The University of Arizona College of Optical Sciences provides comprehensive curricula for students that cover fundamentals and applications in the fields of image science, photonics, optical physics and optical engineering. In an effort to fill the gap between scientific understanding and practical skills, OSC has developed an ongoing series of Practical Optics Workshops, geared toward developing hands-on experience for optical engineering students and those already in the workforce. These workshops utilize the full breadth of UA resources and faculty expertise, to offer both students and employees a unique opportunity for professional development and networking in one setting.

INVESTING IN YOUR FUTURE
In order to exceed the high standards expected of new employees in optical engineering, we will continue to develop workshops based on the needs of our industrial partners. By sending your employees to an OSC Practical Optics Workshop, you not only invest in your own future but also strengthen the vital and mutually beneficial relationship between the private sector and the College of Optical Sciences.

GET STARTED
Visit www.optics.arizona.edu/workshops, or contact the Associate Dean for Business Development and Administration, Justin Walker, at jwalker@optics.arizona.edu.
PRACTICAL OPTICS WORKSHOPS

INTERFEROMETRIC SURFACE MEASUREMENT
Participants will learn principles of interferometry and how to choose different interferometers, make accurate measurements and extract quantitative information from the measurements. Introductory lectures cover the basics of interferometry and coherence. Lab sessions focus on developing skills on: setting up test configurations for Fizeau, Twyman-Green and white-light interferometers, demonstrating interferometry limitations, including retrace error, vibration error and spacial bandwidth; estimating random errors in measurements; calibrating the reference surface error using random ball test; and operating the interferometer in vertical scanning and phase shifting modes, etc.

Instructors: Tom D. Milster, Ping Zhou and Dae Wook Kim

COST: $900 | OSA Members: $720* | OSC Industrial Affiliates: $630*

DATES & TIMES October 18, 2014: 9 a.m - 5 p.m. | October 19, 2014: 9 a.m - 1 p.m.

AVAILABLE SPACE 20

OPTICAL ALIGNMENT
Participants will develop the skills necessary to align a variety of optical components in the lab. An introductory lecture will cover the basics of alignment, including degrees of freedom, optical surfaces and axes, predicting performance due to misalignment, and common alignment techniques. The main focus of the workshop is four lab sessions that will allow participants to gain hands-on experience with these techniques. The broad themes of the sessions are: alignment using an axis of rotation, alignment using a line of sight, alignment of off-axis systems and alignment of aspheres. Participants will learn how to use common alignment hardware and evaluate alignment quality, as well as develop tools for creating an alignment plan and avoiding common pitfalls.

Instructor: Matthew Dubin

COST: $900 | OSA Members: $720* | OSC Industrial Affiliates: $630*

DATES & TIMES October 18, 2014: 9 a.m - 5 p.m. | October 19, 2014: 9 a.m - 1 p.m.

AVAILABLE SPACE 8

BEST PRACTICES FOR SCIENTIFIC SOFTWARE
Participants will learn best programming practices for creating scientific code that is easy to modify and maintain. Skills include code organization and commenting, test case development, an introduction to source control, and how to simplify debugging and optimization through breakpoints and code profiling. Demonstrating how to approach programming problems, the concepts for linear and nonlinear curve fitting are illustrated through examples, and the benefits of vectorizing code in Matlab are established.

Instructor: Greg A. Smith

COST: $600 | OSA Members: $480* | OSC Industrial Affiliates: $420*

DATES & TIMES October 18, 2014: 9 a.m - 5 p.m.

AVAILABLE SPACE 20

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* Not available after Sept.23, 2014.