NUMERICAL ADVISORY SOLUTIONS
a Zachry Group company

GOTHIC Introductory Training

Who Will Benefit

- Engineers who have never used GOTHIC or may have only incidental experience, such as running cases and recovering results in graphs. The training will allow you to build basic models and understand results. It is a foundation for building increasingly sophisticated models in the future.
- Engineers who may be conducting reviews of GOTHIC models and calculation performed internally or by vendors. The training will allow you to recognize indefensible approaches taken by the preparer.
- Managers who have staff who are building GOTHIC models and preparing calculations. The training will provide the necessary basis for oversight of this work.
- While the training is not designed for engineers having more extensive experience with GOTHIC, attendees in the past with some experience have benefited from the presentation of the software package in a sequential and orderly manner.
- EQ program owners who would benefit from an understanding of the basis for the determination of ambient conditions for EQ analysis.

GOTHIC Experience Required

No GOTHIC experience is required. Participants in the training should understand the fundamental principles of thermodynamics, heat transfer, and fluid dynamics.

Contact Information

For more information on GOTHIC training, please contact Numerical Advisory Solutions training@numerical.com.

Details

The training will be conducted online using the Microsoft Teams platform.

- The instructor will provide an appointment with a link for each participant to join the class through Microsoft Teams, either by the installed application or web-based interface.
- Due to the hands-on nature of the class, it is required that each student participating in the class have their own computer and be individually connected to the Teams session to allow for interaction and screen sharing as needed for questions.
- All classes will be conducted using GOTHIC 8.5. GOTHIC must be installed with an active license and successfully started prior to the first session.
- Access to GOTHIC should be available on the same computer used to access Teams to allow the student to share their screen should issues arise. Also, access to an email application is important because the student will be required to send models developed during exercises to the instructor(s) for review and receive feedback during the course.

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- Online classes will be scheduled as half days over two weeks and cover one module per day. In person classes are scheduled as full days and cover two modules per day for a week.
- Participants will be given access to an electronic copy of the course materials.
- A headset, or a microphone and speakers, are required to allow the students to converse with the instructor(s).
- If last minute problems arise, or you want to test your Microsoft Teams connection, please contact us.

Cancellation Policy

You may cancel your registration up to 1 week prior to the start of the class and Numerical Advisory Solutions will refund your entire payment. If you choose to cancel after that point, your payment will be refunded only if we are able to fill your vacated seat. At any time, you may substitute, without additional cost, any other person to attend in your behalf simply by notifying us of the change and providing the contact information.

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Introduction

- Connection Testing
- Personal introductions
- General Questions
- Introduction to GOTHIC
- GOTHIC modeling approach
- Range of applications
- Demonstration of a simple application

Module 1

- Modelling Basics
- Using the Preprocessor
- Postprocessing of Results
- Hands on Session

Module 2

- Fundamentals of Multiphase Thermal-hydraulics in GOTHIC
- Fundamentals of the Multi-component Steam/Gas field in GOTHIC
- Hands on Sessions

Module 3

- Using Boundary Conditions
- Modeling Flow Connections
- Hands on Sessions

Module 4

- Controls, Trips and Tables
- Hands on Sessions

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Module 5

- Modeling Basic Equipment (e.g., Valves, Volumetric Fans, Heaters/Coolers)
- Hands on Session

Module 6

- Modeling Thermal Conductors
- Hands on Session

Module 7

- GOTHIC Files and Debugging Model Results
- Hands on Sessions

Module 8

- Introduction to Subdivided Volumes
- Hands on Sessions

Module 9

- Basis Modeling Guidelines and Suggested Best-Practices
- Hands on Sessions

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