Effective Programming Practices for Economists

This course introduces students to software development methods that will substantially reduce their time spent programming while at the same time making their programs more dependable and their results reproducible without extra effort. The course draws extensively on some simple techniques that are the backbone of modern software development, which most economists are simply not aware of. It shows the usefulness of these techniques for a wide variety of economic and econometric applications by means of hands on examples.

Students acquire the programming and software development skills required to manage complex research projects and to make the results reproducible.

<table>
<thead>
<tr>
<th>Type of course/learning methods</th>
<th>Topic</th>
<th>Language of instruction</th>
<th>Group size</th>
<th>Contact time</th>
<th>Workload [h]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lecture</td>
<td>Effective Programming Practices for Economists</td>
<td>English</td>
<td>open</td>
<td>4 hours</td>
<td>60</td>
</tr>
<tr>
<td>Self-study</td>
<td></td>
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<td>165</td>
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- **Prerequisites**
  - obligatory: none
  - recommended: Basic Module *Econometrics*

- **Degree program allocation**
  - Master of Science Economics
    - elective: 2nd or 4th
  - Master of Science Mathematics
    - elective: 2nd or 4th

- **Requirements for the awarding of credit points (ECTS)**
  - Credits: 7.5 CP

- **Course Cycle**
  - Workload: 225 h
  - Duration: 1 Term

- **Module coordination**
  - Teaching person: See https://basis.uni-bonn.de
  - Module coordinator: Prof. Dr. Alois Kneip
  - Institute/Department: Department of Economics

- **Further Information**
  - (Reading lists, information links etc.)