Garnet
Garnet Global Training Center

GGT-CH-115

Chemical & Process Engineering

Fluid Flow & Hydraulics

جريان الموائع والهيدروليكا

Duration	Language	Formats	Hours	Level
5 or 10 days	**English or Arabic**	**Classroom, online, in-house**	**35 / 70**	**Intermediate (practitioner)**

Overview

Fluid Flow & Hydraulics turns established good practice into step-by-step methods that participants rehearse in exercises and then apply at work. Process design, control and optimisation for chemical, petrochemical and fertiliser plants. Choose 5 or 10 days, classroom or live online, English or Arabic; organisations can also run it in-house and adapt the examples to their own work.

What you will be able to do

- Apply the methods and standards of Fluid Flow & Hydraulics to real tasks.
- Follow safe, compliant and documented work practices.
- Avoid the mistakes that most often cause rework or failure.
- Share good practice with your team.
- Use the right tools, checks and calculations step by step.

Who should attend

Process and chemical engineers, plant operators and technical service teams. Practitioners with one to five years of experience benefit most.

Key topics

- Mass and energy balances
- Unit operations
- Process control
- Simulation and optimisation
- Catalysts and reactions
- Troubleshooting

Formats and fees

5-day classroom	**USD 4,750**
5-day online	**USD 2,950**
10-day classroom	**USD 8,950**
10-day online	**USD 5,450**
In-house	**Quotation per group**

Fees per participant, excluding VAT.

Register or ask

WhatsApp: +971 56 674 7382

Email: info@garnettrainings.com

Training: training@garnettrainings.com

Web: garnettrainings.com

Sharjah Publishing City Free Zone, Sharjah, UAE

Certificate

Participants who attend at least 90% of sessions and complete the final assessment receive a certificate of completion stating 35 contact hours (5-day) or 70 contact hours (10-day).

5-day outline

Day 1 Fluid Flow & Hydraulics: principles and standards

- Simulation and optimisation
- Group discussion and peer review

Day 2 Methods and tools in practice

- Catalysts and reactions
- Troubleshooting

Day 3 Diagnosis and problem solving

- Mass and energy balances
- Measurement and reporting

Day 4 Quality, safety and documentation

- Unit operations
- Hands-on workshop on a workplace challenge

Day 5 Workshop, assessment and action plan

- Process control
- Common mistakes and how to avoid them

10-day outline

Day 1 Fluid Flow & Hydraulics: principles and standards

- Simulation and optimisation
- Group discussion and peer review

Day 2 Methods and tools in practice

- Catalysts and reactions
- Troubleshooting

Day 3 Diagnosis and problem solving

- Mass and energy balances
- Measurement and reporting

Day 4 Quality, safety and documentation

- Unit operations
- Hands-on workshop on a workplace challenge

Day 5 Workshop, assessment and action plan

- Process control
- Common mistakes and how to avoid them

Day 6 Advanced techniques and specialist practice

- Complex cases in depth
- Regional and international case studies

Day 7 Digital tools, data and automation

- Analysis tools and software
- Using AI in this field

Day 8 Benchmarking against international practice

- Global performance benchmarks
- Checklists and templates to take away

Day 9 Capstone project

- Analyse a real challenge from your organisation
- Build the solution and implementation plan

Day 10 Presentations, final assessment and certificates

- Project presentations and review
- Final exam and certificate award

Schedule 2027–2030

Dates	Format	City	Language	Fee (USD)
15–19 Mar 2027	5-day classroom	Geneva	English	4,750
5–9 Apr 2027	5-day classroom	Kuala Lumpur	English	4,750
14–18 Jun 2027	5-day online	Live online	English	2,950
1–12 Aug 2027	10-day classroom	Muscat	English	8,950
10–21 Apr 2028	10-day online	Live online	Arabic	5,450
18–29 Jun 2028	10-day classroom	Riyadh	Arabic	8,950
4–8 Sep 2028	5-day classroom	Barcelona	English	4,750
20–24 Nov 2028	5-day classroom	Abu Dhabi	English	4,750
19–30 Mar 2029	10-day classroom	Istanbul	English	8,950

Dates	Format	City	Language	Fee (USD)
16–20 Jul 2029	5-day classroom	Geneva	English	4,750
5–9 Nov 2029	5-day classroom	Barcelona	English	4,750
17–21 Dec 2029	5-day online	Live online	English	2,950
3–14 Feb 2030	10-day classroom	Riyadh	Arabic	8,950
1–5 Apr 2030	5-day classroom	London	English	4,750
7–11 Oct 2030	5-day classroom	Barcelona	English	4,750
9–20 Dec 2030	10-day online	Live online	English	5,450

Customised and in-house versions of this course are available on request. garnettrainings.com/en/customise/