The industrial sector is considered one of the most important sectors in the Kingdom for having the ability to accommodate different investment opportunities as many indications show its relative importance with increase of investment in this field and increase of the number of factories. The objective of this research is to study to which extent the industrial sector is applying the research methods in the planning and production control processes. The research hypothesis is based on the assumption that most of these factories do not apply the operational researches despite the tremendous advancement in the production means used by such factories. However, many secondary assumptions were derived from this hypothesis, including use of operational research methods in the planning and production control processes depends on the kind of industry, size of the factory and the field in which they are applied to. Also, include availability of information system does not mean using modern methods in operational researches for planning and production control processes as well as the educational level of the managers is of concern to the extent of application and success of using operational research methods in planning and production control processes. The research sample was selected from (90) factories working in foodstuff, mineral and chemical industries. The industrial sectors were selected by random sampling, then 50 factories from each industrial sector were randomly singled out and finally the outcome was (90) forms from all sectors. The research comprised several chapters stating the theoretical and practical aspects of the study. Chapter one determines the research framework including the research plan, problem, objectives, importance and hypotheses. Chapter two casts a comprehensive view on the planning and production control, its processes. etc. Chapter three deals with the important operational research methods used in the planning and production control such as linear programming, transfer and particularization method, decision making theories, competitions, imitation and projects management methods with emphasis on each one of these methods and its application. However, chapters four and five include the field study, results and recommendation. The researcher used the inquiry method in all the field data directed to the managers to know how these managers are convinest with the importance of using the operational research methods and the efforts exerted to ac~ele them.