1. Annotation

Course Description

This is the main research seminar of the Skoltech Center for Design, Manufacturing and Materials (CDMM). All MSc students either enrolled into the Masters Program in Advanced Manufacturing Technologies or PhD students affiliated with CDMM should attend this seminar. The format of the seminar is weekly invited lectures from top scientists in the research fields related to Advanced Manufacturing, Digital Engineering Technologies, Computational Engineering, and Mechanics and Physics of Advanced Manufacturing.

Course Prerequisites

none

2. Structure and Content

Course Academic Level

Master-level course suitable for PhD students

Number of ECTS credits

1

3. Assignments

4. Grading

Type of Assessment

Pass/Fail
<table>
<thead>
<tr>
<th>Grade Structure</th>
<th>Activity Type</th>
<th>Activity weight, %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attendance</td>
<td></td>
<td>100</td>
</tr>
</tbody>
</table>

**Grading Scale**

5. Basic Information

**Attendance Requirements**

Mandatory with Exceptions

**Maximum Number of Students**

<table>
<thead>
<tr>
<th></th>
<th>Maximum Number of Students</th>
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</thead>
<tbody>
<tr>
<td>Overall:</td>
<td>30</td>
</tr>
<tr>
<td>Per Group (for seminars and labs):</td>
<td></td>
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</tbody>
</table>

**Course Stream**

Science, Technology and Engineering (STE)

**Course Delivery Frequency**

Every year

**Students of Which Programs do You Recommend to Consider this Course as an Elective?**

<table>
<thead>
<tr>
<th>Masters Programs</th>
<th>PhD Programs</th>
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</thead>
<tbody>
<tr>
<td>Advanced Manufacturing Technologies</td>
<td>Computational and Data Science and Engineering</td>
</tr>
<tr>
<td></td>
<td>Engineering Systems</td>
</tr>
<tr>
<td></td>
<td>Materials Science and Engineering</td>
</tr>
<tr>
<td></td>
<td>Mathematics and Mechanics</td>
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<td></td>
<td>Petroleum Engineering</td>
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<td></td>
<td>Physics</td>
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</tbody>
</table>

**Course Tags**

- Math
- Physics
- Programming
- Engineering

6. Textbooks and Internet Resources

7. Facilities

8. Learning Outcomes

**Knowledge**

Knowledge of the state of the art research in the field of Engineering Science and Digital Technologies, including Advanced Manufacturing Technologies, Computational Engineering, and Mechanics and Physics of Advanced Manufacturing.

**Skill**

Ability to critically analyze a seminar talk.

**Experience**

Active seminar participation, including the possibility to ask questions, to learn from others which questions are important and open, thus the experience of first-hand learning about the cutting-edge research.
Do you want to specify outcomes in another framework?

Knowledge-Skill-Experience is good enough

9. Assessment Criteria

Select Assignment 1 Type

Other

10. Additional Notes