



Dynamic Graphics, Inc.
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Alameda, CA 94501-1154
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1-510-522-5670 fax
info@dgi.com
www.dgi.com

TRAINING SCHEDULE 2018/2019

DATES AND LOCATIONS AVAILABLE AT DGI.COM

Dynamic Graphics' users are skilled scientists whose time is both valuable and costly. We strive to maximize the use of client time by using real data and application-based, hands-on problem solving in our training. As such, our courses turn new users into more skillful and productive investigators quickly and efficiently.

Open enrollment courses are held in Houston, Texas, the site of our corporate training center. Clients may also arrange with Dynamic Graphics' Educational Services for customer or proprietary training courses at client locations. Email us at training@dgi.com, or call 1-510-522-0700, or 1-719-384-0496 to discuss your training needs.

To register for a class, please either register online or fill out the included Registration Form. Once the Registration Form is complete, please fax the form to 1-510-522-5670.

Please contact Dynamic Graphics to confirm your registration if you have not heard from us within two days of filing out your registration form.

For general questions, please contact:

Bill Hanson | 1-713-952-2611 | bill@dgi.com

Sue Brooks | 1-510-522-0700 ext. 3134 | sue@dgi.com

COVIZ 4D: INTRODUCTION

A complete, yet concise introduction to the CoViz 4D Viewer and the associated Data Registry. Data imports and procedures are explored, and a range of data types are interrogated and analyzed in the Viewer environment. Later exercises cover topics such as temporal animation, instant volumetrics, statistical tools, and creating vue files. The class is condensed into one day to provide a comprehensive overview in the shortest possible time. **(1 day class)**

COVIZ 4D: ADVANCED

Quantitative Visualization and Analysis within CoViz 4D are the focus of the Advanced class. Hands-on exercises introduce in-viewer calculations such as summing, averaging, and back-interpolation of properties/attributes within simulation grids, seismic grids, seismic attribute files, and well logs; these calculations facilitate quantitative comparison and statistical analysis of spatially overlapping, but geometrically dissimilar data sets. Other more specialized features, such as Wellcentric viewing, data queries, and streamline visualization are covered. **(1 day class)**

The Advanced training course requires a basic knowledge of the CoViz 4D software, including usage of the Viewer and the associated Data Registry. Participation is at the Instructor's discretion.

Dates for Introduction and Advanced CoViz 4D classes are available upon request. Please contact Dynamic Graphics, Inc. or your Dynamic Graphics representative to arrange for CoViz 4D training.

INTRODUCTION TO EARTHVISION 2D AND 3D MODELING

An introduction to EarthVision, with a primary emphasis on the program's WorkFlow Manager. The class uses 2D and 3D data and grids for faults and horizons as components in building 3D structure and property models. Class topics include: data visualization and validation, data editing in 3D, constructing fault hierarchies, building stratigraphic sequences, and constructing the final 3D volume model. The extraction of 2D maps and cross sections from the finished model completes the sequence of activities. Other topics include the calculation of precise volumes, formula processor operations for file manipulation, and exploring the program's powerful graphic editor. Upon completion of the course students will have a solid introduction to building three dimensional faulted models and will be comfortable using the 3D visualization tools. **(4 day class, Mon.-Thurs.)**

ADVANCED STRUCTURE MODELING AND THE WORKFLOW MANAGER

This class covers modeling of more complex structural geometries as well as property distributions within the various containers defined by the structural components. Compressional or thrust faults as well as over-turned surfaces are investigated. The class covers iterative refinement of the model, time-to-depth conversion, volume calculation, an introduction to well-bore planning, and extensive use of the program's 3D Viewer for model analysis, validation, and understanding. **(4 day class, Mon.-Thurs.)**

INTRODUCTION TO WELLARCHITECT

Introduces students to Dynamic Graphics' WellArchitect program to design, plan, visualize and manage directionally drilled wells and surveys. The class is organized into lectures, demonstrations, and hands-on exercises covering the major components of the software. These include the Well Explorer (program interface), 3D Viewer, Well Path Designer/Editor, Output Launcher, and the Graphic Editor. By the end of the course students will have a good understanding and level of comfort with the interface and the various program functionality. The Well-Architect software has been designed in cooperation with Baker Hughes to offer professional drillers and well planners an easy to use, professional drilling engineering package. The program includes more than 40 tool types and corresponding error models for risk/collision avoidance calculations and uncertainty analysis and reporting. **(3 day class)**

Dates available upon request. Contact Dynamic Graphics, Inc. or your Dynamic Graphics representative to arrange for WellArchitect training.

INTRODUCTION TO RESERVOIR CELLULAR GRIDDING

Introduces students to Dynamic Graphics' reservoir cell gridding software. EVCELL enables users to quickly and efficiently build upscaled cellular grids and populate them with property values from an EarthVision model.

Activities of the class cover defining the cellular model space and aligning the grid to the major structural feature(s) such as faults. The various fault treatments as I, J, IJ, and IJK stair-step methods are discussed for building cells along faults followed by the definition of flow units based on stratigraphic geometry and lithologic character. Cell grids may be trimmed to cover only a portion of the original EarthVision model. Different property populating methods are examined followed by export of the cellular grid to the industry standard simulation formats, including GridGenr(gtf), VIP™, ECLIPSE™, CMG™, FLOGRID™, and RESCUE™.

The course is organized into lectures and demonstrations with numerous hands-on exercises. Once the basics of the functionality is discussed and exercised, a series of modeling exercises exist to build cell grids. By the end of the course, students will have sufficient experience building, examining, and, using the new 3D Viewer, QC'ing cellular grids to enable them to begin building cellular grids for their own data models. **(3 day class)**

COVIZ 4D/EARTHVISION INTEGRATED WELL DESIGNER

Using 3D structure / property models as a basis, this class explores the CoViz 4D / EarthVision Integrated Well Designer program. Planning the location of entirely new well paths and locating sidetracks from existing wells are covered, along with planning in reverse, positional uncertainty and traveling cylinder visualization, and the creation of hard-copy outputs. The class includes lecture, demonstration, and hands-on exercises, so that students will gain a comprehensive understanding of the program in just one day. This training course requires a basic knowledge of the CoViz 4D / EarthVision software, particularly the 3D Viewer. **(1 day class)**

SPECIAL ADVANCED SEMINAR #1— 3D VOLUMETRIC ANALYSIS

A course in advanced 3D modeling and volumetrics techniques. Students learn how to build complex geologic models incorporating fluid contacts as both 2D and 3D objects. Topics include how to use EarthVision to calculate, report, cross check, and map volumetric distributions using fluid contacts, the J Function water saturation formula, as well as other petrophysical criteria. Property indicator grids are introduced as a method for quick visual display of properties. Additional study is focused on calculating and mapping (via tornado plots) volume sensitivities by easily adjusting the fluid contacts and other petrophysical parameters. **(4 day class, Mon.-Thurs.)**



DYNAMIC GRAPHICS, INC.

CLASS REGISTRATION FORM

Complete this form and fax back to Dynamic Graphics at 1.510.522.5670

Student Information

(one registration per person)

_____	_____	_____	_____
Name	email	Telephone	
_____	_____	_____	_____
Organization		Fax	
_____	_____	_____	_____
Address	City	State/County	Zip Code

Course Information

_____	_____	_____	_____
Title	Location	Date(s)	Price
_____	_____	_____	_____
Title	Location	Date(s)	Price
_____	_____	_____	_____
Title	Location	Date(s)	Price
_____	_____	_____	_____
Title	Location	Date(s)	Price

Billing and Payment Information

Organization

Telephone

Contact Person

email

Fax

Address

City

State/County

Zip Code

Contract No.

P.O. No./Pay Key No.

Gov. Req. No.

Check No.

Credit Card Information

Credit Card Type

Credit Card Number

Please Note: There is a three digit verification code on the back of the credit card. For security reasons, we don't ask you to put that number on this form, but we will contact you before the class to ask for the verification code.

Name on Card

Expiration Date

Billing Address

Telephone

Cardholder/Authorized Signature (I agree to pay the above total amount according to the card issuer agreement).

Phone: 510.522.0700
713.952.2611

Fax: 510.522.5670
713.952.1832

email: training@dgi.com

Space is reserved in order of receipt of a completed Registration Form by Dynamic Graphics via fax number 510-522-5670 or via delivery to 1015 Atlantic Avenue, Alameda, CA 94501 USA. Fees are payable prior to class start date. Fees may be paid via check, credit card, wire transfer or purchase order (payment by purchase order must be approved by Dynamic Graphics). Discounts may be available for multiple registrations from the same organization in the same class. Contact Dynamic Graphics for details. Registrant agrees to the following cancellation policy: 100% refund with written notice received by Dynamic Graphics at least 15 days in advance of class start date; 85% refund with written notice received by Dynamic Graphics between 14 and 6 days in advance of class start date; 0% refund within 5 days of class start date or fails to appear for the class. Dynamic Graphics reserves the right to cancel the class with 14 days notice if less than 3 students registered. Under no circumstances shall Dynamic Graphics be responsible for any travel related expenses of the registrant.

I understand and agree to the conditions of this application.

Signature

Name