

**Sommersemester 2020**

<b>Course</b>	<p><b>Advanced Control and Diagnosis Lab 2 (1P)</b></p> <p>consisting of three experiments:</p> <ul style="list-style-type: none"> <li>• Observer-based Control for a Torsional Oscillator (brt)</li> <li>• Disturbance Estimation in Rotating Machines (de)</li> <li>• Implementation of control and diagnostic routines in Hardware and Software (ICDHS)</li> </ul>
<b>Attendance mandatory:</b>	<p>ISE Master Program: Automation and Safety - Safe Systems Mechanical Engineering – Maritime Systems Safety</p>
<b>URL of the course</b>	<p><a href="https://moodle.uni-due.de/course/view.php?id=20855">https://moodle.uni-due.de/course/view.php?id=20855</a> Course description from last semester: <a href="http://www.uni-due.de/srs/v-acl-an1-Praktikum.shtml">http://www.uni-due.de/srs/v-acl-an1-Praktikum.shtml</a></p>
<b>Lecturer</b>	Ph.D. students
<b>Coordination</b>	Dr.-Ing. Sandra Rothe, praktikum-srs@uni-due.de
<b>Attestation</b>	<p>In SoSe 2020, the attestation will be realized by an online test in the Moodle course.</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>
<b>Attestation date</b>	<p>Resits from WiSe19/20: Write an e-mail to <a href="mailto:praktikum-srs@uni-due.de">praktikum-srs@uni-due.de</a> to enroll for participation of Advanced Control and Diagnosis Lab 1.</p> <p>Regular appointment for ACL2 in SoSe20: <b>Due to the postponement of the registration phase at the examination office, the ACL2 attestation date will be postponed. Please register at the examination office to participate.</b> <b>New date:</b> <b>July 6, 2020 4:30 pm – 4:50 pm</b></p>
<b>Execution of the labs</b>	<p>The experiments will be replaced in SoSe 2020 by an interactive video in the Moodle course. A passed attestation is the prerequisite to open the video. For certain experiments, a document must be uploaded before participation in order to demonstrate preparation. Active participation in the integrated questions is a prerequisite for passing.</p>
<b>Lab report</b>	<p>A semester/group specific lab report has to be established on a high technical/scientific level. The report has to be established by the students, assistance will be provided via the official general consulting hours of the Chair SRS.</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. Grades will be given in three classes leading in combination with the other grades to the below mentioned overall rating.								
<b>Report deadline</b>	<b>The reports must be submitted to the chair not later than 2 weeks after the individual lab date.</b>								
<b>Material</b>	Moodle: Advanced Control and Diagnosis Lab - ACL ( <a href="https://moodle.uni-due.de/course/view.php?id=20855">https://moodle.uni-due.de/course/view.php?id=20855</a> ) 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 the word <b>ACL</b> .								
<b>Attestation</b>	You have to succeed one central attestation for the experiments in order to participate at the labs. The attestations are only offered at the a.m. dates. Participation at the labs without a successfully passed attestation is not possible.								
<b>Registration</b>	<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>  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.								
<b>Grading / fail</b>	Your performance will be graded: <table border="1" data-bbox="555 1249 1404 1715"> <thead> <tr> <th>Criteria</th> <th>Grade</th> </tr> </thead> <tbody> <tr> <td>- Attestation is successful at the first attempt <b>and</b> - Active participation at the lab <b>and</b> - Very good to perfect rated lab report.</td> <td>1,0</td> </tr> <tr> <td>- One attestation failed once and successfully passed in the second attempt <b>or</b> - Passed attestations but no active participation at the lab <b>or</b> - Acceptable to good lab report.</td> <td>3,0</td> </tr> <tr> <td>- Two attestations failed, <b>or</b> - Nonappearance/delay <b>or</b> - Poor or not submitted lab report.</td> <td>5,0 (failed)</td> </tr> </tbody> </table> <p>Grading 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. Grades are 1,0 or 3,0, or all experiments have to be repeated completely.</p> <p>The pass of the practical exercise is connected with:</p>	Criteria	Grade	- Attestation is successful at the first attempt <b>and</b> - Active participation at the lab <b>and</b> - Very good to perfect rated lab report.	1,0	- One attestation failed once and successfully passed in the second attempt <b>or</b> - Passed attestations but no active participation at the lab <b>or</b> - Acceptable to good lab report.	3,0	- Two attestations failed, <b>or</b> - Nonappearance/delay <b>or</b> - Poor or not submitted lab report.	5,0 (failed)
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	<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 interactive video for each experiment must be watched and the integrated questions must be answered correctly. For certain experiments, a file with solutions to previously defined tasks must be uploaded in advance.</li> <li>4) 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>