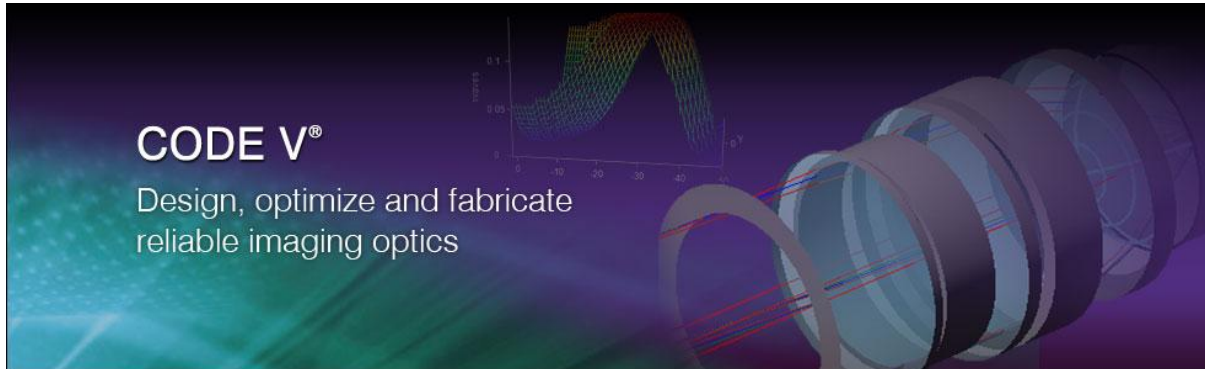




Training Course

Optical Imaging System Design Using CODE V[®]

~~September 6 - 8, 2017~~ Rescheduled to October 9 - 11, 2017 at Mumbai



This 3 days course provides a detailed introduction to the use of CODE V[®] for engineers and scientists who wish to model, analyze, optimize and study tolerances in image-forming optical systems. It will assume some familiarity with optical concepts and terminology. You will learn to use all of the major features of CODE V[®] including model creation, Simulation, Image evaluations and diagnosis, Optimization and tolerancing. Hands-on use of CODE V[®] forms the basis of the course.

Who should attend?

Any engineer or designer who wants to learn to use CODE V to design or evaluate image-forming optical systems. This course will be taught using the latest version of CODE V, which features a graphical user interface and spreadsheet access to data. Therefore, in addition to new users, part-time users may also benefit from attending this course.

What you will learn?

- Model an optical system given its design parameters
- Evaluate the system to determine its quality
- Optimize the system to improve its quality
- Evaluate the manufacturability of the final design

Attendee is required to bring own laptop. CODE V[®] software will be provided to attendees for use during the workshop. Learning material will be provided to all attendees.

Training Instructors : FOS Product Engineers



Agenda

Day 1

Session	Topic	Duration
1	Introduction-: Discussion on simulation software, Key points of Code V, Features and Analysis Techniques, Applications	9:00AM-11:00AM
2	Basic Design Techniques with Cassegraine Telescope Example	11:00AM-1:00PM
3	Digital Camera Design Study Basic Terminology and Conventions, CODE V Interface Elements, Analysis functions referred to as options (with input settings), Optimization Plan, Tolerance Analysis Functions	1:45PM-3:45PM
4	Performance Evaluation Display features, Diagnostic analyses, Geometrical and diffraction-based image evaluations, System and other evaluations	3:45PM-6:00PM

Day 2

Session	Topic	Duration
1	Apertures and Vignetting in CODE V Vignetting Defined, CODE V Aperture Types Illustrated, Apertures — Details	9:00AM-11:00AM
2	Optimizing Lens Systems: CODE V Error Function, Defining Variables, Classes of Constraints	11:00AM-1:00PM
3	Reflective Systems Maksutov Data Entry, Gabor Lens	1:45PM-3:45PM
4	Tilted and Decentered Systems Basic Decenter and Tilt, Different Combinations of Tilts, Virtual Ray Tracing, Types of Decenters	3:45PM-6:00PM

Day 3

Session	Topic	Duration
1	Tolerance Analysis CODE V's Tolerancing Options, CODE V Tolerance Types, Typical Tolerancing Example, Compensators, Performance Prediction, Distortion Analysis	9:00AM-11:00AM
2	Zoom/Multi-Configuration Systems Zoom Features, Inserting, Deleting, and Copying Zoom Positions, More on Zoom and Optimization, Scanning Systems	11:00AM-1:00PM
3	Non-Spherical Surfaces and Special Surface Properties Surface Types, Conversion between Surface Types, Special Surface Properties Telescope - Design Process	1:45PM-3:45PM
4	Afocal Design and Analysis Afocal Systems in CODE V, True Afocal Modeling vs. Perfect Lens	3:45PM-6:00PM



Course Fee : Rs. 20,000/- plus GST (18%)

Workshop fee covers course fee, lunch / tea / coffee / snacks during workshop on all days, memory stick with learning materials.

Registration

Please send email to shalaka.patil@foservice.com or contact on 022 2880 2653 / 2880 3653

Venue : Centre for Excellence in Telecom Technology and Management (CETTM),
Technology Street, Hiranandani Gardens, Powai, Mumbai – 400076

Accommodation

Accommodation can be arranged at training venue. Training centre has over 400 Ac/ Non-AC rooms. Current charges are in the range of Rs. 2500/- to Rs. 3500/- plus GST. Please send your request for accommodation with workshop registration.