

Converge Engineering Pvt. Ltd.

An ISO 9001:2015 certified company

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# WHY CHOOSE CEPL

# Why is CEPL the best alternative for learning process calculation and simulation?

This course gives participants value for their money.
This course is an extension of the four-year engineering course.
We teach them something, which they did not learn before. This is what makes this course interesting.

Our participants become experts in preparing any process calculations spreadsheet, as they are trained accordingly.

Our participants become experts in Aspen HYSYS, EDR, Flare System Analyzer, HYSYS Dynamics and FluidFlow.

Our participants become well equipped with interview questions.

They learn to prepare Simulation reports, PFD, P&ID and C&E Matrix.

Our participants solve real project problems, using the knowledge and expertise they gained in the course.

They learn how to prepare typical Process documents (Process Design Basis, OCP, Line List, PDS, Simulation report etc.).

# MENTOR

#### **Ajay Satpute**

M.Tech (Chemical), IIT Madras



He is the Managing Director of Converge Engineering Pvt. Ltd. and an alumnus of the prestigious Indian Institute of Technology (I.I.T.), Madras with a Master's Degree in Chemical Engineering.

He is amongst the finest chemical engineers in the industry and is very wellknown for his outstanding skills and innovative solutions. He has vast knowledge and experience in several industries like Oil & Gas, Chemicals, Energy, Utilities, Fertilizers, Iron & Steel, and Pulp & Paper etc. in India, Middle East and the Far East. His efficient and accurate solutions are appreciated by all the clients he has worked with.

His contribution to knowledge-sharing websites has helped many practicing engineers. Over 60,000+ engineers have downloaded his process calculations spreadsheets and articles. He has also authored the best selling 'Process Design and Simulation Handbook' which is a step-by-step guide to simulation and 'Compressor Surge Analysis' book.

## **PUBLICATIONS**

#### Author of best selling chemical engineering books







### **SYLLABUS**

**SESSION 1** 

Line sizing using excel

**SESSION 2** 

Control Valve sizing using excel, VBA (Goal Seek).

**SESSION 3** 

**PSV** sizing using excel

SESSION 4

Pump sizing using excel, Separator sizing using excel, Orifice sizing using excel, Plant design problem.

**SESSION 5** 

Control Valve sizing using Aspen HYSYS,
Pressure safety valve sizing- Aspen HYSYS,
Line sizing- Aspen HYSYS, Pump sizing- Aspen
HYSYS, Separator sizing- Aspen HYSYS and
Orifice sizing- Aspen HYSYS.

**SESSION 6** 

Heat exchanger sizing using EDR, Distillation column sizing - Aspen HYSYS, Blowdown utility - Aspen HYSYS, Depressuring utility - Aspen HYSYS.

### **SYLLABUS**

**SESSION 7** 

Aspen HYSYS simulation of a real project (industry problem), VBA Function, VBA Userform

**SESSION 8** 

Process calculations for the same project using spreadsheets, Process simulation report, PFD, P&ID, HYSYS-Excel Linking VBA

SESSION 9

Cause & effect diagram, Line list, Equipment list and other process deliverables, CTR preparation, PVRV sizing, Flare system design using Aspen Flare System Analyzer.

SESSION 10 Aspen Plus Batch Distillation, Aspen Plus Batch Cooling, Surge analysis using Pipenet Transient FluidFlow software

SESSION 11

**Aspen HYSYS Dynamics problems** 

SESSION 12 **Compressor surge analysis using Aspen HYSYS Dynamics** 







**Duration: 12 sessions** 

Saturday batch: 20th April 2024

**Sunday batch: 21st April 2024** 

Timings: 9:00 am - 3:00 pm IST

#### Course Material includes:

- 1. 15+ Process calculation spreadsheets (Line, Pump, Separators, PSV sizing etc.,)
- 2. Best selling chemical engineering books Process Design & Simulation Handbook and Compressor Surge Analysis Book, used by many chemical engineers worldwide.
- 4. 6GB soft study material various simulation examples, chemical engineering books etc.

#### **TERMS & CONDITIONS:**

- 1) Fees once paid shall not be refunded under any circumstances.
- 2) For International participants (residing outside India):
- Shipping charges payable extra depending on receiving country.
- Only e-certificates shall be provided. In case, hardcopy required shipping charges shall be applicable.
- 3) Fees include:
- Registration fees
- Printed book shipped within India
- Course completion certificate
- Course Material provided.



# **OUR CONTACT**

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