# LASER-TEC College Profile

# State Technical College of Missouri Linn, Missouri

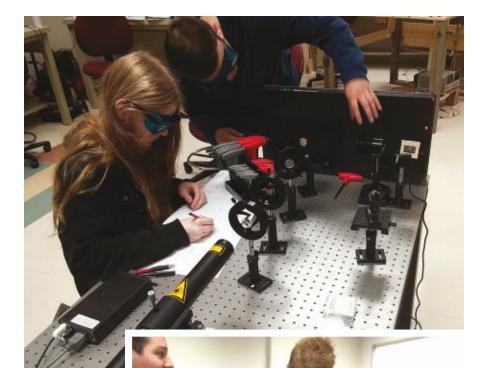
LASER-TEC is the Center for Laser and Fiber Optics Education, founded in 2013 by the National Science Foundation (NSF) and headquartered at Indian River State College in Florida. It was established to help meet the goals of educating and sourcing domestic talent in the areas of optics and photonics. As a service to students, recent graduates, and prospective employers, Photonics Spectra runs a profile of one of the LASER-TEC colleges each month.

tate Technical College of Missouri has offered associate degrees and certificate programs in electronics engineering and biomedical engineering technology for more than 30 years. Its Associate of Applied Science tracks include a degree program in electronics engineering technology with a specialization in laser photonics as well as a program in biomedical engineering technology. The college also offers a one-semester certificate course in biomedical equipment technology.

More than 350 technicians have graduated from the programs and are working in the electronics, biomedical, laser, and photonics industries across the U.S. and internationally. Companies that have hired graduates include Garmin, Honeywell Nuclear Security Division, JT3, GE Biomedical, and the Mercy Hospital system.

# **Program description**

Students pursuing State Technical College's associate degree programs for electronics engineering technology and/ or biomedical engineering take part in a two-year program that provides a strong technical core, with hands-on training in



State Technical College of Missouri students assemble their final project for the lasers/optics course

state-of-the-art labs stocked with the latest industrial-grade equipment.

During the first year, technicians in both programs receive a solid foundation in electronics and computers. In their second year, the technicians' paths diverge. Electronics engineering technology students study photonics, fiber optics,

geometrical optics, laser technologies, and high-end radio-frequency electronic systems. Graduates of this program qualify to work as technicians for industrial production companies — in R&D, national labs, field service, and system repair, among other areas.

Biomedical engineering students learn about diagnostic imaging machines, electrical safety testing, preventative maintenance procedures, and medical devices. Graduates of this program qualify as technicians in hospitals, R&D, field service, and third-party system repair shops.

## Graduates of both degree programs have the skills to:

• Troubleshoot integrated electronic systems using oscilloscopes, digital multimeters, spectrum analyzers, and beam analyzers during laser applications.

- Tune helium neon and diode lasers for maximum power and beam quality.
- Align optical systems.
- Perform high-quality fusion splicing for single- and multimode fibers.
- Use an optical time domain reflectometer to identify problems in fiber optic links.
- Properly clean and maintain precision optics.
- Apply laser safety rules according to ANSI and OSHA standards.

### How to recruit from this college

If you are interested in recruiting students from State Technical College, please

arrange a visit to our college to present your company and employment opportunities to our students. We will provide, free of charge, a private room in which to interview interested students. Graduates are available every May.

### **Contact Information**

Drew Collins +1 573-897-5227 drew.collins@statetechmo.edu 1 Technology Drive Linn, MO 65051

#### Website

www.statetechmo.edu/program/ electronics-engineering-technology



