

Name of Module: Operating System Design		CP (ECTS): 6	Short Name: MINF-SE-OSD
Person Responsible for Module: Heiss	Secretariat: EN 6	e-mail address: heiss@cs.tu-berlin.de	
Module Description			

1. Qualification Aims

Students who have successfully finished this module have an advanced knowledge of operating systems. They are aware of different architectural approaches and know their advantages and disadvantages. They have acquired the ability for well-founded design decisions based on qualitative and quantitative arguments. They have a sound knowledge of modern approaches like microkernels or virtual machines.

The course is **principally** designed to impart
technical skills 50 %, method skills 40 % system skills 10 % social skills %

2. Content

Operating System architecture, micro- and macrokernels, design principles, resource management, virtualization, distributed OS, modern file systems, queuing models

3. Module Components

Course Name	Course type	Weekly hours per semester	CPs (according to ECTS)	Compulsory(C) / Compulsory Elective (CE)	Semester (WS / SS)
Operating System Design	L	3	6	C	WS
Tutorial	T	1		C	WS

4. Description of Teaching and Learning Methods

The lecture conveys the material in traditional form. The tutorial encompasses interactive discussion of issues related to the lecture material. Students may present results of their assignments (homework).

5. Prerequisites for Participation

Basic (undergraduate) course on operating systems is required.

6. Target Group of Module

Master students of Computer Science and Computer Engineering

7. Work Requirements and Credit Points

Course Type	Calculation Factor	Hours
Presence in lectures	3*15	45
Presence in tutorials	1*15	15
Pre- and postpreparation of classes	2*15	30
assignments		60
Exam preparation		30
Total		180

8. Module Examination and Grading Procedures

Oral examination

9. Duration of Module

1 semester

10. Number of Participants**11. Enrolment Procedures**

See homepage of module at <http://kbs.tu-berlin.de>

12. Recommended Reading, Lecture Notes

Lecture notes available in paper form? yes no **X**

If yes, where can they be purchased?

Lecture notes in paper form are sometimes made available during class.

Lecture notes available in electronic form? yes **X** no

If yes, please specify web address: <http://kbs.tu-berlin.de>

Recommended Reading:**13. Other Information**

German name of module: „Betriebssystemkonzepte“