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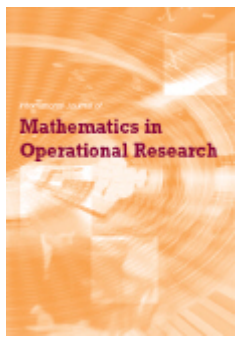

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Title: Statistical-based multi-criteria decision making approach for prediction of the grade of an institution in NAAC

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Abstract: In the modern era, innumerable colleges and universities have been established in India but sometimes quality education is not imparted by the authority of colleges/universities. It has been a major challenge for the Indian government to assess the quality education in India. Through a well-versed assessment procedure, National Assessment and Accreditation Council (NAAC) was established to assist higher education institutions in identifying their assets, strengths, and weaknesses. In this paper, an innovative mathematical model is proposed to calculate and justify the NAAC grading of a well-known engineering college while taking into consideration the NAAC grading of nine other well-known affiliated colleges/autonomous colleges/universities. This model is making a prediction based on the data obtained from the self-study report (SSR) after data validation and verification (DVV). The result of the model is found to be very accurate when comparing the overall NAAC grade of the college given by NAAC.

Keywords: NAAC grade; MCDM techniques; ANOVA test; P-test; combined MCDM techniques; linear regression method.

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Return to top