

Rochima Dita Respita, 2015. **Model Analisis Kovariansi Indeks Prestasi Kumulatif Lulusan Fakultas Sains dan Teknologi Universitas Airlangga.** Skripsi dibawah bimbingan Drs. Eko Tjahjono, M.Si dan Dra Ir. Elly Ana, M.Si, Departemen Matematika, Fakultas Sains dan Teknologi, Universitas Airlangga, Surabaya

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### ABSTRAK

Pada tingkat Perguruan Tinggi, kualitas akademik yang dicapai seorang mahasiswa dapat dilihat dari nilai Indeks Prestasi Kumulatif (IPK). Tingkat keberhasilan lulusan ini dapat dianalisis dengan metode statistika, salah satunya adalah model Analisis Kovariansi (ANAKOVA). ANAKOVA merupakan metode gabungan dari analisis regresi dengan analisis variansi. Model ANAKOVA dapat digunakan untuk menganalisis pengaruh Nilai Ujian Nasional (NUN) dan program studi terhadap nilai IPK lulusan Fakultas Sains dan Teknologi Universitas Airlangga (FST-UA).

Tujuan dari penulisan skripsi ini adalah untuk mendapatkan model ANAKOVA IPK lulusan FST-UA dan menganalisis pengaruh program studi dan Nilai Ujian Nasional (NUN) terhadap IPK lulusan FST-UA. Berdasarkan data lulusan program studi S1 FST-UA tahun 2013-2014 diperoleh model ANAKOVA pada data IPK, NUN, dan prodi S1 lulusan FST-UA yaitu  $\hat{y}_{1j} = 3.062 - 0.083 + 0.002X_{1j}$ ,  $\hat{y}_{2j} = 3.062 + 0.185 + 0.002X_{2j}$ ,  $\hat{y}_{3j} = 3.062 - 0.239 + 0.002X_{3j}$ ,  $\hat{y}_{4j} = 3.062 + 0.036 + 0.002X_{4j}$ ,  $\hat{y}_{5j} = 3.062 - 0.052 + 0.002X_{5j}$ ,  $\hat{y}_{6j} = 3.062 + 0.068 + 0.002X_{6j}$ , dan  $\hat{y}_{7j} = 3.062 + 0.002X_{7j}$ , disimpulkan bahwa prodi dan NUN berpengaruh terhadap perolehan IPK Lulusan program studi S1 FST-UA. Program studi Sistem Informasi dan Fisika merupakan program studi yang mempunyai pengaruh berbeda diantara program studi lainnya.

**Kata Kunci** : Indeks Prestasi Kumulatif, Analisis Kovariansi, Nilai Ujian Nasional

Rochima Dita Respita, 2015. **Analysis Of Covariance Model Faculty Of Science and Technology Airlangga University Graduate's Cumulative Achievement Index**. This *final project* is under advised by Drs. Eko Tjahjono, M.Si and Dra Ir. Elly Ana, M.Si, Mathematics Department, Faculty of Science and Technology, Airlangga University, Surabaya

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### ABSTRACT

At the college level, academic quality that is achieved by student can be seen from its Cumulative Achievement Index. This success rate of graduates can be analyzed using statistical methods, one of them is Analysis Of Covariance (ANACOVA) model. ANACOVA is a combination of regression analysis with the analysis of variance. ANACOVA models can be used to analyze the influence of National Examination Values and Study Program to the Cumulative Achievement Index value Faculty Of Science and Technology Airlangga University graduates.

The purpose of this paper is to obtain an ANACOVA model Faculty Of Science and Technology Airlangga University graduates Cumulative Achievement Index and to analyze the influence of National Examination Value and Study Program to the Cumulative Achievement Index value of Faculty Of Science and Technology Airlangga University graduates. Based on data of bachelor degree Study Program graduates in 2013-2014 retrieved ANACOVA model for the data of Cumulative Achievement Index, National Examination Value, and bachelor degree Study Program graduates that is  $\hat{y}_{1j} = 3.062 - 0.083 + 0.002X_{1j}$ ,  $\hat{y}_{2j} = 3.062 + 0.185 + 0.002X_{2j}$ ,  $\hat{y}_{3j} = 3.062 - 0.239 + 0.002X_{3j}$ ,  $\hat{y}_{4j} = 3.062 + 0.036 + 0.002X_{4j}$ ,  $\hat{y}_{5j} = 3.062 - 0.052 + 0.002X_{5j}$ ,  $\hat{y}_{6j} = 3.062 + 0.068 + 0.002X_{6j}$ , and  $\hat{y}_{7j} = 3.062 + 0.002X_{7j}$  and it was concluded that the Study Program and National Examination Value effect on bachelor degree Study Program of Faculty Of Science and Technology Airlangga University graduates Cumulative Achievement Index. Information Systems and Physics Study Program is Study Program that has a different Influence among other Study Program.

**Keywords** : Cumulative Achievement Index, Analysis Of Covariance, National Examination Value