

Name of Module: SNET 1 – Bachelor-Project		Credit Points (according to ECTS): 12	code designation BINF-SNET- SNETPJ1.S11
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Module Description			

1. Qualification Aims

After successfully finishing this module, the participating students have well-founded knowledge and practical experiences in current and future services and service infrastructures in the Internet. In the seminar, they gained fundamentals in scientific work, processing research results, presentation skills and fundamental paradigms such as cloud infrastructures, n-tier-architectures, Web2.0, mash-ups, XML, JSON, REST as well as best practices for creating services in distributed environments. During the practical project, the students improve their capacity for teamwork and competence in project management while developing, testing and deploying their own services.

The course is **principally** designed to impart

Technical skills: 30%, method skills: 30%, system skills: 10%, social skills: 30%

2. Content

The module consists of two parts – a seminar and a practical project. The participants start with getting familiar with their assigned topics within the research area of SNET and preparing a speech as well as a written report. During the project, the team will cope with a fundamental task including software design and implementation, by applying basic methods and knowledge of the course. The project tasks will also be in the research area of SNET.

3. Module Components

Course Name	Course type	Weekly hours per semester	CPs (according to ECTS)	Compulsory(C) / Compulsory Elective (CE)	Semester (WS / SS)
Basic Seminar SNET	SE	2	3	CE	WS & SS
Basic Project SNET	SP	6	9	CE	WS & SS

4. Description of Teaching and Learning Methods

In the beginning of this course, seminar topics are given to the participants, as well as corresponding literature to start with for their research. The organizer gives introductions on presentation skills and preparing scientific work. Main objectives of the seminar are a talk given by the participants and a written report.

The project starts with forming teams and assigning topics. After refining the first software design they implement and test their topic. The course finishes with the presentation of the results in a speech and a written project documentation. The entire project is accompanied by introductions in tools used for software development and documentation.

5. Prerequisites for Participation

Desirable: experience in object-oriented programming

6. Target Group of Module

Bachelor and diploma students of

- Computer Science (Informatik)
- Computer Engineering (Technische Informatik)
- Compulsory elective in other degree programs possible if course is not full.

7. Work Requirements and Credit Points

Basic Seminar SNET (90h/3LP)	Calculation Factor	Hours
Presence in lectures	12 * 1 + 6	18

Literature research		30
Preparation of oral presentation		12
Written report		30
	Sum	90
Basic Project SNET (270h/9LP)		
Presence, team meetings	20 * 3	60
Familiarization, literature research, software design		50
Implementation, Testing		120
Documentation, report, speech		40
	Sum	270

8. Module Examination and Grading Procedures

Final grades for the module will be composed of grades on partial performances of the seminar and project. As a prerequisite, each partial performance has to be passed to successfully finish the whole module. Basis for grading is the following evaluation scheme:

- Seminar speech 15%
- Seminar report 20%
- Participation in project 15%
- Implementation 40%
- Project documentation 10%

9. Duration of Module

The module can be finished in one semester.

10. Number of Participants

The module is limited to 12 participants.

11. Enrolment Procedures

Registration and regulations will be available on the website of SNET <http://www.snet.tu-berlin.de/>.

12. Recommended Reading, Lecture Notes

Lecture notes available in paper form? **no**
Lecture notes available in electronic form? **no**
web address: <http://www.snet.tu-berlin.de/>

Recommended Reading:

Further recommendations will be given during the course.

13. Other Information

Lectures and practical lessons are given in English.
After individually consulting the organizer, the topics of the module may serve as foundation for a diploma or masters thesis in that research area.