# Investment

<table>
<thead>
<tr>
<th>Code</th>
<th>8207970308</th>
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<tbody>
<tr>
<td>ECTS credits</td>
<td>3</td>
</tr>
<tr>
<td>Attendance time</td>
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<tr>
<td>Language of instruction</td>
<td>English</td>
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<tr>
<td>Duration</td>
<td>1 Semester</td>
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<tr>
<td>Cycle</td>
<td>each Winter Semester</td>
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<tr>
<td>Coordinator</td>
<td>Prof. Dr. Kai-Uwe Marten</td>
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<tr>
<td>Instructor(s)</td>
<td>No English version available yet.</td>
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## Allocation of study programmes

Informatik BSc, Studienbeginn WiSe, Pflichtmodul im AF Wirtschaftswissenschaftern, 3. Fachsemester  
Informatik BSc, Studienbeginn SoSe, Pflichtmodul im AF Wirtschaftswissenschaftern, 4. Fachsemester  
Wirtschaftsphysik B.Sc., 3. oder 4. Semester, Pflicht

## Recommended prerequisites

non

## Learning objectives

Students will be able to

- identify capital budgeting problems (investment decisions across time, limited reversibility, uncertainty)  
- select appropriate analytical tools for an identified capital budgeting problem  
- apply selected capital budgeting tools according to specified valuation problems, i.e., Net Present Value, Internal Rate of Return, Real Option Valuation  
- identify the required inputs for capital budgeting tools (e.g., forecast for free cash flows and cost of capital estimates in case of Net Present Value calculation)  
- explain and qualify the calculated results, given real live problems such as incomplete and non-precise information.
Syllabus

The course covers:

- Brief introduction into utility theory (Fisher separation)
- Present value as a decision criterion: Definition of cash flows (cash flow statement) and Derivation of opportunity cost of capital
- Pro’s and Con’s of alternative decision criteria like Payback, Internal Rate of Return, Annuities, Return on Investment and Economic Value Added(R)
- Introduction of managerial flexibility into net present value calculus ("real option valuation")
- Application in case studies, e.g. Market introduction of pharmaceutical drugs and Investment in flexible manufacturing units

Literature


Teaching and learning methods

Investition (V), 2 SWS, Pflicht

Workload

No english version available yet.

Assessment

The grade of the module will be the grade of the written exam. No prerequisites are necessary for exam registration.

Grading procedure

The grade of the module will be the grade of the exam.

Basis for

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