

Interfaces and Protocols

Fielax GmbH, Bremerhaven

Date & Time:	June 4 & 5, 2014	9 am – 5 pm
Location:	Fielax GmbH Schleusenstr. 14 27568 Bremerhaven	
Language:	English & German	
POLMAR credit points:	2	
Registration:	info.polmar@awi.de	

Course content:

Today, more and more scientific devices and sensors do not work standalone any more but use multiple interfaces to communicate with their surroundings. Many sensors send data to a computer via serial interfaces. On a moving platform like a research ship, devices also often depend on real-time data input from other sensors e. g. GPS receivers or compass systems. This workshop introduces basic knowledge of common interfaces used in the marine environment, communication, protocols, software, and plug connections. In practical sessions you will train how to connect different interfaces, e. g. mould and solder physical plug connections including underwater cables, use hard- and software to build up small sensor networks and troubleshoot malfunctioning connections.

This course offers theory and practice on basic levels, but will also introduce advanced tips and tricks. The workshop will focus on

- Basics in electronics
- Most common interfaces
- Communication via interfaces, data transfer in networks
- Protocols and software
- Plug connections, e. g. soldering and moulding (including underwater cables)

Previous knowledge is not required. To make the course most suitable for your demands, please answer the following questions and send to info@fielax.de.

1. In which scientific field are you working?
2. Please describe your work.
3. Have you worked with interfaces before?
If yes, which interfaces and in which context?
4. What are your expectations from the workshop?
5. Are there specific topics you would like to focus on during this workshop?

Target group:

Students working with sensors or self-made instruments and need more security in handling them.

Students' comments on this course:

- Nette Übungen!
- Sehr schön, es hat sehr viel gebracht. Dringlich zu empfehlen wenn man mit "Selbstbaugeräten" arbeitet.
- Very good to learn more -> evtl. "advanced" course?

More information: <http://www.fielax.com> or contact info@fielax.de

Our courses are generally free of charge for all participants. However, they do have a price and can cost as much as 150€ per day per student. Please take this into account when cancelling your place on the last minute.
