

DEPARTMENT OF CIVIL ENGINEERING
COURSE SYLLABUS

| Course Details | | | | |
|--|--|----------|-----------------|---------------------|
| Code | Academic Year | | | Semester |
| BAU304 | 3 | | | Spring |
| Title | T | A | L | ECTS |
| Soil Mechanics and Foundation Engineering II | 2 | 2 | 1 | 6 |
| Language | German | | | |
| Level | Undergraduate | ✓ | Graduate | Postgraduate |
| Department / Program | Civil Engineering | | | |
| Forms of Teaching and Learning | Formal | | | |
| Course Type | Compulsory | ✓ | Elective | |
| Objectives | In this module, the relevant wall and base constructions are presented and the corresponding proof for these constructions is learned. | | | |
| Content | Structural design, static calculation and stability proof of construction pit soles and usual wall constructions as well as of special constructions like diaphragm walls and underpinnings. Fundamentals and dimensioning of water holdings and their impact on the environment. In the accompanying tutorial, examples of the integrated event are worked on in small groups, laboratory exercises are carried out and support is given for the project to be worked on. | | | |
| Prerequisites | | | | |
| Coordinator | | | | |
| Lecturer(s) | | | | |
| Assistant(s) | | | | |
| Work Placement | | | | |
| Recommended or Required Reading | | | | |
| Books / Lecture Notes | Grundbau: Teil 2 Baugruben und Gründungen (German Edition)4. November 2014von Konrad Simmer | | | |
| Other Sources | | | | |
| Additional Course Material | | | | |
| Documents | | | | |
| Assignments | | | | |
| Exams | | | | |
| Course Composition | | | | |
| Mathematics und Basic Sciences | | | | % |
| Engineering | | | | % |
| Engineering Design | | | | % |

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|------------------------------------|---|---|--------------------------|
| Social Sciences | | | % |
| Educational Sciences | | | % |
| Natural Sciences | | | % |
| Health Sciences | | | % |
| Expert Knowledge | | | % |
| Assessment | | | |
| Activity | Count | | Percentage (%) |
| Midterm Exam | | | |
| Quiz | | | |
| Assignments | | | |
| Attendance | | | |
| Recitations | | | |
| Projects | | | |
| Final Exam | | | |
| | | Total | 100 |
| ECTS Points and Work Load | | | |
| Activity | Count | Duration | Work Load (Hours) |
| Lectures | 14 | 5 | 70 |
| Self-Study | 14 | 3 | 42 |
| Assignments | | | |
| Presentation / Seminar Preparation | | | |
| Midterm Exam | 1 | 2 | 10 |
| Recitations | | | |
| Laboratory | | | |
| Projects | | | |
| Final Exam | 1 | 2 | 15 |
| | | Total Work Load | 137 |
| | | ECTS Points (Total Work Load / Hour) | 6 |
| Learning Outcomes | | | |
| 1 | In the course of infrastructure measures, the excavation of inner-city construction pits with the help of special designs of special civil engineering is essential. In this module, the elevating wall and base constructions are therefore to be presented and the corresponding evidence for these constructions is learned. In addition, the basics of water conservation in construction projects and their impact on the environment are dealt with. The students are then able to plan inner-city construction pits and to determine and assess their stability. A project that accompanies the semester should train these skills for practice. | | |
| 2 | | | |

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Weekly Content

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| 15 | |

Contribution of Learning Outcomes to Program Objectives(1-5)

| | P1 | P2 | P3 | P4 | P5 | P6 | P7 |
|---|----|----|----|----|----|----|----|
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| 12 | | | | | | | |
| Contribution Level | 1: Low 2: Low-intermediate 3: Intermediate 4: High 5: Very High | | | | | | |
| | | | | | | | |
| Compiled by: | | | | | | | |
| Date of Compilation: | | | | | | | |