Teaching

WHR offers teaching in all areas listed in the section on *Topics Covered*. Our teaching benefits from our own R&D experience and reflects the mixed background of our own research with the practicalities of our own engineering solutions¹.

Level Course can be delivered from technician-level up to master's degree level and beyond. We can deliver courses to meet your graduate engineer training program or as modules forming part of a university degree program². Course may be assessed or otherwise, as you require.

Duration Course duration can range from a day to two weeks.

Bespoke Courses

WHR normally delivers courses
bespoke to the requirements of its customers at their
premises. Not only does this become cost effective for
approximately ten delegates or more but the courses can
be designed to meet a customer's specific requirements.
We are happy to help and advise in the planning of courses
and their content. We do run some open access courses,
please enquire for details.

Experience WHR staff have over 40 years' experience in delivering courses at technician, undergraduate or postgraduate level. We are used to delivering courses to service personnel, staff of government research institutes, university staff and students and engineers from industry.

Location WHR staff can travel to most parts of the world. Courses are delivered in English but we are mindful that English may not be the first language for many attendees. We have run courses in UK, Ireland, Norway, South Korea, Saudi Arabia, Singapore, and many others.

Research and Consultancy

WHR is happy to discuss contract research and development, or consultancy work. WHR can offer unprecedented impartiality in reviewing research literature or assessing product descriptions.

with your own product development. WHR has an extensive high-fidelity modelling and simulation capability which enables parametric studies of design options. Much of our modelling capability employs processing software which may be used in actual systems. Our unique blend of expertise in radar systems, radar electronic warfare, computer optimisation and signal processing enables us to propose vastly superior design solutions than would be possible using conventional techniques.

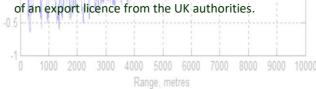
Experience WHR has recently completed successful projects in the following areas: 018894, PRI=67µS

- Design of missile seekers: including feasibility studies of the potential of low THz missile seekers, and design studies of K and W-band systems
 - Design of pulse Doppler modes for short-range ground surveillance radar,
 - Study into future ground-based, long-range, air surveillance radars,
 - > Study and review of weapons locating radars.

Notes

Range, metres

- WHR is a small to medium (sized) enterprise (SME) with a background in both industry and academia. As such, WHR would form ideal research partners with universities.
- International projects entailing primary research or product development would be subject to the approval of an export licence from the UK authorities.





White Horse Radar Limited is a small UK company, founded in 2013 by Dr Clive Alabaster and Dr Evan Hughes and provides teaching, consultancy and research and development services in the field of radar and associated technologies.

Visit us at: www.whitehorseradar.co.uk

¹ All courses are delivered at an *UNCLASSIFIED* level.

² WHR has no degree awarding powers but can deliver modules as part of the degree courses of other universities.

About Us

White Horse Radar Limited was founded by Dr Clive Alabaster and Dr Evan Hughes in 2013 to provide teaching and consultancy for Radar and other sensor technologies.

Drs Alabaster and Hughes have over 45 years of engineering experience between them in all aspects of radar. They have 18 journal papers and over 45 peer reviewed conference papers and Dr Alabaster has recently published a key book on Pulse Doppler Radar.



Dr. Clive M. Alabaster received his BSc degree in Physics with Microelectronics from University College Swansea, Wales, in 1985 and his PhD from Cranfield University, Shrivenham in 2004. From 1985 to 1992 he worked as a microwave design and development engineer on airborne radar systems with GEC Marconi, Milton Keynes,

England. From 1992 to 1998 he worked as a lecturer in radar techniques at Arborfield Garrison, near Reading, England. From 1998 to 2012 he was a Senior Lecturer at Cranfield University, Shrivenham, UK. His research interests include pulse Doppler radar, radar waveform design and the dielectric properties of materials, particularly in the millimetre wave band. He is a member of the Institute of Physics and is a Chartered Engineer.



Dr. Evan J. Hughes received his BEng and MEng degrees in Electrical and Electronic Engineering from the University of Bradford, England, in 1993 and 1994 respectively. He received his Ph.D. in 1998 from Cranfield University, Shrivenham. From 1993 to 1995 he worked as a design engineer with GEC Marconi, Leicester.

From 1998 to 2012 he was a Senior Lecturer at Cranfield University, Shrivenham, UK. His primary research interests include radar signal processing, evolutionary many-objective optimisation, data fusion, and target classification. He is a member of the IET, is a Chartered Engineer and chaired the IET Radar, Sonar and Navigation Professional Network from 2006 to 2010 and was the Technical co-chair for RADAR 2012 in Glasgow.

Services

Drs Alabaster and Hughes also have over 40 years of teaching experience between them; the majority taught at Master's degree level and above. White Horse Radar (WHR) Limited can provide bespoke short courses ranging from one day to multiple weeks in a wide range of topics (see example list below). We regularly travel worldwide to deliver the courses at customers' premises and can also provide courses in the UK. Video presentations in these topics are also available for study at your own pace.

We are also available to provide consultancy services ranging from as little as a day, through to longer ad-hoc support contracts if needed. We can also conduct research programmes on behalf of customers and have significant experience over many years in doing so, which has led inpart to our significant portfolio of publications.

WHR also sells a range of low-power, short-range security/surveillance radars incorporating automatic target recognition and a coaxial dielectric probe offering measurement of complex permittivity from 0.5 to 40GHz.

Topics Covered

Topics covered for teaching, consultancy, research and development include:

- Radar systems design and analysis,
- Radar waveform design,
- > Radar electronic warfare,
- > RF test & measurement & Microwave engineering,
- Dielectric materials measurements,
- Digital and analogue hardware design,
- Digital signal processing,
- Sensor & Data fusion,
- ➤ Multi target tracking and classification
- Optimisation of complex systems,
- Software development for detailed modelling and simulation and also Software and hardware for realtime data processing.

Contact Us

If you think we can help you or would like to find out more, then please contact us.

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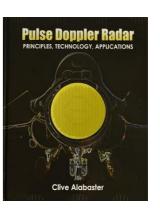
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