Degree Programme	**Master of Science in Life Sciences (MSLS)**
Specialisation	**Chemistry for the Life Sciences**
Module	**Master's Thesis**
Code	MSc_V3_M
ECTS Credits	40
Workload	1200 h
Module Coordinator	**Name** Prof. Dr. Jürgen Stohner **Phone** +41 (0) 58 934 54 93 **Email** juergen.stohner@zhaw.ch **Address** ZHAW Zürcher Hochschule für Angewandte Wissenschaften Life Sciences and Facility Management Einsiedlerstrasse 31 8820 Wädenswil
Learning Outcomes and Competences	The objective of the Master's thesis is to enhance the student's scientific knowledge and competences and to increase professional, theoretical and methodological qualifications that develop the student's professional and interdisciplinary skills and the ability to work in related jobs in an industrial or academic environment. The student demonstrates with the Master's thesis that he/she is skilled in independently transforming scientific theories and methods to solve a given problem. The quality of the Master's thesis is expected to be on the level of a peer-reviewed publication. Furthermore, the student is able to explain his/her research project in precise scientific terms, orally as well as in written form. The student • is able to analyse a problem taking relevant literature into account (developing a scientific approach, concept, hypothesis, etc.) • is able to adequately design, plan and set up appropriate experimental strategy (considering scientific standards) • can plan, implement, evaluate and carry out an original independent research project individually using adequate, scientific methods (project management) • is able to critically interpret acquired experimental data • can draw final conclusions based on the evidence in the Master's thesis and can present results following scientific principles
Teaching / Learning Methods	The Master's thesis is conducted at a selected research group of the institute responsible for the Master specialization or when agreed with the supervisor at an external research group in industry or academia. The work in a research group is to experience direct professional and methodological context of future fields of activity. The student works individually on the Master's thesis project and develops an appropriate solution for a predefined problem in terms of content and subject matter at a high level of self-competences and complying with the principles of scientific work as well as with ethical responsibility. The Master's thesis is an independent, written piece of work in an expert environment.

	The student presents his/her results in a scientific manner and is able to discuss the results in front of experts. He/she creates a poster following the corresponding research group's standards.
Assessment of Learning Outcome	• Milestone 1 "proposal / literature research" • Milestone 2 "experimental strategy" • Milestone 3 "experimental strategy" • Milestone 4 "final conclusions" • Oral presentation (pass/fail)
Language	• German • English
Comments	Topics and supervisors can be found on the homepage: https://www.zhaw.ch/de/lsfm/studium/master-of-science-in-life-sciences/vertiefung-chemistry-for-the-life-sciences/masters-thesis/ Further information can be found in the document "Brochure for Master's Thesis MSLS": https://www.zhaw.ch/de/lsfm/studium/studiweb/master-ls/masters-thesis/
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