

# **A Convex Programming Approach for University Timetabling**

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## **Abstract**

This paper investigates solving university timetabling problems using convex programming. Historically, such problems are solved using mixed integer linear programming or using heuristic approaches that require considerable computation and the solutions are suboptimal. The new formulation uses the L1 norm penalty that promotes solution sparsity knowing that the vector of decision variables is essentially sparse. We test the new formulation on the international timetabling benchmark problem and demonstrate the efficiency of the technique compared to mixed integer linear programming.