



# *Hands-On FTA Course*

## *Outline*

*Introduction*  
*Deductive Analysis*  
*Basic Concept*  
*Advantages/Disadvantages*  
*Immediate, Necessary And Sufficient Concepts*  
*Fault Tree Symbols And Terminology*  
    *Common Symbols, Special Symbols*  
    *Definitions, Usage*  
*Examples*  
*Qualitative, Quantitative Trees*  
*Basic Rules*  
*System Operational Modes*  
*Guidelines - Keys To Success*  
    *Increased Accuracy, Consistency, Economy*  
    *Best Kept Secrets?*  
*Maintainability*  
*Fault Tree Notes*  
*Concurrency And Correlation*  
*Step Size Precautions*  
*Similar Subtrees*  
    *Limiting Fault Tree Size*  
    *Sharing Subtrees*  
*Partial Analysis*  
*Fault Tree Reviews*  
*Cut Sets, Minimal Cut Sets*  
*Minimal Cut Set Analysis*  
    *What This Really Means*  
*Importance Analyses*  
*Common Mode Analysis*  
    *An Excellent Approach*  
*Acceptance/Rejection Criteria*  
    *20 Attributes*  
*Supporting Material*  
*FTA Software*  
    *The Good, Bad & The Ugly*  
    *The Good - CAFTA*  
        *Introduction*  
        *Initializing*  
        *Creating, Editing, Data Entry*  
        *Producing Minimal Cut Sets*  
*Introductory Exercise*  
    *System Description*  
    *Hands-On FTA*  
    *Discussion*  
    *Solution*  
*Intermediate Exercises*  
    *System Descriptions*  
    *Hands-On FTAs*  
    *Solutions*

*Advanced Exercise*  
    *System Description*  
    *Hands-On FTA*  
    *Solution*  
*Attendee-Specific Exercise (If Time Permits)*  
    *Hands-On FTA*  
*Wrap-up*

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