LEAN SYSTEMS ENGINEERING TECHNOLOGY

The B.S. in Lean Systems Engineering Technology (LST) is a unique program that gives students the skills to improve quality output, streamline processes and reduce waste. The UK College of Engineering has partnered with Toyota for over 25 years to develop a world-class Lean Systems Program. Students in the LST program will benefit from professional instructors, some of whom are former Toyota executives.

PURSUING LEAN SYSTEMS ENGINEERING AT UK

The LST program prepares students to thrive in a highly competitive global marketplace by developing advanced skills in just-in-time manufacturing, problem-solving, project management, lean enterprise development, logistics & supply chain management, material & information flow strategy and more. The curriculum is based on a solid foundation of intensive classroom and laboratory experience and provides in-depth instruction in just-in-time processes, built-in quality and productivity improvement.

CAREER PROSPECTS IN LEAN SYSTEMS ENGINEERING

Lean systems engineering technologists are employed as Lean continuous improvement engineers, Lean engineers, manufacturing engineers, Lean process improvement engineers, supplier quality engineers, Lean manufacturing specialists and quality engineers. They are employed by manufacturing and non-manufacturing industries, non-governmental organizations and government labs for manufacturing and analysis.

A 2+2 PARTNERSHIP BETWEEN UK AND BCTC

Earn an Associate of Applied Science (AAS) in Integrated Engineering Technology and a Bachelor of Science (B.S.) in Lean Systems Engineering Technology thanks to a unique partnership program between the University of Kentucky College of Engineering and the Bluegrass Community and Technical College (BCTC). The LST program specializes in hands-on, inductive learning opportunities immediately applicable to our changing workforce. An LST degree is perfect for students who desire a four-year college degree with a unique technology pathway that features participation in extensive industrial practicums.

LST students spend their first two years earning their AAS degree at BCTC before working toward their B.S. degree at UK's main campus.

PROGRAM FACTS

Toyota Engineering Technology Diversity Scholarship
Toyota is investing $1.7 million in scholarships for underrepresented students

Karen & Stanley Pigman Engineering Technology Scholarship is also available

GRADUATE STARTING SALARIES
Median full-time starting salary info for 2021 new college graduates
Zippia.com - Summer 2022

$78,105
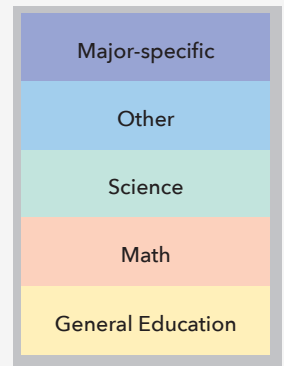MEDIAN SALARY

INDUSTRY SECTORS:

- Manufacturing
- Service and Hospitality Industry
- Financial Industry
- Industrial Equipment Design
- Consulting Firms
- Government Agencies
- Energy and Environmental Solutions

UK College of Engineering

For more information, visit:
engr.uky.edu/explore/lean-engr-tech

LEAN SYSTEMS ENGINEERING TECHNOLOGY
Curriculum Synopsis

This list is a synopsis of classes a student will take to pursue a degree in Lean Systems Engineering Technology. As part of the Lean Systems Engineering Technology curriculum, students must complete the pre-engineering requirements, major requirements and general education coursework, called UK Core.

Note: This synopsis represents one of several paths to a Lean Systems Engineering Technology degree. Consult the departmental website for details on specific paths.

Major-specific	
Other	
Science	
Math	
General Education	

YEAR ONE (BCTC)	YEAR TWO (BCTC)	YEAR THREE (UK)	YEAR FOUR (UK)
Basic Electricity	Automated Motor Controls	Computer-Aided Engineering Graphics	Capstone I & II
Electro-hydraulics/Pneumatics	Introduction to CAD	Introduction to Abnormality Management	Logistics
Lean Manufacturing Concepts	Lean Machine Reliability	Introduction to Just-in-Time	Managing the Shop Floor and Leading Kaizen
Lean Safety Culture	Lean Problem Solving Methodology	Introduction to Productivity Improvement	Problem-Solving II
Mechanical Drive Systems	Robot Maintenance	Kaizen of Standardized Work	Production Inst., Small Lot, Change-over Processes
Motor Controls and Sensing Devices	Welding and Fabrication	Manufacturing Simulation & Material and Info Flow Charts	Technical Electives
Introduction to Physics	Two Courses of Social and Behavioral Science	System of Quality Assurance & Built-in-Quality	
Elementary Calc & Its Applications	Heritage	Technical Writing	
Technical Algebra and Trigonometry	Oral Communications	Arts & Creativity	
Writing I and II			

YEAR ONE SUMMER (BCTC)	
	Blueprint Reading/Schematics
	Lean 5S Methodology
	Machine Tool Operations

TAKING CO-OPS?
When you participate in semester co-ops, the above schedule can adjust.

Detailed Curriculum Information: **engr.uky.edu/explore/lean-engr-tech**

As a new academic offering, the LST program will be eligible to apply for accreditation following the first graduates of the program. Once accreditation is received, it will apply to any student who has gone through the program within two years of the accreditation being awarded.

UK College of Engineering

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