

Management of ICT Projects

2nd Assignment

Issued: 02/04/2026

Due: 19/04/2026

Exercise 1 - CPM

A company has developed a large information system. The whole project requires the implementation of 12 activities for its completion. The relationships between the activities, as well as the duration, are given in the following tables:

Activity Id		Activity Id
100	<i>Must be finished before...</i>	201, 202 can start
101		301
102		203, 204
201		302
202		301
203		301
204		303, 304
301		401
302		401
303		401
304		-
401		-

Activity Id	Duration (in days)
100	14
101	10
102	13
201	15
202	25
203	12
204	14
301	17
302	13
303	10
304	10
401	11

1. Which is the critical path and what is the completion time of the project?
2. If activity 203 is delayed by 9 days, will the implementation time of the project be affected and, if so, why?
3. If activity 204 requires 19 days instead of 14, what will happen in relation to the project implementation time and why?
4. In a meeting that took place 16 days after the start of the project, the following were found:

- Activities 100, 101 and 102 were carried out according to the original planning.
- Activities 201 and 202 are ongoing and require 6 and 10 days to be completed, respectively.
- Activities 203 and 204 are also in progress and require 3 and 21 days to be completed, respectively.
- For activity 303, a new estimate of its duration was made, and it was estimated that it would take 12 days to complete.
- For activity 304 it was decided that it could be implemented in 5 days, while the remaining activities are estimated to be carried out according to the original planning. Which is the **new critical path and the new completion time** of the project?