

OTT Newsletter

Are you the Certified ONE?



Now you can prove that you really understand Next Generation Optical Networks, by becoming a **Certified Optical Network Engineer (CONE)**.

The telecoms industry is in a period of change & intense competition as differing technology offerings compete to become the solution chosen by providers seeking the best way to supply higher data rates and more flexibility at a lower cost. 40Gb/s data rates are in demand and Agile Optical Networks with ROADMs are changing the entire scope of the network engineering challenge. This is making life a lot more demanding for network engineers that need to make major decisions affecting their networks. A grasp of some of the individual issues is no longer enough, engineers need to be able to see the big picture and truly understand the impact of different approaches. The new 5-day CONE training and certification has developed from the heritage of OTT's popular

"Understanding Next Generation Optical Networks" programme, which was first launched in the early stages of telecoms boom time, with a unique complete systems perspective. That programme has been updated regularly and run as a company course for various telecoms companies and end users. The new extended CONE certification, which is focussed on long haul core networks, is rigorously assessed by a closed book examination as well as a practical assignment based on real case study material, now sets the standard for the professional optical network engineer.

Amongst the numerous issues it will help you deal with are: the optical solutions versus electronics debate, proprietary versus open systems, moving from point to point links to complex networks, CWDM vs DWDM, Raman or EDFA amplification, which ROADM technology, which modulation format to choose and of course how to make it all work together.



OTT has extended its standards activities by **joining ITU-T** as an Associate Member. The ITU

(International Telecommunications Union) is the world's authority on all aspects of telecommunication systems standardisation and its recommendations ensure that the world's communications systems can all interoperate. With all the exciting developments going on in telecoms including the roll-out of Next Generation Networks and Fibre-to-the-home in many territories, it is essential that the basics of testing fibre optic infrastructure are carried out

properly. OTT's specialist expertise in fibre characterisation is therefore invaluable to help ensure that the ITU Recommendations for testing installed cabling are fully up-to-date, accurate and fair. Our experience of training CFCEs from a dozen different countries gives us an excellent international perspective, and our good relationships with all test equipment manufacturers means that we can provide valuable vendor-neutral technical expertise. Being involved directly also means that we can keep you, our customers, informed of developments in a timely and accurate manner.



www.ott.co.uk

Certified Fibre Characterisation Technician

OTT have launched a technician level certification scheme for fibre characterisation to complement the existing engineer level CFCE programme. Developed initially as a response to a customer requirement, following on from their investment in CFCEs, this programme will now be available as a public course from February 2008.

The CFCT programme is focused on the practicalities of carrying out the actual measurements efficiently, verifying that the acquired data is valid, storing the results methodically and filling in test documentation correctly. There are many hands-on practical exercises and fibre characterisation tasks covered include insertion loss, return loss & OTDR testing, as well as carrying out chromatic dispersion, polarisation mode dispersion and spectral attenuation measurements. There is the opportunity to spend sufficient time on OTDR testing so you can be sure that you can optimise the measurement parameters to get the best possible traces and analyse them to identify any potential problems. Like the CFCE the CFCT has a formal assessment comprising both a written exam and a practical fibre characterisation assignment, as a basis for awarding the certification.



Tel +44(0)1756 797155

www.ott.co.uk

sales@ott.co.uk

Fax +44(0)1756 797112

providing expertise in fibre optics and communications cabling since 1989

November 2007 (Telecoms)

© Optical Technology Training Ltd 2007

Certified Fibre Characterisation Engineers

the numbers and nationalities continue to grow!



The number and nationalities of CFCEs has continued to grow as end users, telecom providers and test equipment manufacturers from around the world see the benefits of investing in this world-class training programme.

The next UK date is 14-18th January 2008. The next US date is 31st March-4th 2008 April. Book now online.



NATO team become CFCEs



The Nato Allied Joint Force Command in Brunssum is the home of some of Nato's top communications infrastructure experts.

In September 2007 a team of engineers all successfully completed the Certified Fibre Characterisation Engineer (CFCE) training programme at OTT in Skipton.

"I chose the CFCE course for my colleagues believing that it is head and shoulders above other advanced fibre testing courses"



said Geoff Briggs, technical consultant to the group. His feedback was that "The course was very well taught and very complex methodologies were explained easily to our multi-national team of engineers."

Pictured are the team with their CFCE Certificates along with Richard Ednay, Technical Director of OTT.



First CFCE meeting at ECOC

With so many fibre optics people gathered in the same place for the European Conference on Optical Communications in Berlin in September, it was a good opportunity to arrange meetings. Optical Technology Training used the occasion to host a get together of Certified Fibre Characterisation Engineers (CFCEs) and supporters of this unique certification. There were attendees from Denmark, Germany, Norway, the UK and even Saudi Arabia.

An update on the success of the CFCE certification scheme was followed by a discussion of developments with relevant standards and also the exhibition and conference highlights. There will be another meeting arranged during ECOC in Brussels next year, so put 21st - 25th September 2008 in your diary.

JDSU host CFCE programme in New Jersey



The Optical Networking Lab at JDSU's facility in Eatontown, New Jersey provided an excellent venue for a Certified Fiber Characterization

Engineer (CFCE) training programme in July 2007. This world-leading certification programme provides the knowledge and skills needed to carry out comprehensive characterization of optical fiber links and to analyze the results to assess the quality of the infrastructure and the ability of the link to support new high speed applications including 10 & 40Gb/s OTN, 10Gb/s Ethernet, extended wavelength DWDM and CWDM systems.

The course includes practical hands-

on sessions including video inspection of connector end faces, measuring insertion and return loss, OTDR testing, chromatic dispersion and Polarization Mode Dispersion (PMD) plus spectral attenuation. There is a challenging examination that has to be passed to make the grade as a CFCE as well as a practical fiber characterization assignment.



Course dates for 2008



City & Guilds 3666-03 Fibre Optic Cabling in an External Environment

7-11 January 2008, Skipton
31 March - 4 April 2008, Skipton



Travel and local Accommodation Information

If you are thinking about attending a course at OTT then you'll find lots of useful information on travel and accommodation options and anything else you might need under the **trainee assistance** section of our website. Just follow the link to 'local information' from our home page www.ott.co.uk

www.ott.co.uk



Now you can book & pay securely online

OTT's new secure online web payment option is now live on the website enabling you to book and pay for public courses online using a credit or debit card. Company and custom courses can also be paid for using payment cards by contacting us directly. Our new service is provided by NetBanx. NetBanx are an industry-leading provider of credit and debit card payment solutions, used by government bodies, universities, insurance companies as well as small businesses like OTT.



Certified Fibre Characterisation Technician

4-8 February 2008, Skipton



Certified Fibre Characterisation Engineer

14-18 January 2008,
Skipton

31 March - 4 April 2008
New Jersey, USA



Certified Optical Network Engineer (Core)

28 Jan - 1 Feb 2008, Skipton

Further dates will be added by demand, so if there's not one that suits you let us know and we'll see what we can do, or why not host a course in your region.

Company courses also available

These courses are also available as company courses and we can often run them for your organisation on your own premises. We also offer 'bespoke' or customised courses designed to meet the exact training needs of a group from one organisation if for example you want to focus on a specific issue or specific makes of test equipment. So why not arrange to have one of our experts come to you.



ECOC 2007 sells out

This year's European Conference on Optical Communications was held in Berlin from 16th - 20th September 2007. The exhibition, alongside the technical

conference, is Europe's largest fibre optics event. It's another encouraging sign of the increased confidence we are seeing in the telecoms marketplace that the exhibition space was completely sold out, with more than 300 exhibitors present. Some of the conference highlights

included the workshop on 100Gb/s Ethernet, the continuing debate over dispersion compensation between the 'polarised' viewpoints of the optical and the electronic camps, an interesting resurgence in coherent detection systems to make full use of phase as well as amplitude information and the further application of RF technologies into the optical domain with several presentations on OFDM transmission systems. Other discussions, at the wide ranging conference, included a symposium on Plastic Optical Fibres, one on Broadband access networks, as well as discussions at all levels from optical signal processing components up to the

network issues associated with wavelength switched agile optical networks and ROADMs, not forgetting all the issues with high-bandwidth multimode fibre. Richard Ednay, OTT's Technical Director, attended the conference and exhibition, so all the latest developments and trends will shortly be integrated into OTT's Optical Networking training programmes. So with the pace of change in fibre optic technology obviously accelerating, make sure you don't get left behind. OTT training sessions can help provide you with a clear, well-structured, unbiased approach to the technology and to marketplace issues.

Tel +44(0)1756 797155

www.ott.co.uk

sales@ott.co.uk

Fax +44(0)1756 797112

providing expertise in fibre optics and communications cabling since 1989

November 2007 (Telecoms)

© Optical Technology Training Ltd 2007