

NEM Modularization Certificate Program



2023 - 2024



LEARN FROM THE BEST



LEARN FROM OTHERS



REFLECT AND APPLY



DEMONSTRATE YOUR SUCCESS

NEM Modularization Certificate Program

2023 – 2024 program overview



Module 1

4 weeks

Kick-off August 2023

Module 2

5 weeks

Q4 2023

Module 3

5 weeks

Q1 2024

Sign up
before
June 15th

Program format

- 3 modules – 14 weeks - 28 sessions
- 100% virtual participation via Microsoft Teams
- Course days on Thursdays at 14:00 - 16:30 (session 1) and 19:00 - 21:30* (session 2) (CEST)
- Get insight into multiple perspectives on and approaches to modularization through lectures, industry cases, and cross-company group assignments

Participation fee

NEM EXEC. members:
5500 € / participant

Non-members:
7500 € / participant

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Participant testimonials



“[I enjoyed] the openness in discussion and the underlying premise that there may be difference in solutions applied to problems that appear to be the same in different companies.”

- participant, 2022-2023

“Module 2 demonstrated excellent mastering of remote teaching and how to include class participants. Module 1 and 3 demonstrated great in-depth examples (...).”

- participant, 2022-2023

“Good cases and theory to build up around the case from the external professors.”

- participant, 2022-2023

“In general, I think this is a great course, executed very professionally. The online format turned out to work a lot better than I had imagined.”

- participant, 2021-2022

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Reasons to join



The program is **unique**

- The program is the first of its kind to present a multi-dimensional, international, and collaborative approach to modularization training.

The program provides **upskilling**

- The program is carefully structured to give participants the opportunity to learn about modularization from renowned experts - our lecturers - and from the experiences made in other participating companies.
- The program considers diversity in participants' modular knowhow and is suitable as both an in-depth introduction to modularization and for expanding on existing knowledge.
- When multiple employees from one company attend the program, they gain a common understanding of and language for modularization; this is a substantial benefit for the company, which can otherwise be difficult to obtain.

The program aims to be **uplifting**

- The program facilitates a place for modularization enthusiasts across companies and across the world to connect and collaborate with likeminded people.
- We ensure a friendly atmosphere and encourage participants to stay curious and have a good time while learning and exploring modularization.



The 2021-2022 program had participants from 7 European countries.
The 2022 - 2023 program had participants from 8 countries worldwide

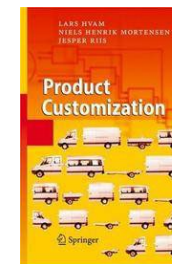
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Module I overview



	Week 1	Week 2	Week 3	Week 4
14.00 – 16.30	<p>NEM: Introduction to NEM + module I</p> <p>The main idea and vision of modular architectures</p> <p>Terminology</p>	<p>Product/ manufacturing as-is architectures</p> <p>Assignment on product architectures</p>	<p>Introduction to product configuration, CTO and ETO processes</p> <p>Assignment on scope and business case for configurator</p>	<p>Software for implementing configurators.</p> <p>Product configuration</p> <p>Complexity management</p>
19.00 – 21.00	<p>Market strategy</p> <p>Case introduction</p> <p>Assignment on market clarification</p>	<p>Product and manufacturing to- be architectures</p> <p>Assignment on to- be architectures</p> <p>Case presentation</p>	<p>How to model products for a configurator</p> <p>Assignment: Modelling products for a configurator</p>	<p>Presentation and evaluation of models and configurators.</p> <p>Module I wrap-up</p>

Based on Nordic academia



Main lecturer



Prof. Niels Henrik Mortensen,
DTU

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Module 2 overview



	Week 1	Week 2	Week 3	Week 4	Week 5
14.00 – 16.30	Introduction to module 2	Platform strategy	Design structure Matrix and interfaces	Platform metrics	Managing platforms
19.00 – 21.30	Competitive advantage	Platform financials: calculation	Designing product platforms	Organizing for platforms Introduction to assignment	Module 2 wrap-up Test

Based on US industry cases



Main lecturer



Dr. Bruce Cameron,
Technology Strategy Partners

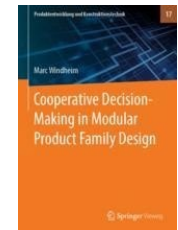
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Module 3 overview



	Week 1	Week 2	Week 3	Week 4	Week 5
14.00 – 16.30	<p>Introduction to module 3</p> <p>Modularization in SMEs: NEM CfM</p>	<p>Development of modular product families (TUHH)</p>	<p>Modularization in SMEs: Simplimize approach</p>	<p>Industry case: Modular Matrix in the automotive industry pt. 1</p>	<p>Execution models in modularization: Solutions from NEM companies</p>
19.00 – 21.30	<p>Modular Manufacturing</p>	<p>Decision making and impact model for modularization (TUHH)</p>	<p>Modularization and circular economy</p>	<p>Industry case: Modular Matrix in the automotive industry pt. 2</p>	<p>Cert. program wrap-up and 'graduation' celebration</p>

Based on experience and expertise from NEM and our partners



Featured lecturers



Dr. Ulrich Hackenberg,
NEM advisory board & HAC



Prof. Dieter Krause, TUHH

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Practicalities [1/3]



General rules for participation

- Please let us know if you are unable to attend a session.
- Please turn off your microphones but your cameras on during the presentations.
- Please keep an eye on the clock during group discussions in the breakout rooms and return to the main meeting rooms at the agreed time.
- Due to contractual agreements with our lecturers, we cannot offer recordings of the sessions.

Our forum on Microsoft Teams

Before the program starts, we will invite you to a designated forum on MS Teams, where you will be able to:

- See and access the scheduled sessions
- Access the breakout rooms for group work
- Access the list of participants and groups
- Access the course materials and read occasional updates from lecturers and other participants.
- Communicate with each other and the program coordinators via chat.

It is your responsibility to let us know ASAP if you have trouble accessing the forum – we are happy to help you out! We will also create a Sharepoint folder for backup storage of the course materials.

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Practicalities [2/3]



Breakout rooms

- Are used for discussions in smaller groups with participants from different organizations.
- Each breakout group will be assigned a group name and a meeting room where the discussions are to take place.
- You will not receive meeting invitations to the breakout rooms but can access them via MS Teams.

Certificate of achievement

- After module 3, eligible participants will receive a personalized certificate that documents participation in the program.
- To be eligible for a course certificate, you must have at least 80% attendance in sessions and hand-ins.



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Practicalities [3/3]



Surveys

- After each module concludes, we will send out a survey, which we encourage you to complete.
- Participant perspectives on the program's structure, themes and materials provides us with valuable insight, which we use to improve future iterations.
- Your answers in the surveys remain anonymous.

Participation fee

- The participation fees pay our lecturers' salaries.
- NEM members can participate at a reduced fee.
- For information about the participation fee, reach out to us at info@modularization.net.