

MasterClass CSU Engineer

Classroom training and e-Learning

Move the Needle!



What is it?

MasterClass CSU Engineer training is based on the American Petroleum Institute Recommended Practice for Facilities Systems Completion (API RP 1FSC) and is applicable to all sectors in the Energy and Process Industries. Choose from Classroom or e-Learning, covering the entire project life cycle through Commissioning and initial project Start-Up. Applicable to Process & Petrochemical Plants, offshore Production Facilities, Nuclear and Renewables.

Who is it aimed at?

Engineers, experienced Technicians / Operators involved in Systems Completion and Commissioning & Start-Up. Or Engineers from stakeholder organizations, such as Construction, Operations, Engineering, QA/QC, Safety. Gain valuable insight to your roles and other requirements of this vitally important Discipline.

How will I benefit?

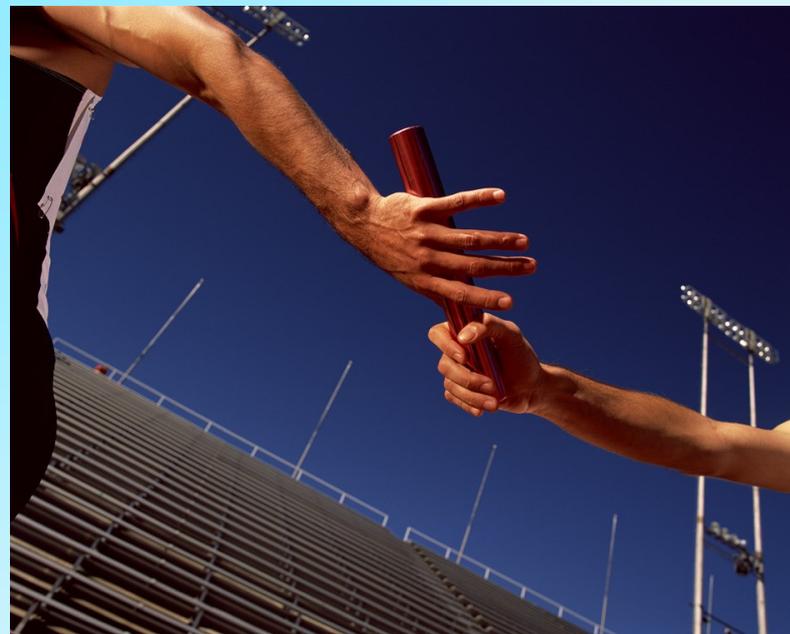
By the end of this course, you will have learnt how to:

- ◇ Achieve successful CSU on any project by applying the Critical Success Factors
- ◇ Develop and justify a budget for CSU
- ◇ Apply the Systemization process and formulate the Start-Up sequence of priority Systems
- ◇ Perform Gap Analysis, know how to apply the results
- ◇ Persuade Construction and major stakeholders to be successful in the CSU process

Value Proposition to Employers

For ECITB members, the subsidised e-Learning training cost is £500. Learners receive an ECITB certificate worth 18 hours CPD. CSU skills and knowledge will bring considerable cost savings on your current and successive projects.

[Click here to sign up and register for classroom training or e-Learning now!](#)



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Developed and Distributed by Falcon Group



Effective Teamwork



Visionary Leadership



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MasterClass CSU Engineer Training ~ Classroom-based or e-Learning

TS 02 for Commissioning Engineers (Public or Private Training)

- ◆ 3-day, 18-hour course (English Language)

Private training content is tailored to meet customer requirements.

MasterClass e-Learning for individuals or groups is self-paced learning where the learner has a 3 month window to complete the course.



MasterClass CSU teaches you:

- ◆ How to do Systemization
- ◆ FATs and Preservations
- ◆ Gap Analysis
- ◆ Effective Pre-Commissioning
- ◆ Punch List Management
- ◆ MoC and PSSRs
- ◆ System Turnovers
- ◆ Handover to Operations
- ◆ Critical Success Factors for CSU
- ◆ ... and much more ...



Be the best

Course Outline in Summary

Day 1

- Introduction, Safety and House Rules
- What is Commissioning?
- What is Systems Completion?
- Case Studies
- Overview of Commissioning Phases

- Phase 1 – Preparation
- Commissioning Manager and the Team
- Systems Completion Execution Process, Documentation and Procedures
- Design Reviews, Risk Assessments and Risk Analysis
- Case Studies

Day 2

- Phase 1 – Preparation
- Planning and Budgeting and Systemization
- CSU Team Organisation, Recruiting and Training
- Auditing and Gap Analysis
- Commissioning Spares, Specialist Services, Logistics, Equipment

- Phase 2 – Implementation
- Acceptance Testing, Preservations, Checksheets and Pre-Commissioning Activities
- Punch List Management

Day 3

- Phase 2 – Implementation
- Pre-Commissioning and Dynamic Commissioning Activities
- Process Safety, Preparing for initial Start-Up
- Critical Success Factors for CSU
- Assessment Test and Questionnaire.

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Classroom training and e-Learning

Ideal for working remotely or working from home (WFH)



What People Say About Us

"I am very glad you were able to deliver the program as planned. It's not about business but the robustness of MasterClass CSU, the passion you have for this, and the willingness to share what you know with others. For me this is the differentiator. That is what makes your workshop better than others." ~ Ignatius Nwokorie, Shell Nigeria, responsible for project delivery and putting 50 Engineers through the course

"The course was definitely worthwhile and I recommend it. Projects with complex arrangements and technology such as ours, will really benefit. The discussions during the course are very valuable and would not come up otherwise. I believe this has provided a good kick start to CSU." ~ Andrew Easton, Marine Technical Authority, Shell Stones Project

"As Commissioning & Start-Up continues to grow in its importance and value, I realized that immersive training classes would be needed to gain a better understanding. To manage my novice understanding, Alan kept ensuring the content was clear and the brainstorming/discussions in the room were relevant to all attendees. On top of that, the customer service made me feel warm and welcomed. Overall, the training class was intuitive and it was clear that Alan had invested a lot of resources in developing the content and facilitation process. I highly recommend Falcon Global as it has been integral to my development in this space!" ~ Aadel Sarfani, CP Supply Chain Lead, Shell Vito Project

CSU skills are vital to all sectors of the Energy and Process Industries



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MasterClass CSU Engineer Classroom training and e-Learning



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Overview

Curriculum

Instructor

Reviews

Take MasterClass e-Learning at your pace. This course is completely flexible to meet the needs of your career, family, and work-life balance. Agree the pace of your plan with your line manager and relevant key stakeholders and the MasterClass Instructor.

Introduction

Refer to Introduction videos and PowerPoint slide deck

- What is Commissioning?
- Many Changes and Some Similarities
- What is Systems Completion?
- The Relationship between Systems Completion and Commi
- Safety and Environmental Considerations
- The Commissioning Approach
- Influence Curves
- Refer to Introduction videos and PowerPoint slide deck
- Quiz - Introduction

Module 1: Introduction and Course Overview

Commissioning & Start Up Workshop

A note to Senior Managers

The consequences of not following the direction given in this course are the usual scenario that will be familiar to many of you.

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Module 2: Commissioning, Systems Completions

Commissioning & Start Up Workshop

Completions Pyramid © 2005
With reference to AFI 04 (FISCI) Figure 1

| | | |
|--|----------------------------|---|
| Steady State Operations | Dynamic Commissioning | All Category "C" Punch List Items completed by Operations |
| Final Commissioning Activities Pre Startup Safety Review (PSSR) All C Checklists complete Ready for Startup Certificate | Static Commissioning | All Category "B" Punch List Items complete |
| All B Checklists complete Ready for Commissioning Certificates | Mechanical Completion | All Category "A" Punch List Items complete |
| All A Checklists complete Mechanical Completion Certificates | Factory Acceptance Testing | AFAT Punch List Items complete |
| Inspection & Testing Records and Factory Acceptance Records | | |

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Module 3: Safety and Environmental Considerations

Commissioning & Start Up Workshop

Safety and Environmental Considerations

- Awareness of safety and specific environmental conditions;
- Compliance with health, safety and environmental regulations;
- Some factors are constant, irrespective of environment:
 - Well-trained people in the Commissioning Team;
 - Broad and diverse range of skills and expertise;
 - Sufficient resources to control commissioning activities;



Put MasterClass CSU training on your career progression route map

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Beat the pandemic — train online and rejoin the workforce with highly valuable skills.