

UNIVERSITÄT DUISBURG-ESSEN Lehrstuhl Steuerung, Regelung und Systemdynamik Univ.-Prof. Dr.-Ing. Dirk Söffker



Sommersemester 2024

| Course | Practical Exercise System Dynamics und Control Engineering (1P) | |
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| | consisting of three experiments (Scripts in german language): | |
| | Modellbildung und Simulation (ms) (SoSe) Druckregelung (dr) (SoSe) | |
| | Elektrohydraulisches Servosystem (hs) (WiSe) | |
| Attendance mandatory: | Students Mechanical Engineering (ISE) Bachelor | |
| URL of the course | https://moodle.uni-due.de/course/view.php?id=10139 | |
| Examiners | Scientific co-workers and PhD students of the Chair of Dynamics and Control | |
| Coordination | Jonathan Liebeton, praktikum-srs@uni-due.de | |
| | In SoSe 2024, the attestation will be realized by an Moodle-based online test which will be realized in person in the attestation room in the university. | |
| Attestation | The realization will take place via: - An assignment to the group of admitted participants SD (prerequisite: registration at the examination office in this semester) - Temporally limited execution of the Moodle attestation | |
| Attestation date | Control Engineering resits (hs) from WiSe23/24: April 08, 2:00 – 2:20 pm | |
| | Regular System Dynamics appointment (ms/dr) in SoSe24: May 31, 1:00 – 1:20 pm | |
| Execution of the labs | Both experiments ms and dr are held at the university and in English language. The participants are grouped in teams of 4 students and assigned to fixed lab dates. A central date exchange service by the chair will not be provided, but a change-of-dates-forum is arranged in Moodle. The participants are allowed to switch their dates 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 will be checked if their participation is accepted. Not accepted students are not allowed to take part. | |
| Material | Moodle: System Dynamics and Control Engineering Lab (https://moodle.uni-due.de/course/view.php?id=41508) | |
| | The password can be requested via the e-mail address srs-pw@uni-due.de . The subject must contain the word PrSC . | |



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| | The Moodle course will open for new registrations of due to resit appointments in the first weeks of April | |
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| Attestation | You have to succeed one central attestation for the experiments in System Dynamics and one central attestation for the experiment in Control Engineering 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. | |
| Registration | The mandatory registration at the examination office realized in the <u>current</u> summer semester. This registration also for the lab of Control Engineering in the reterm. A re-registration in the winter term is neither nor possible. ONLY official registered participants at take part in the attestation. | stration is next winter necessary |
| | A deregistration for the practical exercise is only po- email to praktikum-srs@uni-due.de latest 1 week (before the attestation date. Nonappearance leads to fail for all three experiments. After participation at attestation a deregistration is not possible. | full 7 days) o the grading |
| Grading / fail | Your performance will be graded: | |
| | Criteria | Grade |
| | All attestations (SDe, CE) were successful at the first attempt and Active participation at the lab. | 1.0 |
| | One attestation failed once and successfully passed in the second attempt or Passed attestations but no active participation at the lab. | 3.0 |
| | Two attestations failed, orNonappearance/delay. | 5.0 (failed) |
| | Grading with 5.0 (failed), all experiments and the a have to be repeated. Grades will be reported to the office like other examination results. | |
| | The experiments have to be completed within one of (in the sequence System Dynamics – Control Engin Single labs of earlier terms expire. Grades are 1.0 of experiments have to be repeated completely. | eering). |
| | The pass of the practical exercise is connected with 1) Attestation: Each participant has to succeed attestations for the experiments in order to the labs. 2) For each student it is checked whether the r for participation in the attestation are fulfille Moodle attestation can only be opened, if all requirements are fulfilled. 3) For verification of your identity, you have to Student-ID, or your passport, or your Aufen the beginning of the labs. If the ID cannot b | the participate at equirements ed. The show your thaltstitel in |



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| | or is not correct, the student loses the right to participate. 4) The experiments start 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. 5) Active participation at the practical experiments. |
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| Further information | It is strongly recommended to conduct the experiments in the proposed order and terms because failed attempts lead to worse grades or failed trials. |