

MDSE - Specialization



Ghsdwp hqwr i#
P dwkhp dwlfv#lqg#
Frp sxwu#fthqfh

-
- We focus in particular on design and analysis methods of software systems:
 - Algorithms and Visualization
 - Information Systems
 - ***Model Driven Software Engineering***
 - ***Digital Twins Technology***
 - Security and Embedded Networked Systems

9/16/2022

i.

Ushvdufk#EWX h2Lqgxvwu|

- **Model Driven System Engineering**

- Automotive
- Automotive Standards

- **Functional Safety**

- **AUTOSAR**

- **Digital Twin**

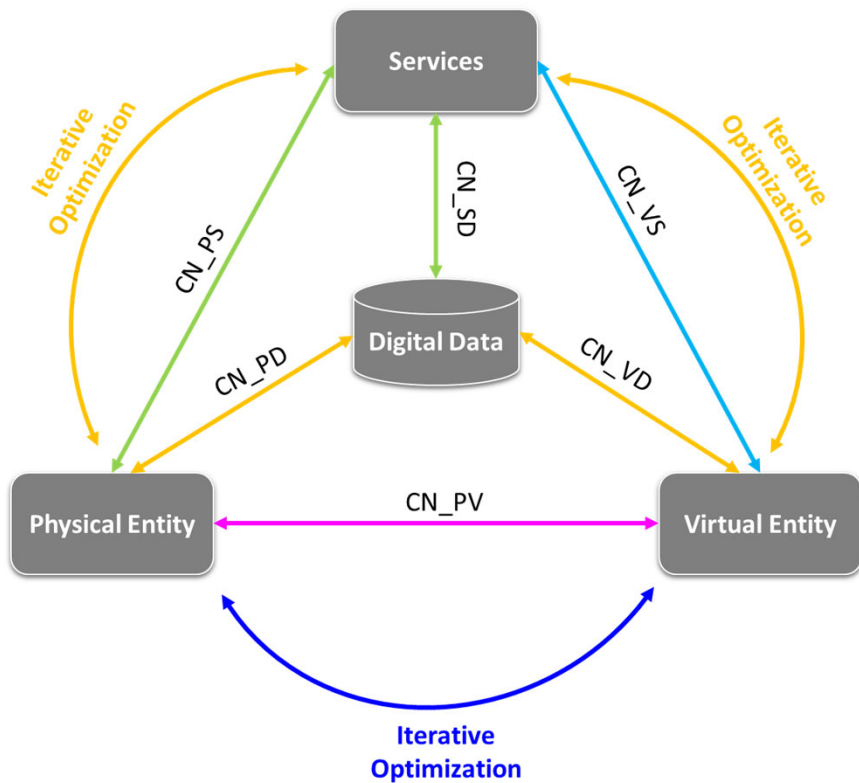
- HiL, SiL, MiL

- **CarE-Model**

- A vehicle framework based on emotion and awareness
- Vehicle Personality
- Integration in the Smart Cities



Uitdaging #1: H2 Logistiek



Earlier Distribution



\ rxu#Sdwk#0J udgxdwlrq#lq#P GVH#



Krz #gr#z h#suh#duh#| rx#iru#kh
vshfldd}dwrq#q#P G VHB

You get an “All Inclusive package”

Holistic Approach	Content	Pedagogy
<p>Model Driven Systems Engineering</p> <ol style="list-style-type: none"> 1. <i>Understanding the big picture</i> 2. <i>Structured approach to system development</i> 3. <i>Design Patterns</i> 4. <i>Tools – CASE</i> 5. <i>Methodologies</i> 	<ol style="list-style-type: none"> 1. Relevant and Applied Curriculum 2. Climate for Creativity and Innovation 3. Develop New Skills <ul style="list-style-type: none"> • <i>Collaboration, Heuristic Problem Solving</i> 	<ol style="list-style-type: none"> 1. Be Responsible 2. Establish great goals for your career/life 3. Be Tolerant 4. Be Courageous 5. Be Joyful 6. Be Ambitious (<i>Will Power</i>) 7. Learn to Smile 

Uhg lwhu

- Fill in the form for MDSE Graduation
- Select the courses for Graduation

Automated reasoning

Algorithms for model checking

Hardware verification

Capita Selecta FSA

Architecture of Distributed Systems

Internet of things

Real-Time Systems

System Design Engineering

Seminar software engineering and technology

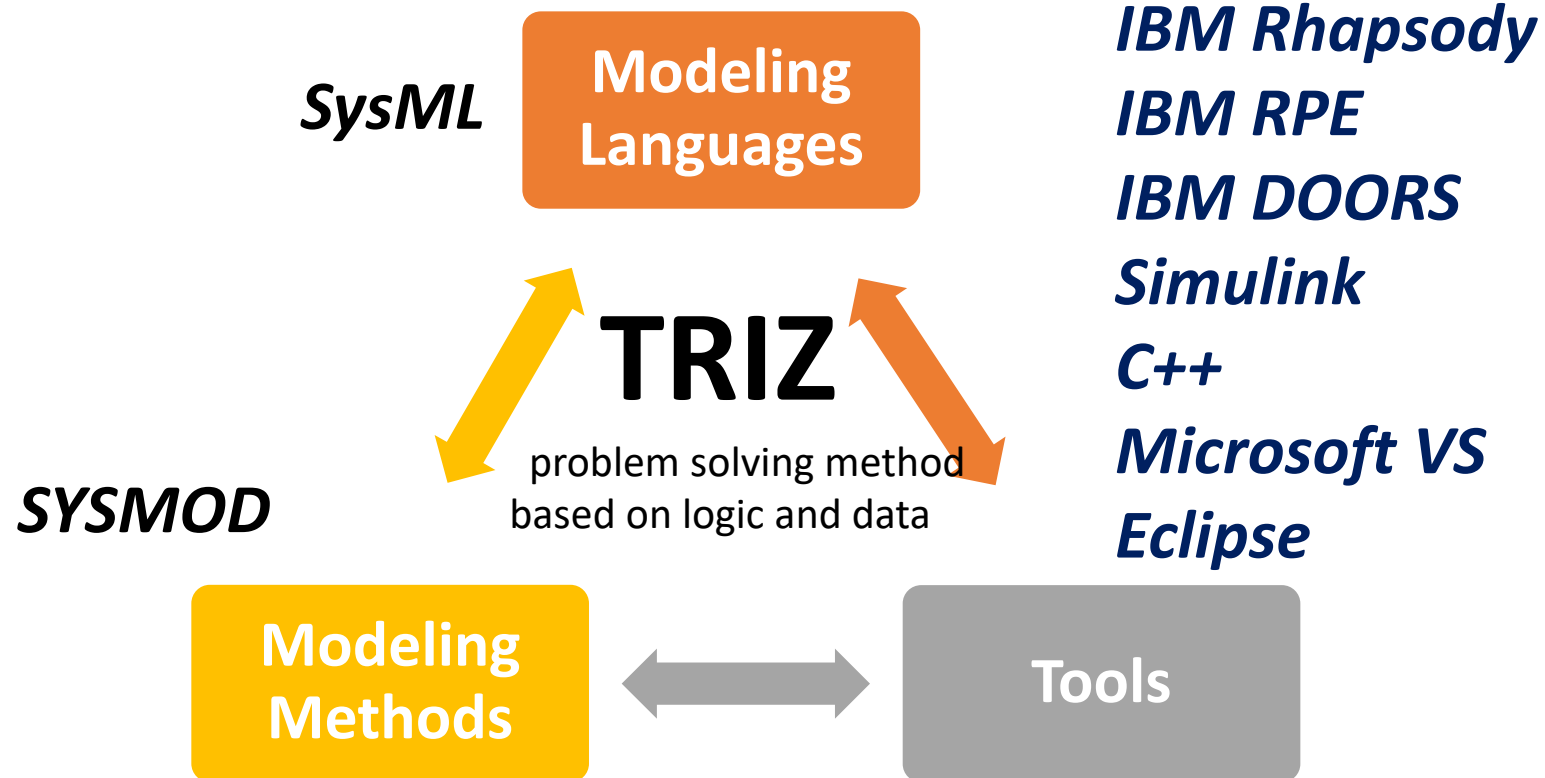
Software specification and architecture

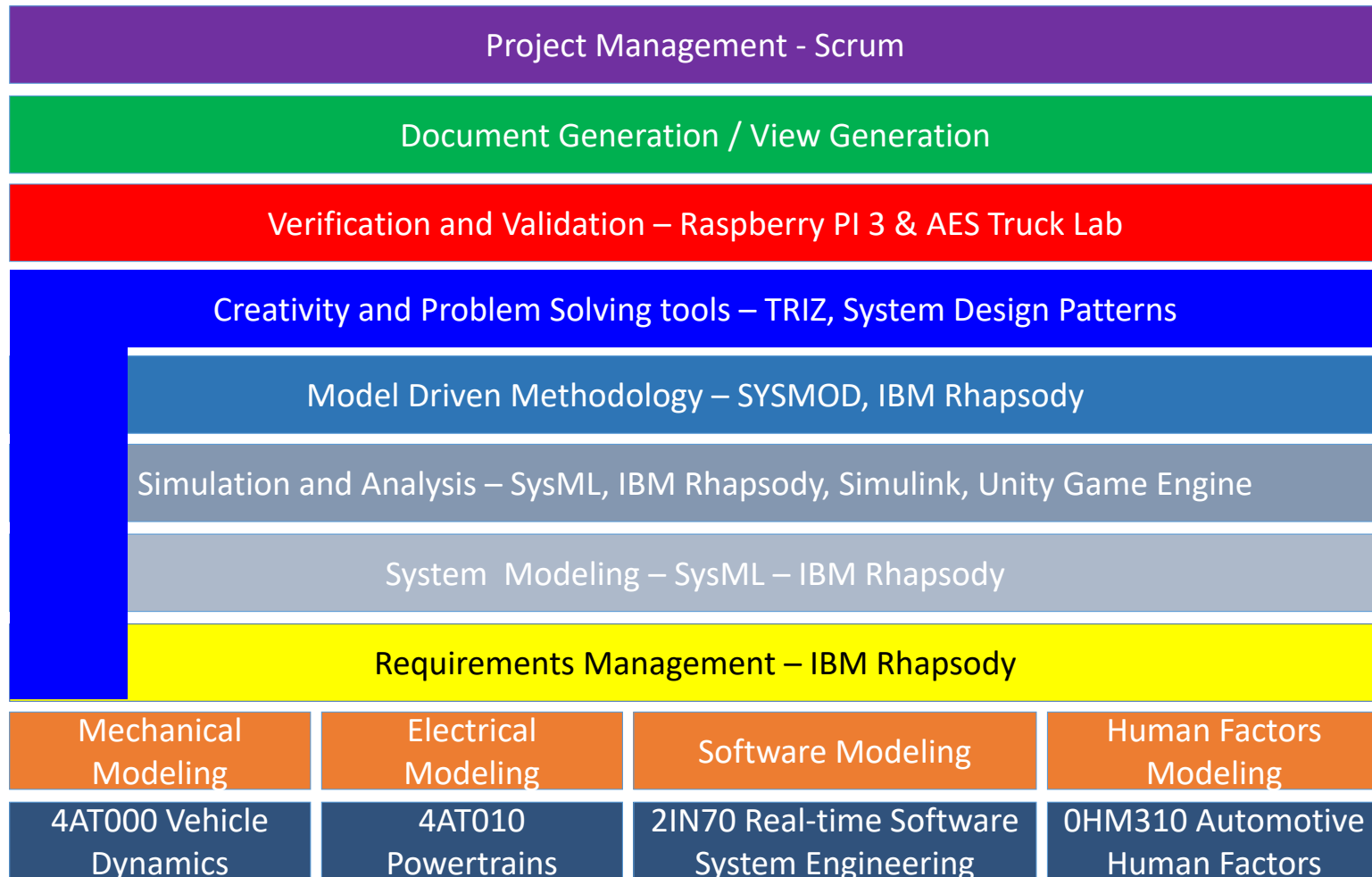
Capita Selecta software engineering and technology

Programming

P EVH#DSSUR DFK

D#krdwlf/#p xwlg lvlsdqdu| #lqg#frcoderudwyh#dssurdfk#r#ghvljq#lqg#
p d l q w d l q l q j #f r p s d h { #v | w h p v







MDSE - Specialization Meeting

Date: 19.09.2002

Time: 15:00

Location: MF6.131

Contact: [*i.barosan@tue.nl*](mailto:i.barosan@tue.nl)