The objective of this research was to adapt a model to evaluate the satisfaction of industrial engineering graduates from a public university in Ecuador, in order to identify factors that enhance specific skills of future students.

The study has an empiricist-inductive epistemological foundation, based on observing perceptions. Through a review of scientific literature on evaluating graduate degree satisfaction, a model was adapted to the Ecuadorian context with the participation of education and industrial engineering experts, including some aspects of the HESQUAL (Higher Education Service QUALity) model.

A 21-item Likert scale questionnaire was developed. The instrument was applied to 167 graduates in 2022 from a public university in Ecuador. Given the data analysis technique used, the sample size is considered adequate. Validity and reliability tests were performed on the partial least squares structural equation modeling (PLS-SEM), using SmartPLS statistical software. Construct validity, internal consistency assessment, and validation of the measurement and structural models were applied.

The main finding of this study was confirming that perceived quality of teaching service, perceived quality of administrative service, and perceived quality of facilities and infrastructure are key factors in industrial engineering graduates’ satisfaction. These have a direct effect on satisfaction with competencies acquired during their studies. This result is due to the constant revision of the degree’s curriculum structure and the institution’s prestige regarding teaching service; efficiency of processes and performance of academic authorities stand out in administrative service; and the library service, IT platforms for teaching, and equipment (in classrooms, workshops and laboratories) are noteworthy regarding facilities and infrastructure.

Knowing the factors influencing industrial engineering graduates’ satisfaction will help university administrators allocate resources when making institutional budgets, creating and improving teaching environments related to teaching, infrastructure and administrative services for students.

This research presents empirical data on satisfaction of industrial engineering graduates from a university in Ecuador. Similar studies are evident in Latin America, but not specifically in this country and degree. Limitations of the study include only one university and excluding sociodemographic variables.

Keywords: graduate’s satisfaction, skills, PLS, SEM, structural equation model, partial least squares