

APPLYING POLYNOMIAL REGRESSION WITH COMPUTER SIMULATION TO STRUCTURAL ELEMENTS

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Abstract—As parallel to today's technologic developments, experimental researches have important role in scientific studies. Although experimental studies which are closely associated with laboratory possibilities cost and time give realistic results, they are limited with the properties of the elements used. On the other hand, computer softwares provide great convenience and divert the design phase, although they compensate the experiments exactly. In this study, a civil engineering problem is handled. It is aimed to transfer one of the experimental studies about resistance of structural being elements to computer environment. Numerical results are obtained by graphics and the coherence with experimental results are investigated.

Keywords: polynomial regression; computer simulation; structural elements; beams.