This study investigates mismatch between the job profiles as well as their requirements at the current job market and the qualification profiled to graduates from the educational institutes in Sri Lanka. In many situations, the reality is that the qualification along does not help enough to find a job, because of the mismatch between the demand and the supply of the job market. Therefore, some graduates have to be engaged in irrelevant jobs, mostly under low salaries while some of them have to be unemployed. With motivation of situation analysis, the study aims to investigate the mismatch between job-education transitions. The scope was narrowed down to areas of science & management, and required job profiles data were obtained from employees who work at private companies. Primary data were collected through telephone conversations and the standard job profiles were collected through different sources of human resource management criterion. Two bipartite network models were developed for current and standard job-education transitions and analysis was done based on the two graphs. The results showed that, there was a job-education mismatch by considering matrix norms and score similarity method. Whole sample occurred 43.75% of mismatch transitions. According to the node similarity scores, 68% of science degree holders work with some mismatch qualifications. Most of Science degree holders occupied the job positions of management graduates. In conclusion, the graduate qualifications should be streamlined according to the labour-market needs in various disciplines, with their significance.

**Keywords:** bipartite graph, job-education mismatch, gap analysis