



Time-of-Flight Diffraction (TOFD)

Welding, NDT & Materials

QGT-WLD-108 | Foundation | 5 or 10 days | Online, classroom, in-house

Course overview

Time-of-Flight Diffraction (TOFD) is an introduction that builds a solid working knowledge in Time-of-Flight Diffraction (TOFD). It covers the principles, the requirements of AWS D1.1, ASME IX, ISO 9712 and ASNT SNT-TC-1A, and the practical methods used on site, with case studies from operations in the Gulf, Africa and worldwide. Available online, in the classroom in 60 cities, or in-house.

What participants will be able to do

- Explain the principles, terminology and scope of Time-of-Flight Diffraction (TOFD)
- Apply the relevant requirements of AWS D1.1, ASME IX, ISO 9712 and ASNT SNT-TC-1A
- Use practical tools, checklists and calculations with confidence
- Recognise common problems, risks and root causes and choose the right corrective action
- Prepare an improvement plan for their own site or organisation

Who should attend

Designed for welding engineers, inspectors, NDT technicians and materials specialists, new joiners and anyone who needs a solid grounding in the subject.

Course outline (5 days)

Day 1: Principles and terminology

Scope, key definitions and how Time-of-Flight Diffraction (TOFD) fits into daily operations

Day 2: Codes, standards and requirements

What AWS D1.1, ASME IX, ISO 9712 and ASNT SNT-TC-1A require, and how to read them

Day 3: Methods, tools and calculations

Step-by-step methods, checklists and worked examples

Day 4: Operation, inspection and common problems

Typical failures, warning signs and what to do about them

Day 5: Case studies, workshop and assessment

Group exercise on real cases and a final knowledge check

What the 10-day edition adds

Day 6: Applied project, part 1 – Apply the week-one methods to a case from your organisation

Day 7: Data and digital tools – Software, spreadsheets and digital tools used in practice

Day 8: Lessons from incidents and audits – What investigations and audit findings teach

Day 9: Applied project, part 2 – Complete, test and refine your solution

Day 10: Presentations and final assessment – Present to the group and complete the final assessment

Fees (USD per participant)

Duration	Live online	Classroom	In-house
5 days	\$3,000	\$5,500	On quote
10 days	\$5,500	\$9,900	On quote

Fees include course material and certificate of completion; classroom fees include refreshments and lunch. In-house training is priced per group.

Dates and cities 2027–2030

Dates	City	Format	Duration	Fee
15–19 Feb 2027	Abu Dhabi	Classroom	5 days	\$5,500
15–26 Mar 2027	Manchester	Classroom	10 days	\$9,900
17–21 May 2027	Tbilisi	Classroom	5 days	\$5,500
2–13 Aug 2027	Houston	Classroom	10 days	\$9,900
9–13 Aug 2027	Online (live)	Online (live)	5 days	\$3,000
17–21 Jan 2028	Manchester	Classroom	5 days	\$5,500
13–24 Feb 2028	Doha	Classroom	10 days	\$9,900
29 May – 2 Jun 2028	Nairobi	Classroom	5 days	\$5,500
7–18 Aug 2028	Prague	Classroom	10 days	\$9,900
4–8 Sep 2028	Online (live)	Online (live)	5 days	\$3,000
19–23 Mar 2029	Madrid	Classroom	5 days	\$5,500
9–20 Apr 2029	Amsterdam	Classroom	10 days	\$9,900
16–20 Apr 2029	Athens	Classroom	5 days	\$5,500
9–20 Jul 2029	Nairobi	Classroom	10 days	\$9,900
22–26 Oct 2029	Online (live)	Online (live)	5 days	\$3,000
11–15 Feb 2030	Nairobi	Classroom	5 days	\$5,500
13–24 May 2030	Abu Dhabi	Classroom	10 days	\$9,900
8–12 Jul 2030	Cape Town	Classroom	5 days	\$5,500
2–13 Sep 2030	Geneva	Classroom	10 days	\$9,900
7–11 Oct 2030	Online (live)	Online (live)	5 days	\$3,000

How to register

Register online or scan the code

<https://qimmatrainig.com/courses/time-of-flight-diffraction-tofd/>

WhatsApp: +971 50 697 0908

Email: training@qimmatrainig.com

