Edelev, A. V.; **Zorkal'tsev, V. I.**

An algorithm for determining optimal and suboptimal trajectories of the development of a system. (Russian, English) Zbl 1438.90376

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Summary: An algorithm is described for determining the optimal and the entire set of suboptimal trajectories of development of technical and economic systems. The dynamics of the possible development of a system is considered as a directed graph whose nodes characterize the possible system states in the future time intervals, while the arcs represent all possible transitions from one state to another during given time intervals. The algorithm is based on the dynamic programming principles. It is applied in the software package 'Dynamics' that realizes the methods of combinatorial modeling to study the long-term options for the development of energy systems.

MSC:

90C39 Dynamic programming
90C27 Combinatorial optimization

Keywords:

dynamic programming; combinatorial modeling; optimal and suboptimal options of development

Software:

Dynamics

Full Text: DOI

References:

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