



## Python programming (SE-025)

(PROGRAMMEERIMINE KEELES PYTHON)

### SUBJECT DESCRIPTION

<b>Credits (ECTS)</b>	4.00 ECTS
<b>Assessment</b>	grading
<b>Aim of the subject and short description</b>	
<p>During the course, students will acquire basic programming techniques and tools, learn to use the Python Standard Library and external libraries, incl. PyPI; learn to test and create, document and package environments, different dialects and variants of Python, work with databases (traditional SQL and ORM), do scientific calculations and data analysis, create graphs and images; use interfaces for calling external functions (ctypes, cffi), and debugging and troubleshooting. During the course, the acquired programming skills are applied to realistic practical tasks.</p>	
<b>Learning outcomes:</b>	
<p>Student:</p> <ol style="list-style-type: none"><li>1. creates Python programs;</li><li>2. is able to process files</li><li>3. creates graphical user interfaces at a basic level;</li><li>4. debugs and refactors programs using functions, modules and object oriented programming;</li><li>5. knows fundamental data structures: list, glossary, graph, tree</li></ol>	

