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4.6.6. Modeling techniques

Sommario/riassunto

Systems engineering is the design of a complex interconnection of many elements (a system) to maximize a specific measure of system performance. It consists of two parts: modeling, in which each element of the system and its performance criteria are described; and optimization in which adjustable elements are tailored to allow peak performance. Systems engineering is applied to vast numbers of problems in industry and the military. An example of systems engineering at work is the control of the timing of thousands of city traffic lights to maximize traffic flow. The complex and intricate field