APPROACHES TO SOLUTION UNIVERSITY TIMETABLING

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We consider two problems of university timetabling. The first problem is timetabling in non-Russian universities where individual study programs of students are taken into account(Course Timetabling). The second problem is timetabling in Russian universities where students are considered in groups. It is an expanded combination of problems School Timetabling when availability of the rooms isn't considered, all groups are engaged in own audiences and don't change them and Course Timetabling when availability of rooms is considered and in a room can be different groups. The university timetabling is NP-Complete [1].

We consider 4 approaches to solve the problems:

- harmony search [1];

- non-linear great deluge [2];

- honey-bee mating optimization [3];

- branch-and-cut [4].

Result of comparison are presented with a conclusion of their applicability in university timetabling software.

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