Holland Innovative Academy

## Project Management

# Systems Engineering Excellence: Tools, Trends & Technical Leadership

**The goal of this training is to broaden the competencies of systems engineers, making them more effective in their roles. This will enable faster market introduction of new systems that are more robust and better meet customer requirements. The "Integrated Systems Engineering Excellence" training by Holland Innovative provides the tools and knowledge needed to enhance the effectiveness of systems engineers, addressing the challenges of modern systems and creating sustainable solutions.**

### Purpose of the Training

The purpose of this training is to equip participants with the skills and knowledge to become more effective systems engineers. While the course includes foundational systems engineering concepts to establish a common understanding, it primarily focuses on practical applications, leadership skills, and emerging trends. Through this training, professionals can:

- Better understand and manage complex systems.
- Effectively translate customer requirements into design specifications.
- Develop innovative solutions that meet the highest quality standards.
- Collaborate efficiently with various stakeholders and teams.

### What Will You Learn

- **Fundamentals of Systems Engineering:** Learn and refresh your understanding of systems engineering concepts, including systems thinking, architecting, and the V-model, to support the rest of the course.
- **Practical Applications:** Develop skills in methods such as Design for Six Sigma and Lean, and learn how to apply these in daily operations. Reliability engineering will also be covered to ensure robust system design.
- **Interpersonal Skills:** Improve your communication with stakeholders, team collaboration, and leadership skills.
- **Emerging Trends and Technologies:** Gain insights into the latest trends and technologies such as model-based systems engineering, digital twins, AI, and sustainability.
- **Financial and Strategic Insights:** Understand financial principles such as Return on Investment and Discounted Cashflow, and learn how to develop strategies that align with business goals.

### Program

#### Day 1

- Introduction of the case
- Systems thinking and architecting: Establish a common understanding of systems engineering principles.
- V-model and verification/validation: Learn how to apply the V-model for effective system development.
- Business strategy and financial basics: Understand the financial and strategic aspects that drive successful projects.
- Value proposition and customer requirements: Learn how to define and meet customer needs effectively.

#### Day 2

- Qualitative and analytical product development methods: Gain skills in product development techniques that ensure quality and innovation.
- Quantitative tools in systems engineering: Learn how to use quantitative methods to analyze and improve system performance. →

**Click here** for more information

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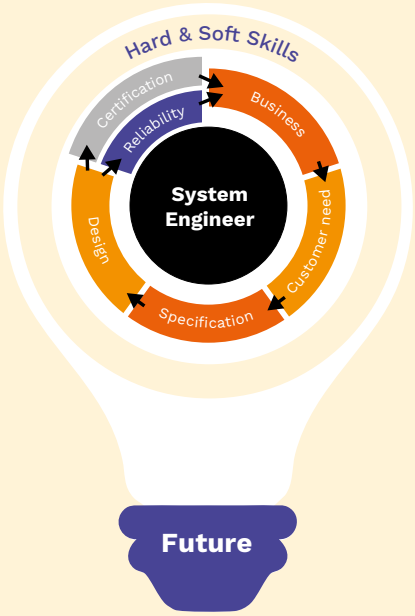
Professionals for integrated product and process development.




### Day 3
- Project management (technical and soft skills): Develop project management skills to lead and coordinate technical projects effectively.
- Stakeholder management and estimation models: Learn how to manage stakeholder expectations and accurately estimate project requirements.

### Day 4
- Reliability and availability: Ensure your systems are reliable and available when needed.
- Risk analysis and system design: Learn how to identify and mitigate risks in system design. →
- Regulatory and compliance: Understand the regulatory requirements and ensure compliance in your projects.

### Day 5
- Model-based systems engineering and digital twin: Explore advanced techniques for system modeling and simulation.
- Resilience, security, and sustainability: Learn how to design systems that are resilient, secure, and sustainable.

### Follow-up Day:
- Evaluation of the application of learned skills in practice: Review how the skills learned have been applied in real-world scenarios.
- Discussion of challenges and successes: Share experiences and learn from others.
- Further deepening of specific topics based on participant needs: Address any remaining questions or areas of interest.
- Networking opportunities and exchange of best practices: Connect with peers and exchange best practices.

### Target Audience
TThis training is ideal for professionals involved in designing, developing, and managing complex systems. Systems engineers, project managers, product developers, quality managers, technical leaders, and consultants will all find valuable insights and practical tools to enhance their effectiveness and drive successful projects.

## Course information

**Course duration and number of participants**
1 day, from 9.00 to 18.00.
Maximum group size: 12.
The Workshop ISEE can be offered as an in-company training.

**Location and investment**
Holland Innovative, High Tech Campus 29, Eindhoven and Holland Innovative, The Gallery, University of Twente. For the investment per participant visit our website. Included are comprehensive course materials, tools, lunches and refreshments.

**Dates, registration and more information**
See www.holland-innovative.nl under Academy.

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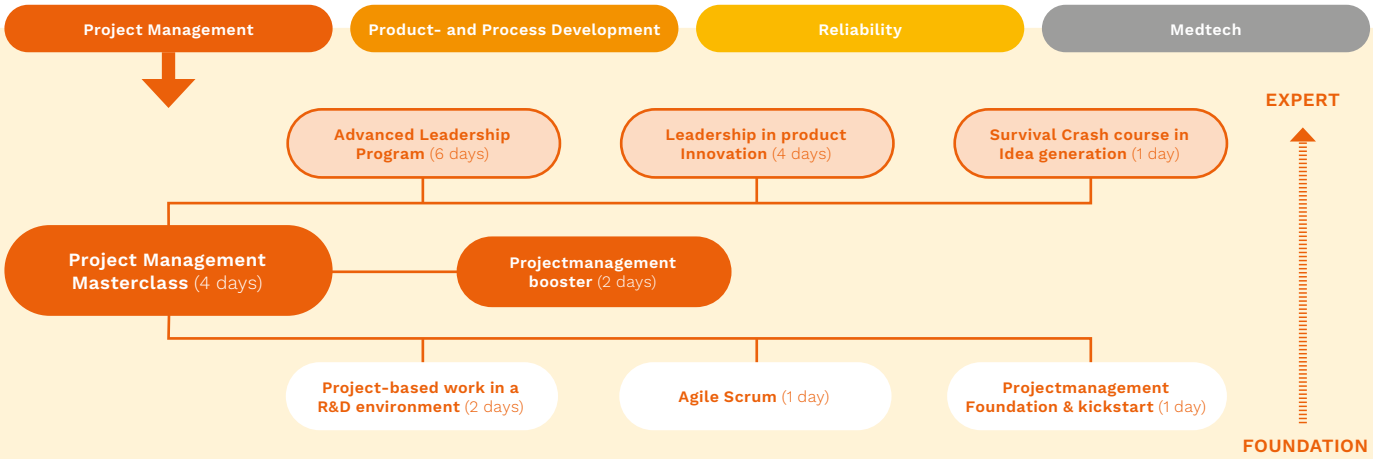
## Hi Academy Roadmap Project Management

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