



THE UNIVERSITY OF THE WEST INDIES

ST. AUGUSTINE, TRINIDAD AND TOBAGO, WEST INDIES

FACULTY OF ENGINEERING

DEPARTMENT OF CHEMICAL ENGINEERING

Telephone: (868) 662-2002 Ext. 82196/82169 Fax: (868) 645-0410 Email: Chemical.Engineering@sta.uwi.edu

aspenONE Engineering Suite Training Session

In an effort to continue providing high quality educational opportunities to Chemical Engineering professionals, the Department of Chemical Engineering is pleased to collaborate with AspenTech in hosting training sessions for the aspenONE Engineering products.

AspenTech is a leading supplier of software that optimizes process manufacturing and as such is used widely in the petrochemical, chemical and processing industries. The Department recognizes the need to provide modern and updated training in the use of the AspenTech suite of products in an effort to increase productivity and effectiveness. In these challenging economic times, the delivery of this training must be done in the most cost effective manner to provide the greatest benefits to prospective participants.

Training will be hands on and demonstrated with the most current software and taught in a highly practical manner. This training opportunity will be of immense benefit to your organization as it will provide:-

- Competent instructors who bring a wealth of industry expertise from AspenTech
- Hands-on training
- Demonstration with the latest version AspenTech solutions

Participants who complete these training courses will receive continuing Education Units (CEU) which in some cases can be used as credits to maintain professional licenses and designations.

The training is scheduled to take place in June at the Department of Chemical Engineering's Design Office, UWI.

We recognize that demand for this specialized training may be high and as such we will need to know which courses are of interest and the number of your employees who will be attending. We will be able to significantly reduce the cost per participant if we can maximize the attendance. The cost for a given course will depend on the total number of participants as well as on the number of participants from an individual organization attending the course.

We believe that the courses we propose to offer, as listed on the following pages may be of relevance to your organization. The complete AspenTech training course catalog can be accessed at: <https://training.aspentech.com/SelectCourse.asp#Engineering> where additional information on each course may be found.

EHY101: Aspen HYSYS: Process Modeling (3 days)

Learn to build, navigate and optimize process simulations using Aspen HYSYS. Learn to evaluate the performance of existing equipment, improve the convergence performance of a simulation; troubleshoot common issues. Model unit operations such as distillation columns, heat exchangers, separators and rotating equipment. Learn how to use Oil Characterization for crude assays. Learn how to perform Case Studies to determine the optimum operating point for a process. Learn how to use the pipeline hydraulics capabilities.

EHY202: Aspen HYSYS: Advanced Process Modeling Topics (2 days)

Learn how to use and apply advanced modeling techniques to enhance your simulation. Create models that emulate plant conditions. Create custom column templates, including non-standard configurations. Optimize process conditions to meet one or more process constraints. Perform complex calculations on flowsheet variables using the HYSYS Spreadsheet. Integrate rigorous heat exchanger models into a standard flowsheet. Use the Depressuring Analysis to predict pressures and temperatures inside process vessels during pressure let-downs and emergency conditions.

EAP101: Aspen Plus: Process Modeling (3 days)

Learn how to build flowsheet simulation models to analyze steady-state processes using Aspen Plus. Learn how to simulate and troubleshoot the basic Unit Operation models and full process models. Develop the foundation skills for process design, debottlenecking, and optimization.

EHY2511: Flare Network Design and Rating (2 days)

Understand the capabilities of Aspen Flare System Analyzer to rigorously model flare systems and equipment, and develop practical experience through modeling exercises. Learn the basics for rating a flare convergent, divergent and looped network for the constraint violations and for pressure, temperature and flow profile throughout the network. Understand the solver messages to analyze the flow network problems and review options to take corrective measures.

EHX1011: Design and Rate Shell and Tube Heat Exchangers (2 days)

Learn the thermal design of shell and tube heat exchangers and how to use simulation to solve real process problems. Learn how to optimize work processes using Aspen Shell & Tube Exchanger software. Learn the fundamentals of producing a cost optimized exchanger design. Understand the basic geometric selections required to establish a practical exchanger design and find out how to avoid tube vibration at the design phase.

EEE102: Introduction to Aspen Process Economic Analyzer (3 days)

Learn to develop an economic evaluation and proposed design using Aspen Process Economic Analyzer. Obtain detailed design results for both equipment and installation bulks with minimal input, and by integrating operating cost, capital cost, and schedule.

Learn to analyze different process alternatives in simulation and determine the more profitable approach. Learn to show the utility usage for your process. Learn to adjust construction wages and to adjust the system calculations to reflect your local cost.

EEE103: Introduction to Aspen In-Plant Cost Estimator (3 days)

Learn how to develop in-plant design, estimate and schedule using Aspen In-Plant Cost Estimator. Reduce estimation variability by adopting a consistent methodology.

EHY223: Aspen HYSYS Dynamics: Introduction to Dynamic Modeling (3 days)

Develop the skills and techniques required for creating and running dynamic simulations. Build dynamic models of vessel relief scenarios, compressor surge control, distillation column control, and pipeline hydraulics. Apply the best practices for transitioning from steady-state to dynamic modeling and discover shortcuts for efficient use of Aspen HYSYS Dynamics.

CALL TO ACTION

Please let us know which courses are of interest to your company and how many participants you would like to attend each course. We would like to get your feedback on your preferred courses by April 15, 2016.

Company:

Contact Information:

Course	Interest (Yes/No)	No. of Participants
EHY101: Aspen HYSYS: Process Modeling		
EHY202: Aspen HYSYS: Advanced Process Modeling Topics		
EAP101: Aspen Plus: Process Modeling		
EHY2511: Flare Network Design and Rating		
EHX1011: Design and Rate Shell and Tube Heat Exchangers		
EEE102: Introduction to Aspen Process Economic Analyzer		
EEE103: Introduction to Aspen In-Plant Cost Estimator		
EHY223: Aspen HYSYS Dynamics: Introduction to Dynamic Modeling		

For further information please contact:

Jeffrey Smith

Lecturer - Reactions Engineering; Computer-Aided Engineering

Department of Chemical Engineering.

E-mail: jeffrey.smith@sta.uwi.edu | Tel/ext: (868)-662-2002 ext. 83074

Roger Deo

Lecturer - Separation Processes; Loss Prevention & Risk

Department of Chemical Engineering

E-mail: roger.deo@sta.uwi.edu | Tel/ext: (868)-662-2002 ext.84000