

AVIONIC SYSTEMS TECHNOLOGY

Module EPMA9



5 - 9 March 2007

This module is organized by the Aerospace Division of KHBO,
Faculty of Industrial Sciences and Technology – Oostende (Belgium),
in cooperation with Barco, Belgocontrol, UGent, FLAG, VIK, EHB, VLCOB

Aim: the aim of this module is to provide an overview of existing avionic systems in aircraft operational environment and to consider the design, development and certification requirements for future avionic systems.

Target Delegates: this module is intended for professionals with a relevant national diploma, engineers and/or managers. It is also a part of the KHBO-postgraduate MSc (IS) in Avionics.

Learning Outcomes: on completion of this module, delegates will be able to:

- * understand systems functions and principles as well as their dependencies from requirements and aircraft operation modes.
- * describe and analyze the basic performance characteristics for individual systems.
- * formulate the different integrated avionic systems, conceptual design steps and the related management procedures.
- * understand the influence of avionic systems on reliability, safety and economics of aircraft operation.

Learning Environment and Pre-Module Study: the module will include lectures, application examples and computer based exercises. Delegates will be assigned a ten- hour preparatory reading of reference literature.

Module Content: introduction, avionics project environment, cockpit instrumentation, navigation and communication systems, engine control systems, integrated modular avionic systems and databusses, autoflight systems, CNS/ATM, opto-electronics and display technology, avionic systems design requirements and certification of software, field visits and computer based training.

Post-Module Assignment and Certificate: delegates will be given assignment tasks which will involve the application of the knowledge gained during the module, related to their own activities. When successfully completed this module (inclusive assignment), KHBO issues a certificate.

Venue: KHBO-Aerospace Division, Campus Oostende, Zeedijk 101 B-8400 Oostende, Belgium
Contact: Mr. R. Defever, Head of KHBO-Aerospace Division / coordinator EPMA - project,

Tel. 00 32 59 56 90 37 Fax. 00 32 59 56 90 01 E-mail: roland.defever@khbo.be

Module Cost: 1090,00 Euro, inclusive of didactical material, coffee-breaks and lunches (accommodation and course dinner (48 Euro) are not included).

Maximum number of delegates: 24. A company-group-discount is provided.

Enrolment/cancellation/module fee payment: before 20th February 2007.

KHBO/EPMA9-MODULE: AVIONIC SYSTEMS TECHNOLOGY (5 – 7 March 2007)

DRAFT MODULE PROGRAMME

Monday	
10.15	WELCOME– KHBO - Campus Oostende
10.20	INTRODUCTION - PROGRAMME OVERVIEW
10.30	AVIONICS PROGRAMME & PROJECT ENVIRONMENT, Barco Avionics Div.
12.00	LUNCH
13.30	COCKPIT INSTRUMENTATION + CBT, KHBO
15.30	BREAK
16.00	INTRODUCTION TO NAV & COM – SYTEMS, INTEC - University of Gent
17.30	ASSIGNMENT PROCEDURE, KHBO
Tuesday	
09.00	SHORT RANGE NAVIGATION SYSTEMS I, Belgocontrol
10.30	BREAK
11.00	SHORT RANGE NAVIGATION SYSTEMS II, Belgocontrol
12.30	LUNCH
14.00	DIGITAL ENGINE CONTROL SYSTEMS I, EHB - Brussel
15.30	BREAK
16.00	DIGITAL ENGINE CONTROL SYSTEMS II, EHB - Brussel
17.30	ASSIGNMENT TASKS, KHBO
Wednesday	
09.00	AUTONOMOUS NAVIGATION SYSTEMS, KHBO
10.30	BREAK
11.00	AVIONIC SYSTEMS - CBT, KHBO
12.30	LUNCH
14.00	AVIONIC SYSTEMS - CBT, KHBO
15.30	BREAK
16.00	AVIONIC DATABUSES –, Belgocontrol
17.30	ASSIGNMENT TASKS - KHBO
20.00	COURSE DINNER
Thursday	
08.30	DEPARTURE TO BELGOCONTROL – Brussels International Airport
10.30	BREAK
11.00	AUTOFLIGHT & FMS SYSTEMS, Belgocontrol
12.30	LUNCH
14.00	CNS/ATM, Belgocontrol
15.15	BREAK
15.30	VISIT/GUIDED TOUR
17.30	RETURN*
Friday	
08.30	DEPARTURE TO BARCO - Kortrijk
09.30	AVIONICS DISPLAY TECHNOLOGY, BARCO Avionics Div.
11.00	DESIGN, SOFTWARE DEVELOPMENT & CERTIFICATION, VISIT
12.30	LUNCH
14.30	EMC-ORIENTED DESIGN, KHBO*
15.45	INTEGRATED AVIONIC SYSTEMS FOR SAFETY, KHBO
17.00	MODULE EVALUATION, ASSIGNMENT TASKS

ENROLMENT: please complete* and sign this form and fax it to:
KHBO – Aerospace / EPMA9 Zeedijk 101 B-8400 Oostende Belgium Fax : 00 32 59 56 90 01

Yes, I wish to enrol on the KHBO-EPMA9 – Avionic Systems Technology Module

Name:

Organisation:..... Function:.....

Address:

Tel: Fax: E-mail:

Date:

Sign:

*Before 20 February 2007 - - - After enrolment, you will receive an invoice and more detailed practical information.