# COURSE DETAIL

| SCIENTIFIC COMPUTING |
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| **Country**<br>Germany |
| **Host Institution**<br>Technical University Berlin |
| **Program(s)**<br>Technical University Berlin |
| **UCEAP Course Level**<br>Upper Division |
| **UCEAP Subject Area(s)**<br>Computer Science |
| **UCEAP Course Number**<br>122 |
| **UCEAP Course Suffix** |
| **UCEAP Official Title**<br>SCIENTIFIC COMPUTING |
| **UCEAP Transcript Title**<br>SCIENTIFIC COMPUTNG |
| **UCEAP Quarter Units**<br>5.50 |
| **UCEAP Semester Units**<br>3.70 |

**Course Description**
This course on scientific computing covers the following topics: numerical methods focusing on partial differential equations (finite elements, finite volumes, mesh generation, linear and nonlinear solvers, iterative methods), their implementation and programming, computer languages (mainly C++, with introduction; python), parallelization, visualization, and software tools.

**Language(s) of Instruction**
English

**Host Institution Course Number**
3236 L 216

**Host Institution Course Title**
WISSENSCHAFTLICHES RECHNEN (SCIENTIFIC COMPUTING)

**Host Institution Campus**
FAKULTÄT II MATHEMATIK UND NATURWISSENSCHAFTEN

**Host Institution Faculty**

**Host Institution Degree**

**Host Institution Department**
Mathematik

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