

# READING LIST 2023-2024

## MASTER ENGINEERING SYSTEMS



### LAPTOP REQUIREMENTS

The laptop specifications are as follows:

Processor	Intel Core i5 (or higher) or comparable
RAM memory	16 GB or more
Storage	512 GB or more, preferably with SSD or a combination SSD/HDD
Network	WiFi & Wired LAN
Multimedia	Webcam* (possibly integrated), microphone and loudspeakers
Operating system	Microsoft Windows 10

You have a Macbook

It's OK to use a Macbook, as long as it can run Windows 10 (e.g. using a dual-boot or in a virtual machine).

**TIP: student software licenses**

Student software licenses for Microsoft Windows and Microsoft Office can be purchased inexpensively for HAN students via [www.surfspot.nl](http://www.surfspot.nl).

\*You need a WEBCAM and microphone to participate in online lessons and exams.

### ALL MODULES (Minor Project)

#### Compulsory literature:

*Grit. R. (2021). Project Management, a Practical Approach. Noordhoff, (4e druk) Noordhoff Uitgevers, ISBN 9789001790929*

*Elling. R., et. al. (2011). Report Writing for Readers with Little Time. Noordhoff Uitgevers, ISBN 9789001812591*

## MODULE SYSTEMS MODELLING

### Compulsory literature:

ZyVersion of the book of Nise: Control Systems Engineering. (More information and access will be arranged during the first lecture Introduction Modelling).

Kreyszig, Erwin, (2011). *Advanced Engineering Mathematics* (10<sup>th</sup> edition) International Student Version). Wiley.

Hibbeler, R.C. *Engineering Mechanics: Dynamics SI Edition* (14th Edition). Pearson, ISBN 9781292088723.

Hanington, B. & Martin B. *Universal Methods of Design*, Rockport Publishers Inc. 2012

Grit, Roel. *Project Management, A Practical Approach*, (4e druk) Noordhoff Uitgevers, ISBN 9789001790929

Elling, Rien & Andeweg, Bas. *Report Writing for readers with little time*, Noordhoff Uitgevers, ISBN 9789001812591

*Reader Introduction Dynamics*, E. Tazelaar et al, HAN, 2016 (available at HAN)

Reader System Modelling, Data Regression and System Identification

Lecture notes, P. van Kan, HAN 2018

Lecturing material and hand-outs available on OnderwijsOnline

Baarda. D.B. (2010). *Research this is it!* Noordhoff

<https://www.youtube.com/@GradCoach> play list:

<https://www.youtube.com/playlist?list=PLvcb33xNTVUk-Bj4Y9iuU0n46LowYtjb5>

### Recommended literature:

Van den Akker, H. & Mudde, R.F. *Transport Phenomena, The art of Balancing*, Delft Academic Press, ISBN 9789065623584

## MODULE APPLIED CONTROL

### Compulsory literature:

ZyVersion of the book of Nise: Control Systems Engineering. (More information and access will be arranged during the first lecture Introduction Modelling).

Lecturing material and hand-outs/manuals available on OnderwijsOnline

Handouts / manuals

Specific articles about control structures

### Recommended literature:

Scientific papers

## MODULE ADVANCED VEHICLE DYNAMICS

### Compulsory literature:

Lecturing material and hand-outs, available on OnderwijsOnline

### Recommended literature:

Joop P. Pauwelussen, Essentials of Vehicle Dynamics, 2014, Butterworth-Heinemann, ISBN: 9780081000366

R.J. Jagacinski, J.M. Flach.: *Control Theory for Humans*, ISBN nr. 0805822925

V. Cossalter.: *Motorcycle Dynamics*, 2<sup>nd</sup> edition (2006), ISBN nr. 978 – 1 – 4303 – 0861 – 4

P.Sweatman (ed.): *PBS Explained, Performance Based Standards for Road Transport Vehicles*, report Australian Road Transport Suppliers Association (2003)

[http://www.artsa.com.au/assets/library/PBS\\_Explained\\_Sept\\_03.pdf](http://www.artsa.com.au/assets/library/PBS_Explained_Sept_03.pdf)

Alessandro Genta and Giancarlo Genta, Road Vehicle Dynamics, Fundamentals of Modeling and Simulation, 2016, World Scientific, ISBN 9814713430, 9789814713436

## MODULE BIG DATA & SMALL DATA

### Compulsory literature:

Coursera course: Machine learning (Andrew NG)

Scientific papers

**Recommended literature:**

## **MODULE Embedded Control**

**Compulsory literature:**

Readers, book chapters, papers, online (video) tutorials, lecturing material, and hand-outs, to be distributed using Onderwijs Online

Kopetz, H. (2011). *Real-Time Systems: Design Principles for Distributed Embedded Applications*. Springer

Khalil, H.K. (2002). *Nonlinear Systems*. Prentice-Hall.

To be decided during class, depending on the subject.

**Recommended literature:**

Van Steen, M. & Tanenbaum, A.S. (2017). *Distributed Systems: Principles and Paradigms*. Prentice-Hall.

Kreyszig, E. (2011). *Advanced Engineering Mathematics*. Wiley

To be decided during class, depending on the subject.

## **MODULE Hydrogen Technology**

**Compulsory literature:**

Fuel Cell Handbook / 7<sup>th</sup> Edition 2004

Atkins, P. and Jones, L., *Chemical Principles: The Quest for Insight*, W. H. Freeman.

Lecturing materials and hand-outs on OnderwijsOnline

Handouts and papers

**Recommended literature:**

## **MODULE Innovation in Powertrains**

### **Compulsory literature:**

Mehrdad Ehsani, Yimin Gao, Ali Emadi, *Modern Electric, Hybrid Electric, and Fuel Cell Vehicles*, Third edition, ISBN 9781138330498

Lecturing materials and hand-outs on OnderwijsOnline

### **Recommended literature:**

Lino Guzzella, Antonio Sciarretta, *Vehicle Propulsion systems*, Third edition, Print ISBN 9783642359125 and online ISBN 9783642359132

## **MODULE Intelligent Mobility**

### **Compulsory literature:**

Lecturing material (readers, papers and handouts) will be made available on Onderwijs Online

To be decided during class, depending on the subject.

### **Recommended literature:**

To be decided during class, depending on the subject.

## **MODULE SUSTAINABLE ENERGY SYSTEMS**

### **Compulsory literature:**

Renewable Energy in Power Systems, 2nd Edition 2020 Author: D. Infield, L. Freris, Publisher Wiley, ISBN: 978-1-118-64993-0

Handouts and papers

## **MODULE SMART POWER SUPPLY**

### **Compulsory literature:**

Lecture notes (to be distributed during the lectures) and scientific papers

R. Ross, Reliability Analysis for Asset Management of Electric Power Grids, John Wiley, (eBook: ISBN: 978-1-119-12519-8; hard copy: ISBN: 978-1-119-12517-4)

reader Material analysis (free pdf)

To be announced

### **Recommended literature:**

Antonio J. Conejo; Luis Baringo, Power System Operations, Springer, ISBN:978-3-319-69406-1, 978-3-319-69407-8

IAM: Asset Management – an anatomy (pdf – can be downloaded)

To be announced

## **MAJOR PROJECT**

### **Compulsory literature:**

Lecturing material, papers and hand-outs (Power Point, on Onderwijs Online),

Report Writing for readers with little time' van Noordhoff Uitgevers, ISBN 978-90-01-81259-1

Manual Major Project Master Engineering Systems

Baarda. D.B. (2010). Research this is it! Noordhoff