WHO SHOULD ATTEND
- AHJs
- Fire Investigators
- Fire Engineers
- Fire Safety System designers
- Smoke Management System designers
- Risk Management Consultants
- Insurance Assessors and Loss Adjusters
- Building Surveyors

WORKSHOP BENEFITS
- Small class size gives you more one-on-one time with the instructor
- Hands-on application lets you learn from experience
- Current, relevant information keeps you up-to-date with industry knowledge
- A 90-day license for PyroSim or Pathfinder is provided

INTRODUCTION TO FDS/PYROSIM WORKSHOP
The 2-day workshop is an introduction to FDS and PyroSim. It gives the big picture and is suitable for managers, AHJs and beginning modellers.

Day 1
- Introduction to FDS and Smokeview
- Hardware and Software Requirements
- The Domain
- Reactions
- Fires
- Materials
- Events
- Hands-on Construction of a Simple Model Using PyroSim

Day 2
- Simple Supply and Exhaust Fans
- HVAC
- Sprinklers and Suppression
- Viewing the Results of a Simple Scenario
- Modelling Something other than Fire
- Performance-Based Design, with Examples
- Forensic Reconstructions, with Examples
- Modelling Evaluating FDS Reports
- Strengths and Weaknesses of FDS
- Resources
ADVANCED FDS/PYROSIM WORKSHOP
The advanced workshop will examine common practical problems encountered by fire protection engineers in creating and running FDS models efficiently. (It will not deal with research-level topics such as multi-layered materials or other subjects of primary interest to the research community.)

Day 1
- Choice of cell size
- Building models from CAD and Revit files
- Optimizing multiple meshes
- Trouble-shooting numerical instabilities
- Model validation and uncertainty
- Hardware and software
- HVAC

Day 2
- How FDS models fires
- How FDS can and can’t extinguish a fire
- Liquid fuels
- Extra species
- Fractional Effective Dose
- Multiple reactions (lumped species)
- Advanced control features
- Smokeview tours, movies and other tricks
- FDS review checklist

INSTRUCTOR
David McGill was a full-time professor in the School of Fire Protection Engineering Technology at Seneca College in Toronto Canada. He designed and developed fire and evacuation modelling courses for full-time students in the Fire Protection Technology Program.

In 2000, he created the first online support forum for FDS, which ran until NIST created their own forum. Dave is a frequent contributor to the FDS Discussion Group. He is included in the Acknowledgement section of both the FDS and Smokeview manuals. He has been offering a distance education course on FDS since 2003 that has been taken by an international audience of fire protection engineers. He has delivered 2-day workshops on FDS in Australia, Canada, Ireland, Lithuania, New Zealand, USA, and Venezuela. Thunderhead Engineering is excited to be working with Dave to offer this international workshop series.

WORKSHOP DATES AND FEES

Introduction to FDS and PyroSim Workshop
$1,000 USD
February 18-19, 2019

Advanced FDS and PyroSim Workshop
$1,000 USD
February 20-21, 2019

Pathfinder Workshop
$500 USD
February 22, 2019

REGISTRATION
Space is limited in each workshop. Please register online at www.thunderheadeng.com/training/ by December 15, 2018 to reserve your place. If you have any questions or want to be notified of any updates, then please contact us at training@thunderheadeng.com

PATHFINDER WORKSHOP
Day 1
- Introduction to Evacuation Modelling
- Creating the geometry
- Importing geometry
- Stairs
- elevators
- Occupant Profiles
- Behaviours
- Assisted evacuations
- Examples
- Resources

REQUIREMENTS
All workshops are hands-on, and participants must bring their own laptop computer.