This is a highly technical course introducing new calculi and new modelling methods as well as providing tools to analyse and build concurrent systems.

The students this year put in an extremely good performance, with most students showing an almost complete understanding of most of the concepts and able to express them formally. The overall average was 69%. Well done.

Q1 (Modelling and Java concurrency) Most got the modelling right, or nearly so, quite a few (surprisingly) didn’t get the right Java implementation, with the producers and consumers as objects with new threads, and the buffer as a monitor with synchronised methods.

Q2 (Proof rules and derivations) Very good - quite a few completely correct derivations, some with minor errors. It appeared than only those who engaged little with the course got poor marks.

Q3 (Process equivalence) Again, mainly good scripts - but precise descriptions were are problem for many, especially for bisimulation and the "colouring" algorithm. The example was carried out reasonably well, but some got the wrong transition systems to start with, only a few misapplied the algorithm.

Q4. (Process properties) Quite a few marks were lost here by building an incorrect parallel composition of the LTSs of a process and a property, and failing to understand the point of this - namely to detect traces to an error state.

Q5 (Deadlock in concurrent systems) Superb answers - understanding the properties leading to deadlock, applying them, and building deadlock-free systems.