



Faculty of Arts and Social Sciences
Law

Syllabus

Legal Tech, AI, and Rules-as-Code

Course Code:	JPA005
Course Title:	Legal Tech, AI, and Rules-as-Code <i>Legal Tech, AI och Rules-as-Code</i>
Credits:	15
Degree Level:	Master's level
Progressive Specialisation:	Second cycle, has only first-cycle course/s as entry requirements (A1N)

Major Field of Study:
RVA (Jurisprudence)

Course Approval

The syllabus was approved by the Faculty of Arts and Social Sciences 2024-02-19, and is valid from the Autumn semester 2024 at Karlstad University.

Prerequisites

60 ECTS credits from semesters 1-2 and 90 ECTS credits from semesters 3-6 of the Law Programme (JALAW), or equivalent

Learning Outcomes

Upon completion of the course, students should be able to:

1. give an account of the concept Legal Tech and basic concepts in the areas of artificial intelligence (AI), machine learning (ML), and Rules-as-Code (RaC),
2. give an account of legal problems and challenges that arise when authorities use RaC transformers,
3. identify, analyse, solve, and document common problems for the development of RaC,
4. demonstrate in-depth knowledge of legal problems and challenges that arise when businesses and authorities use systems for automated decision-making and generative AI,
5. demonstrate in-depth knowledge of the relationship between research questions, research

- methods, and research results in legal informatics related to AI,
6. identify areas of law that are relevant for legal assessments of problems that occur in relation to RaC transformers and other digital decision-making tools, and
 7. evaluate the legal system in terms of relevant technical and societal aspects.

Content

The course treats the broad concept of Legal Tech which is an umbrella term for technology, especially software, used to deliver legal services and also for systems that support the work of legal practitioners. Their work is facilitated by powerful text databases with laws, preparatory documents, common practice, and doctrine. At the same time, there is an ongoing trend of businesses and authorities trying to streamline their processes, which may lead to automated decision-making without human judgement. The course has a special focus on applications of artificial intelligence (AI) in legal work processes, and on Rules-as-Code transformers in which rules are written in machine-readable form so that the reinterpretation to programming code for computers will not entail reinterpretation of the intentions behind the rules. In relation to AI, different forms of machine learning (ML) are described. Guest lecturers from different Swedish authorities contribute examples and organise workshops as part of the course.

Instruction is in the form of lectures, discussion seminars, workshops, laboratory sessions on AI use and RaC use, and presentation seminars.

Reading List

See separate document.

Examination

Learning outcomes 1 and 2 are assessed based on a written exam.

Learning outcome 3 is assessed based on laboratory work presented orally and in writing in groups in seminars.

Learning outcomes 2-7 are assessed based on an individual written hand-in assignment presented orally in seminars.

Submissions for assessment must clearly indicate individual contributions.

If students have a decision from Karlstad University entitling them to Targeted Study Support due to a documented disability, the examiner has the right to give such students an adapted examination or to examine them in a different manner.

Grades

One of the grades AB (Pass with Distinction), Ba (Pass with Some Distinction), B (Pass), or U (Fail) is awarded in the examination of the course.

Quality Assurance

Follow-up relating to learning conditions and goal-fulfilment takes place both during and upon completion of the course in order to ensure continuous improvement. Course evaluation is partly based on student views and experiences obtained in accordance with current regulations and partly on other data and documentation. Students will be informed of the result of the evaluation and of any measures to be taken.

Course Certificate

A course certificate will be provided upon request.

Additional information

The local regulations for studies at the Bachelor and Master levels at Karlstad University stipulate the obligations and rights of students and staff.