Abstract

This paper presents the results of research carried out at the Faculty of Mechanical Engineering (FME) in Belgrade for the purpose of enrollment policy. Artificial neural networks are used in predicting graduates’ professional choice, i.e. a number of secondary vocational education and training schools (VET schools) graduate students will enroll on. The assumption of graduates’ professional choices was verified on a sample of 119 graduates from two Belgrade VET schools. Factors influencing the professional choice of VET school students are grouped in nine input variables. The results show that neural network algorithms present a powerful tool for predicting graduates’ professional choice.

Key words: graduates’ professional choice, artificial neural networks, enrollment policy.

1. Introduction

Young generation acquiring secondary school education in Serbia nowadays enter the new world, which itself experiences fast changes in all fields – economy, culture, politics, science, technology, and social relationships. Fast changes in the surrounding countries demand from the management of higher education institutions a more flexible approach to organizing and improving efficiency in carrying out teaching activities. The core of the modern, business-oriented management of higher educational institutions is based on the concept of active management, heavily relying on planning, communication and flexibility (Karavidic 2006).