**TRAINING BROCHURE** 

# Training Mechatronics system design - part 2





# Mechatronics system design - part 2

Price:	€ 3,900 excl. VAT *
Duration:	5 consecutive days
Contact:	training@hightechinstitute.nl, +31 85 401 3600

Score: 8.7 ★★★★☆

### Intro

Part 2 of the course 'Mechatronics system design' focusses on the essential basics in any multi-disciplinary development of mechatronic (motion) system. In this applied mechatronics training, participants will acquire broad technical knowledge beyond the limits of their own discipline.

What makes this training unique:

- The leading training with over 2000 enthusiastic participants.
- Mix of well-known university professors and industry experts.
- Variety of practical experiences and lessons learned from multiple application areas.
- Recommended by euspen & DSPE (European/Dutch Society for precision engineering).

This training is available for open enrollment as well as for in-company sessions.

# **Objective**

After completion of the full course 'Mechatronics system design', the participants will be able to make a more effective contribution to the realization of mechatronic constructions because they will have a better understanding of adjacent disciplines (terminlogy, basics, solution space, challenges, ...) and the interdependencies between disciplines.

## **Target audience**

This course is intended for architects, designers, engineers and project leaders with various technical background who are involved in the multidisciplinary development of products/devices or equipment.

Prerequisites: Technical education (BSc or higher) and completion of the course 'Mechatronics system design - part 1'.

The course attracts participants from both the Netherlands and abroad, creating an international atmosphere that fosters valuable knowledge exchange. If you're traveling from outside the country, you can find useful travel information <u>here</u>.



## **Certified by**



## Certification

This course is certified by the European society for precision engineering & nanotechnology (<u>euspen</u>) and the Dutch Society for Precision Engineering (DSPE) and leads to the <u>ECP2-certificate</u>.

## **Course leader**

Dr. Adrian Rankers Prof. Jan van Eijk

### Trainers

Dr. Adrian Rankers Prof. Jan van Eijk Dr. Theo Ruijl Michiel Vervoordeldonk MSc Dr. Joost Bolder Rik van der Burg MSc Dr. Rick van der Maas Dr. Leon Jabben Dr.ir. Marc Vermeulen

\* Prices are subject to change. Price correction will be applied at the end of the year.



### Program

- Introduction & recap
- Exercise modeling and simulation (20-Sim)
- Dynamics & implications on control design
- Electromechanics/power electronics
- Analog Electronics
- Control system architecture/development
- Dynamic Error Budgetting
- Thermal effects in mechatronic systems
- Metrology & Calibration
- Exercise (digital) control design on test setup
- Software in mechatronic systems
- Case 1: Compact disc player
- Case 2: Wafer stepper/scanner

### **Frequency**

Once per year

Read the interview:



Prof. Jan van Eijk about the effectiveness of the METRON trainings

Wise lessons, advise and van Eijk's most important patents.

Interview with Prof. Jan van Eijk, co-founder of Mechatronics Academy

Remarks from participants:

- "Most important items I have learned: Relationship between control loop and mechanics." > Danny Vonk , ASML
- "Very nice to learn about a wide range of aspects from field experts." > Gijs van der Veen , TU Delft/MI partners
- "High quality content, subject & teachers!!! Nice location & food." > Anonymous , Heidenhain