



<b>Degree Programme</b>	<b>Master of Science in Life Sciences (MSLS)</b>
<b>Specialisation</b>	<b>Applied Computational Life Sciences</b>
<b>Module</b>	<b>Master's Thesis</b>
<b>Code</b>	MSc_V5_M
<b>ECTS Credits</b>	30
<b>Workload</b>	900 h
<b>Module Coordinator</b>	<p><b>Name</b> Dr. Manuel Gil</p> <p><b>Phone</b> +41 (0) 58 934 57 44</p> <p><b>Email</b> <a href="mailto:manuel.gil@zhaw.ch">manuel.gil@zhaw.ch</a></p> <p><b>Address</b> ZHAW Zürcher Hochschule für Angewandte Wissenschaften Life Sciences and Facility Management Schloss 1 8820 Wädenswil</p>
<b>Learning Outcomes and Competences</b>	<p>The general objective of the Master's thesis is to develop the student's professional and interdisciplinary skills and the ability to work in qualified jobs in an industrial or academic environment.</p> <p>The student demonstrates with the Master's thesis that he/she is skilled in independently applying computational methods to solve a given problem in a specific life sciences context. 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.</p> <p>The student</p> <ul style="list-style-type: none"> <li>• is able to analyse a problem taking relevant scientific methods and literature into account (developing a scientific approach, concept, hypothesis, etc.)</li> <li>• can plan, implement, evaluate and carry out an original independent research project individually using adequate, scientific methods (project management)</li> <li>• is able to critically interpret data, models and results</li> <li>• can draw final conclusions based on the evidence in the Master's thesis and can present results following scientific principles</li> </ul>
<b>Teaching / Learning Methods</b>	<p>The Master's thesis is conducted at a selected research group or 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.</p> <p>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.</p> <p>The Master's thesis consists of the following tasks</p> <ul style="list-style-type: none"> <li>• Creation of an independent, written piece of work in an expert environment</li> <li>• Scientific presentation and discussion of results in front of experts</li> <li>• Creation of a scientific poster</li> </ul>

<b>Assessment of Learning Outcome</b>	<ul style="list-style-type: none"> <li>• Milestone 1 “literature research / disposition”</li> <li>• Milestone 2 “experimental strategy”</li> <li>• Milestone 3 “final conclusions”</li> <li>• Oral presentation (pass/fail)</li> </ul>
<b>Language</b>	<ul style="list-style-type: none"> <li>• English</li> </ul>
<b>Comments</b>	<p>Topics and supervisors can be found on the homepage:  <a href="https://www.zhaw.ch/de/lsvm/studium/master-of-science-in-life-sciences/vertiefung-applied-computational-life-sciences/masterarbeit/">https://www.zhaw.ch/de/lsvm/studium/master-of-science-in-life-sciences/vertiefung-applied-computational-life-sciences/masterarbeit/</a></p> <p>Further information can be found in the document "Brochure for Master's Thesis MSLS": <a href="https://www.zhaw.ch/de/lsvm/studium/studiweb/master-ls/masters-thesis/">https://www.zhaw.ch/de/lsvm/studium/studiweb/master-ls/masters-thesis/</a></p>
<b>Last Update</b>	15.09.2021