

Operating Systems IV (BOS4002)

This module is presented as follows in 2017:

- **SUMMERSTRAND CAMPUS NORTH: Full-Time (01)**

Can be used as a major: **Yes**

Offered in: **Term 3+4**

Credit value: **12**

Estimated fees: **R2330**

Lecturer(s): **LEPPAN, RG;**

Syllabus

PURPOSE

The objectives of this subject are to provide the student with an in-depth knowledge of underlying operating systems functionality, as well as some practical administrative concerns in a typical systems environment.

LEARNING OUTCOMES

After the completion of this module, students will be able to:

- identify and solve problems within an IT installation;
- use Systems Center to monitor and manage users and their environments;
- organise and manage activities responsibly and effectively, for example, using process states to control the efficient execution of processes within an operating system;
- collect, analyse, organise and critically evaluate information on various operating system topics;
- configure and manage functions using Systems Center in a Microsoft environment;
- critically evaluate methods and possible implementations of concepts within an operating system, such as Mutual Exclusion and Synchronisation primitives, and various Deadlock strategies.

CORE CONTENT

- Operating Systems and Middleware.
- Atomicity.
- Synchronization.
- Concurrency.
- Deadlocks.
- Mutual Exclusion.
- Systems Center – Configuration Manager.

Evaluation criteria

1 x 3-hour examination, 40% class mark + 60% examination mark.

MODERATION

External.

Prerequisites

None