learn more about C, one of the most popular programming languages of all time, and the one that is used in most computers.

## Fashion Design\*

9 a.m.–4 p.m., \$500 day camp/\$665 residential

Learn what it takes to become a fashion designer. You'll draw fashion figures and fabrics, illustrate your designs, and create your own 15–20 piece clothing collection. You'll learn how to sew by hand and machine and how to incorporate trims into your work. Then you'll produce one of your designs in fabric to present at an end-of-camp fashion show that family and friends can attend!

## Industrial Design, Week 1\*

9 a.m.–5 p.m., \$500 day camp/\$665 residential

Industrial designers create the manufactured products we use every day: furniture, appliances, bikes, cars, tools, farm equipment, medical instruments, electronics, and much more. This camp highlights how art and design are combined with modern industrial processes to create consumer items that are marketed and sold. You'll work on projects that give you hands-on experience and include fun competitions. **Attendance of this camp is required in order to participate in Industrial Design Camp, Week 2.**

## Transportation Design, Week 1\*

9 a.m.–5 p.m., \$500 day camp/\$665 residential

Do you have a talent for drawing and a passion for styling cars? In this camp, you'll learn about the design and development of concept cars, create ideation sketches, and experiment with scale modeling. You'll also see professional demonstrations and receive individual evaluations of your work. **It is highly recommended that you attend this camp before participating in Transportation Design Camp, Week 2.**

JULY 23 – 27, 2012

## Architectural Engineering\*

9 a.m.–4 p.m., \$500 day camp/\$665 residential

Looking to go green? Want to help reduce the use of energy and preserve our natural resources? Join us and take your artistic skills, creativity, imagination, and interest in architecture, engineering, technology, and cutting-edge building sciences to the next level by helping to create a more sustainable world. Architectural engineers design high-performing buildings that are durable, safe, healthy, economical, and healing for the earth. Hands-on projects, group activities, field trips to an actual green building site and an architectural engineering office are just a few of the fun and challenging activities planned for you! A final project will cap off this exciting week of learning, collaboration, and fun.

## Architecture and Interior Design, Week 2\*

9 a.m.–5 p.m., \$500 day camp/\$665 residential

In the second week of the Architecture and Interior Design Camp, you'll go into greater depth and detail on your projects, giving you a better idea of the design process followed by professional architects and interior designers. **Participation in Architecture and Interior Design Camp, Week 1, is required to attend this camp.**

## Imaging and Graphic Design\*

9 a.m.–5 p.m., \$500 day camp/\$665 residential

Develop your artistic skills as a graphic designer. With the guidance of field-seasoned professionals, you'll learn to navigate the challenges of visual communication while creating artwork for computer games, cartoons, and advertising. Sketching, photography, computer-based graphics, and animation will be featured.

## Industrial Design Camp, Week 2\*

9 a.m.–5 p.m., \$500 day camp/\$665 residential

In the second week of the Industrial Design Camp, you'll refine and improve on the design prototype you created in your first week. You'll also prepare a final presentation of your design, just like the professionals in the field do. **Participation in Industrial Design Camp, Week 1, is required to attend this camp.**

## Motorsports Camp

9 a.m.–4 p.m., \$550 day camp/\$665 residential

Do you love the rush and excitement of car racing? Learn what it's like to design and build racing vehicles that are fast, maneuverable, and able to withstand punishing terrain. In this camp, you'll be an honorary member of one of Lawrence Tech's Blue Devil Motorsports competition teams. You'll research, design, build, and test your vehicle – and develop a budget and plan a marketing campaign.

## Transportation Design Camp, Week 2\*

9 a.m.–5 p.m., \$500 day camp/\$665 residential

In the second week of the Transportation Design Camp, you'll work with clay to create a physical model of the vehicle you designed in the first week of camp. During the process, you'll become familiar with the tools and techniques used by professional designers. **Participation in the Transportation Design Camp, Week 1, is not required to attend this camp, but it is highly recommended.**

## Writing and Film

9 a.m.–4 p.m., \$500 day camp/\$665 residential

Write, shoot, edit, and score a film project! In this camp, you will be part of a film crew. Your crew will pick a character, a prop, and a line of dialogue out of a hat to begin the creative process. Using hands-on techniques in film production and post production, you will travel from scriptwriting and camera work to editing and audio post-production.



Possible is everything.

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Rev 2.12