Training Modules

Module A – ESABASE2 basics

Become familiar with the necessary basics to efficiently operate ESABASE2. Profit from the knowledge of the ESABASE2 developers, providing a comprehensive introduction and hands-on training of the following features:

- the ESABASE2 framework (editors, interfaces)
- available space environment models and their physical background
- pre- and post-processing capabilities
  Duration: 1 day

Module B – ESABASE2 practice (M/OD)

Run through a realistic risk analysis scenario and perform a M/OD risk analysis from end to end. Learn about the proper selection of the physical models and the analysis features offered by the ESABASE2 framework:

- selection of the M/OD model and damage equations and their associated parameters
- running the analysis
- interpretation of results
  Duration: 1 day

Module C – ESABASE2 practice (other models)

Domain specialists will train you on the proper selection and application of physical models offered by the ESABASE2 framework such as

- Sunlight
- Atmosphere/Ionosphere
  Duration: 1 day

Courses

Type I   (Standard)

- Location: etamax premises, Braunschweig
- Participants: min. 3, max. 8
- Costs per participant:
  - Module A (mandatory)   525,00 €
  - Module A + B   975,00 €
  - Module A + C   on request
- Next Dates: **26.02. – 27.02.2019**
          (Dates for module C on request)

Type II   (On-Site)

- Location: at customer premises*
- Participants: min. 3, max. 8
- Costs per participant:
  - Module A (mandatory)   625,00 €
  - Module A + B   1175,00 €
  - Module A + C   on request
- Next Dates: on request

Type III   (Consulting Service)

- Location: negotiable*
- Participants: max. 2
- Content:
  - Expert consulting services of varying content as agreed with the customer.
- Costs per day   1350,00 €
- Next Dates: on request

Inside Germany, a travel allowance of 200 € per commenced training/consulting day will be charged.

All prices are net prices without VAT.

Registration

I herewith register to the following ESABASE2 training course (please tick the relevant box):

Module		Type I @etamax	Type II @customer	Type III
A only	1 day			
A + B	2 days			
A + C	2 days			
Preferred Date				

Subject(s) of particular interest

_____

_____

Note: Registrations will be handled on a 'first come – first serve' basis. Acceptance of the registration is subject to the required min./max. number of participants.

Company _____

Participant _____

Address _____

_____

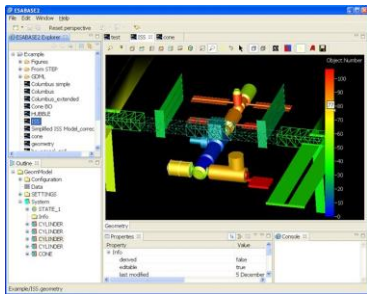E-Mail _____

Phone _____

_____

Please send back by fax or mail to

etamax space GmbH
ESABASE2 Helpdesk
esabase2@etamax.de
Fax +49 (0)531.866688.99

Lilienthalplatz 1
D-38108 Braunschweig
Germany

The Topic

In space system design, space environment analysis plays a vital role to assess and minimize the risk from effects such as meteoroids or orbital debris. ESABASE2 is a highly ergonomic software application providing the design engineer with the capability to identify and protect critical spacecraft components.

Convincing ESABASE2 features

- Various analysis capabilities on common satellite geometry and mission model
  - Meteoroid and Orbital Debris
  - Atmosphere/Ionosphere,
  - Sunlight
- Single point access to all relevant meteoroid and debris models including MASTER 2009 and the latest NASA model ORDEM 3.0
- Single point access to relevant damage equations
- Sophisticated mission modelling capabilities
  - spacecraft pointing and kinematics
  - deterministic shadowing effects
  - trajectory input
- Highly ergonomic Eclipse based framework
- Interface to external CAD tools via STEP interface
- Unique pre- and post-processing capabilities

Read more at esabase2.net

etamax space provides consulting services for customers from the aerospace, automotive and transportation domain. A highly specialised team of engineers and scientists supports challenging projects and customers in safety critical design aspects.

etamax space developed the PC version of ESABASE under ESA contract. It maintains the tool and the licensing process. Support contracts as well as analysis campaigns on customer request are offered by etamax.

etamax space maintains offices at two sites. The main site and the location of our training courses is Braunschweig/Germany. A second office serving our projects for ESOC and EUMETSAT is located in Darmstadt.

Contact

etamax space GmbH
Dr. Karl Dietrich Bunte
Lilienthalplatz 1
38108 Braunschweig
Fon: 0531.866688.33
Fax: 0531.866688.99
E-Mail: esabase2@etamax.de
www.etamax.de
esabase2.net

Training Courses ESABASE2

Meteoroid and Orbital Debris Risk Assessment

Atmosphere/Ionosphere Effects Analysis

Sunlight, Earth Albedo and Infrared Irradiation Analysis