

Course description:

The lecture aims to familiarize students with the basic algorithms and protocols occurring in distributed calculations. Are considered models of synchronous and asynchronous without a common memory. The main model of communication, the exchange of messages.

Program:

1. Synchronous and asynchronous distributed computing models.
2. Distributed deadlock detection algorithms, selecting the leader and agreeing a joint decision.
3. Basic graph algorithms in distributed protocols: tree algorithms  
and spanning graph searching.
4. Resistance to damage protocols distributed network elements.
5. The allocation of resources in the network.