

Unige soft skill course available for the STAT PhD program 2025

TITLE	Ethics and Bioethics in Bioengineering and Robotics
Lecturer	Linda Battistuzzi, <a href="mailto:linda.battistuzzi@unige.it">linda.battistuzzi@unige.it</a> .
Duration and Credits	4 CFU (tot. 15 hours)
Course description	<p><i>Can ethical considerations be incorporated into the design of novel artifacts? What duties and obligations do researchers have towards research participants? How can we develop models of human-robot interaction that preserve human values?</i></p> <p>Increasingly, researchers and professionals in the fields of bioengineering and robotics are faced with ethical questions like these. The goal of this course is therefore twofold: to develop PhD students' sensitivity to the ethical issues that arise in research and professional practice, and to provide them with knowledge and tools that will help them navigate ethically complex scenarios. Upon successful completion of this course, students will be able to:</p> <ul style="list-style-type: none"> <li>- explain some of the key ethical and bioethical issues in bioengineering and robotics;</li> <li>- identify ethically problematic facets of a research project;</li> <li>- apply an ethical decision-making framework to ethically problematic scenarios involving questions that are relevant to their research interests.</li> </ul> <p>Topics covered may include:</p> <ul style="list-style-type: none"> <li>• Ethics and bioethics: concepts and frameworks</li> <li>• Ethical decision-making</li> <li>• The requirements of ethical research</li> <li>• Research protocols and ethical review</li> <li>• Informed consent</li> <li>• Personal data and privacy</li> <li>• Ethical issues in human-robot interaction</li> <li>• Value Sensitive Design in bioengineering</li> </ul>
Course organization	<p>The course will be delivered using different teaching and learning methods, including lectures and group discussions and activities. Case-Based learning, an approach to learning and instruction that uses factual or fictional scenarios exemplifying the issues at hand, will be extensively used.</p> <p><b>Exam Description</b> Students will be split into groups and each group will be asked to develop an ethically problematic case of their own, explaining the issues it raises and proposing an ethically appropriate course of action to solve it or engage with it.</p> <p><b>Assessment Methods</b> Students will present their case and discuss it during class time. Contributions to class discussion will be considered a part of the assessment.</p>
Teaching period	Students are invited to contact the reference lecturers to schedule the class.

