

**Wintersemester 2025/26**

<b>Course</b>	<b>Advanced Control Lab 1 (1P)</b> consisting of three experiments: <ul style="list-style-type: none"> <li>• Modellbildung und Simulation (ms)</li> <li>• Elektrohydraulisches Servosystem (hs)</li> <li>• Inverses Pendel (ip)</li> </ul>
<b>Attendance mandatory:</b>	ISE Master Program: Automation and Safety - Safe Systems  This lab is exclusively for the A+S program students, specification: Safe Systems
<b>URL of the course</b>	<a href="https://lehre.moodle.uni-due.de/course/view.php?id=5880">https://lehre.moodle.uni-due.de/course/view.php?id=5880</a>
<b>Lecturer</b>	Ph.D. students/scientific co-workers
<b>Coordination</b>	Mazen Zeno, M.Sc., praktikum-srs@uni-due.de
<b>Attestation</b>	<p>In WiSe25/26, the attestation will be realized by an online test in the Moodle course at the university (in presence), no exception possible. Please be aware of the related room announcement.</p> <p>The realization will take place via:</p> <ul style="list-style-type: none"> <li>- An assignment to the group of admitted participants ACL (prerequisite: registration at the examination office)</li> <li>- Temporally limited execution of the Moodle attestation</li> </ul> <p>You have to succeed one central attestation for the experiments in order to participate at the labs. <b>The attestation is only offered at the mentioned date. There is no (!) possibility to change the attestation date or to repeat the attestation in the same term.</b> Resit of this attestation is in the first semester week of the following term. Participation at the labs without a successfully passed attestation is not possible.</p>
<b>Attestation date</b>	November 24th, 2025 8.00 am
<b>Execution of the labs</b>	<p>The experiments are held in English language and will take place <b>in the university in presence.</b></p> <p>The participants are divided into groups and assigned to fixed lab dates. A central date exchange service by the chair can not be provided, but a change-of-dates-forum is arranged in Moodle. The participants are allowed to switch their appointments with another accepted student on their own risk. If the switching party does not participate, the original advised student loses the right to participate. The doctoral candidate conducting the lab has to be informed at the beginning of the experiment about a date's switch. All participants</p>

	will be checked if their participation is accepted. Not accepted students are not allowed to take part.								
<b>Lab report</b>	<p>A semester/lab specific report has to be established on a high technical/scientific level.</p> <p>The report has to be established by each student individually, assistance will be provided via the official general consulting hours of the Chair SRS.</p> <p>We expect a well written technical/scientific English written report, stating that the author/s are familiar with all rules of scientific writing, formatting, and scientific discussion. Each student has to submit an individual report.</p>								
<b>Report deadline</b>	<b>The reports must be submitted to the chair not later than 6 weeks after the last lab date.</b>								
<b>Material</b>	<p>Moodle: Advanced Control and Diagnosis Lab 1 – ACL1 (<a href="https://lehre.moodle.uni-due.de/course/view.php?id=5880">https://lehre.moodle.uni-due.de/course/view.php?id=5880</a>)</p> <p>The password can be requested via the e-mail address <a href="mailto:srs-pw@uni-due.de">srs-pw@uni-due.de</a>. The subject must contain only the word <b>ACL</b>.</p>								
<b>Consulting hours</b>	Wednesday, 8.00 am - 19.30 am, Registration via Moodle, MB 326								
<b>Registration</b>	<p><b>The mandatory registration at the examination office <u>has</u> to be realized. ONLY officially registered participants are allowed to take part in the attestation.</b></p> <p>A deregistration is only possible via email to praktikum-srs@uni-due.de latest 1 week (full 7 days) before the attestation date. Nonappearance leads to the grading fail for all three experiments. After participation at the attestation a deregistration from the entire practical exercise is not possible.</p>								
<b>Grading / fail</b>	<p>Your performance will be graded:</p> <table border="1"> <thead> <tr> <th>Criteria</th><th>Grade</th></tr> </thead> <tbody> <tr> <td> <ul style="list-style-type: none"> <li>- Attestation is successful at the first attempt <b>and</b></li> <li>- Active participation at the lab <b>and</b></li> <li>- Lab reports are <ul style="list-style-type: none"> <li>- Perfect.</li> <li>- Very good.</li> <li>- Good.</li> <li>- Acceptable.</li> </ul> </li> </ul> </td><td> 1,0 1,3 1,7 2,0 </td></tr> <tr> <td> <ul style="list-style-type: none"> <li>- One attestation failed once and successfully passed in the second attempt <b>or</b></li> <li>- Passed attestations but passive participation at the lab <b>and</b></li> <li>- Lab reports are <ul style="list-style-type: none"> <li>- Perfect.</li> <li>- Very good.</li> <li>- Good.</li> <li>- Acceptable.</li> </ul> </li> </ul> </td><td> 2,3 2,7 3,0 3,3 </td></tr> <tr> <td> <ul style="list-style-type: none"> <li>- Two attestations failed, <b>or</b></li> <li>- Nonappearance/delay <b>or</b></li> </ul> </td><td> 5,0 (failed) </td></tr> </tbody> </table>	Criteria	Grade	<ul style="list-style-type: none"> <li>- Attestation is successful at the first attempt <b>and</b></li> <li>- Active participation at the lab <b>and</b></li> <li>- Lab reports are <ul style="list-style-type: none"> <li>- Perfect.</li> <li>- Very good.</li> <li>- Good.</li> <li>- Acceptable.</li> </ul> </li> </ul>	1,0 1,3 1,7 2,0	<ul style="list-style-type: none"> <li>- One attestation failed once and successfully passed in the second attempt <b>or</b></li> <li>- Passed attestations but passive participation at the lab <b>and</b></li> <li>- Lab reports are <ul style="list-style-type: none"> <li>- Perfect.</li> <li>- Very good.</li> <li>- Good.</li> <li>- Acceptable.</li> </ul> </li> </ul>	2,3 2,7 3,0 3,3	<ul style="list-style-type: none"> <li>- Two attestations failed, <b>or</b></li> <li>- Nonappearance/delay <b>or</b></li> </ul>	5,0 (failed)
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	<div data-bbox="491 248 1182 331" style="border: 1px solid black; padding: 5px;"> <p>- Poor or not submitted lab report.</p> </div> <div data-bbox="1190 248 1337 331" style="border: 1px solid black; width: 100px; height: 100px; margin-left: 10px;"></div> <p>Graded with 5,0 (failed), all experiments and the attestation have to be repeated. Grades will be reported to the examination office like other examination results.</p> <p>The experiments have to be completed within one semester. Single labs of earlier terms expire.</p> <p>The pass of the practical exercise is connected with:</p> <ol style="list-style-type: none"> <li>1) Attestation: Each participant has to succeed the attestation for the experiments in order to participate at the labs.</li> <li>2) For each student it is checked whether the requirements for participation in the attestation are fulfilled. The Moodle attestation can only be opened, if all requirements are fulfilled.</li> <li>3) The lab starts exactly at the announced time. Participants who are not present until 5 minutes after start of the exercise will be graded as being "not present", regardless of reasons. Nonappearance leads to the grading fail for all three experiments.</li> <li>4) Active participation at the practical experiment.</li> <li>5) The reports must be submitted on time and be at least acceptable.</li> </ol>
<p><b>Further information</b></p>	<p>It is recommended to conduct the labs in the proposed order as failed attempts lead to worse grades or failed trials.</p>