



**INSTITUTE OF  
TECHNOLOGY**

## FACULTY WORKSHOPS

All workshops are part of our High School Partners program, and any expense incurred will be handled by OSUIT. We are very flexible--the workshop can be presented during regular class time (just one class period or several in one day), in an assembly (several classes joining together), or modified for block scheduling. Just let us know how we may best meet your needs and those of your students.

### **An Introduction to Nursing, Mondays and Fridays, 9:30-11:30 or 12:30-2:30**

Leah Torbett, MS, RN, Nursing Faculty and Lab Coordinator for OSUIT Nursing

Leah.torbett@okstate.edu, (918) 293-5328

Nursing instructors provide a short presentation on career options for nurses, salary ranges nurses can expect and what kind of education is required to work as a nurse. At the completion of the presentation, students are given information on how to obtain vital signs (blood pressure, pulse and respiratory rate) and given the opportunity to practice on patient simulators.

### **Basic electrical controls, Monday through Wednesday, 12:30-3:30 p.m.**

Paul Margwarth, Instructor, Air Conditioning/Refrigeration

Paul.margwarth@okstate.edu

An introduction into the electrical controls used to operate air conditioning, refrigeration and heating systems in homes and businesses. Exploring OHMS law, series, parallel, and low voltage controls used in the HVAC industry. Use of an electrical, hands-on trainer for student participation.

### **Basic Thermodynamics, Mondays, Wednesdays, Fridays, 12:30-3:30 p.m.**

Boyd King, Instructor, Air Conditioning/Refrigeration

Boyd.king@okstate.edu

An introduction into the two laws of thermodynamics that affect the lives of all people on a daily basis. Understanding the laws of heat transfer, and an in-class demo on how we can boil water at room temperature with tools used in the HVAC industry. Included in this presentation will be the use of digital temperature meters and digital humidity indicators.

### **An introduction into HVAC business opportunities, Mondays, Wednesdays, Fridays, 12:30-3:30**

Matt Davis or Roger Shepherd, Program Chairs, Air Conditioning/Refrigeration

Matt.Davis@okstate.edu or Roger.Shepherd@okstate.edu

A look at what it takes to start an HVAC business, and what you will need to know. This is a business where you learn how to make ice cream hard, you will learn how to use a torch, and how you can own your own business in 6 years.

### **Basic Plumbing Techniques (Science Lesson on Aero and hydrodynamics)**

Tuesdays and Thursdays, 12:30-3:30

Dr. Bruce Roberts, Program Chair, Plumbing

Bruce.Roberts@okstate.edu

At the completion of the lesson, students should have a fundamental understanding of the physics and chemistry associated with plumbing techniques and the material evolution leading up to present day applications.

**Basic Orthotics and Prosthetics, Mondays, Wednesdays, Fridays, 12:30-3:30 p.m.; Tuesdays, Thursdays, 8:30-11:30 a.m.**

Jennifer Block, Instructor, Orthotic and Prosthetic Technician program  
jblock@okstate.edu

An introduction to the materials and skills used in the fabrication of orthotic and prosthetic devices. Overview of upper and lower extremity prosthetics and orthotic management of the limbs and torso. During a hands-on demonstration, students will practice fitting each other with cervical collars. Orthotics and Prosthetics (O&P) is the evaluation, fabrication and custom fitting of artificial limbs and orthopedic braces. O&P is an allied health profession with a variety of career paths including O&P practitioners, fitters, and technicians.

**Career Opportunities in Heavy Equipment/Diesel Mechanics,**

Roy Achemire, Program Chair, Heavy Equipment Vehicle Institute  
roy.achemire@okstate.edu

Discussion on career opportunities and skills needed to be successful in this field. Presentation will focus on in eight different programs in HEVi. Technician jobs are near recession proof. Technicians need writing skills for service and warranty reports, math skills and basic algebra to understand electronics and hydraulics, speech is important when talking or demonstrating to customers, business ethics and psychology help deal with customers.

**Scheduling Presentations:**

Contact the presenter directly at the e-mail address provided. Please let us know dates/times of your classes and the total number of students. We will provide all handouts/materials.