Become an OpticStudio™ Master

Updated and restructured training program delivers faster, easier and more focused curriculum.
New targeted courses to help you master OpticStudio.

As the leader in physics-based software, Zemax has redesigned our courses to offer complete training no matter what your skill level. New, shorter classes help you come up to speed quickly on the topics that matter most to you.

Expert Instructors with Exclusive Knowledge

Zemax training classes are conducted by our Optical Engineers, who have extensive optics backgrounds and advanced degrees in physics, mathematics, and engineering. All training is hands-on and incorporates the most useful tips and techniques empowering you with intimate, working knowledge of Zemax OpticStudio software.

Introductory Courses

Introductory courses assume attendees have an engineering background, with the specific requirements described in each listing. We recommend taking courses in numerical sequence to ensure maximum benefit.

• OpticStudio 100: Fundamentals of Optics (2 days)
  This NEW introductory course is designed for engineers who need to use OpticStudio but have little or no background in optics. The course teaches basic concepts and prepares attendees for OpticStudio 101: Optical System Design. This course is ideal for those from other engineering disciplines who need to understand basic concepts of optics and how to apply them within OpticStudio. No prior knowledge of OpticStudio is required.

• OpticStudio 101: Optical System Design (5 days)
  A thorough introduction to the OpticStudio design environment. Hands-on examples and exercises are used to simulate actual design challenges. Familiarity with college-level mathematics and basic computer skills recommended. No prior knowledge of OpticStudio required. Assumes a background in optics.

• OpticStudio 102: Lighting and Illumination (3 days)
  This course is focused on non-sequential design applications using OpticStudio and is beneficial for anyone involved in the design and manufacture of illumination systems. Familiarity with OpticStudio required.

• OpticStudio 103: Tolerancing (2 days)
  This course provides an in-depth look at how to tolerate with OpticStudio and is beneficial for optical designers who need to relate manufacturing and assembly procedures to OpticStudio simulations using multiple complex examples. Attendance of OpticStudio 101 or several years’ experience with sequential mode in OpticStudio required. Assumes a background in optics.

Advanced Courses

Advanced courses assume attendees have taken OpticStudio 101 or have several years’ experience with OpticStudio. We recommend taking courses in the order listed to ensure maximum benefit.

• OpticStudio 201: Aspheres and Freeforms (2 days)
  This 2-day advanced course provides training on designing and optimizing aspheric and freeform lenses with manufacturability at the key consideration.

• OpticStudio 202: Lasers and Fibers (2 days)
  This NEW advanced course provides training on the many approaches for simulating lasers in OpticStudio. The course will review tools including ray-based approximations, paraxial Gaussian beams, and full complex-valued field propagation using Physical Optics to model a variety of systems. Attendance of OpticStudio 101 or several years’ experience with sequential mode in OpticStudio, including optimization and coordinate breaks, is required. Assumes a background in optics and/or lasers.

• OpticStudio 203: Adv. Imaging System Design (5 days)
  This 5-day course provides in-depth training on the advanced sequential analysis and optimization features in OpticStudio. Attendees will learn the key features and functions to take an imaging or afocal design from initial specification to manufacture and testing. Familiarity with OpticStudio required. Assumes a background in optics.

• OpticStudio 210: Programming OpticStudio (2 days)
  This 2-day course provides training on how to utilize the ZOS-API.NET to build standalone applications in CA, control OpticStudio through MATLAB or C#, and design custom analyses. Additionally, you’ll learn Zemax Programming Language (ZPL) macro programming, user-defined features (surfaces, objects, sources, etc.) and operands. Indispensable training for anyone wanting to write their own code to control Zemax OpticStudio, or interface it to other programs. Familiarity with OpticStudio required. Experience with at least one high-level programming language strongly encouraged. Knowledge of MATLAB is assumed for MATLAB-specific material.

Training Locations

Zemax provides in-person, hands-on training around the world. The following classroom locations are for regularly scheduled events and are owned and operated by independent location providers.

• United States
  - Redwood City, CA
  - Waltham, MA
  - Kirkland, WA
• United Kingdom
  - London, UK
• Japan
  - Chiyoda-ku, Tokyo, Japan
  - Taiwan
  - Taipei City, Taiwan R.O.C.
• China
  - Shanghai, China

Each venue is conveniently located close to lodging, restaurants, and airports making travel easy and convenient. Locations are subject to change.

Private Training

If your organization has five or more individuals that require training to improve their usage of OpticStudio, Zemax offers customized, onsite training. You are free to select from any of the publicly offered Zemax training courses or we’d be happy to customize trainings to meet the specific needs of your organization.

For a listing and description of our training courses visit Zemax.com/training. All customized courses are taught with the most current version of OpticStudio software. Zemax will work with you to create the training agenda and will provide a written quotation for the training that will include all travel expenses for Zemax instructor(s). Contact us if you have questions or need additional information.

Learn more at Zemax.com

Zemax training accelerates your ability to efficiently or accurately model, analyze and optimize any optical and illumination system. Training participants gain the knowledge and skill to expand their capabilities, taking their designs skills to the next level.

For a complete list of training classes, dates, locations, fees, terms and conditions, visit www.zemax.com/training.