REGINNA 4.0 Third Summer School: «Deep Tech training on Industry 4.0, Artificial Intelligence, Nanotechnology and Entrepreneurship»



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Additive manufacturing as a mean for supporting rapid development of innovative products

Friday, 19 April 2024 12:00 (45 minutes)

Syllabus outline:

- 1. What is additive manufacturing and its basic operating principle (10 minutes)
- 2. Review of groups of technologies and materials in additive manufacturing (40 minutes)
- 3. Capabilities, advantages, constraints and limits of additive manufacturing (15 minutes)
- 4. Application of additive manufacturing for innovating. Scope of application (15 minutes)
- 5. Trends and future of additive manufacturing (10 minutes)
- 6. Practical case using free software (45 minutes)

Objective competences:

Comprehensive overview of the different additive manufacturing technologies.

Knowledge about limits and advantages of additive processes compared to traditional manufacturing. Basic knowledge about the actions for preparing, manufacturing and post-processing a part in additive manufacturing.

Practical simulation of a case

Intended learning outcomes:

- 1. To know the reason behind the revolution of additive manufacturing in manufacturing of products
- 2. To understand the reason which justify the consideration of additive manufacturing as one of the key enabling technologies in strategic agendas
- 3. To know the range of industrial technologies for additive manufacturing
- 4. To understand the process flow when manufacturing a product by additive manufacturing

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