

# Designing the Lean Enterprise Systems Course for Enterprise Resource Planning Education

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**Keywords:** Lean thinking; lean production; lean enterprise; enterprise resource planning; interdisciplinary curriculum design

## Abstract

The objective of this research proposal is to design an interdisciplinary enterprise resource planning (ERP) course for information technology, engineering and business students in planning, designing, and managing lean enterprise systems. The term “lean” in a business environment portrays a doctrine incorporating an assortment of techniques into the business processes to optimize an organization’s resources, while improving productivity and the quality of products and services to its customers. Many modern organizations are beginning to recognize the philosophy of lean thinking. Especially, many U.S. companies have been spurred into action by their executive managers to embrace this innovative thinking. Nevertheless, lean is not as easy as it appears—virtually every case of a lean initiative has surfaced some radical challenges for the organization. As many business executives assert, a successful lean implementation will considerably hinge on the company’s ability to recruit qualified “lean” experts. However, the current ERP education programs cannot meet this need due to the problem that the conventional curricula are deficient in offering adequate courses for producing modern “lean professionals”. Addressing this need, an “*interdisciplinary lean-driven enterprise systems*” (ILES) model is proposed as a formal foundation for designing cross-disciplinary lean enterprise systems course content and a viable framework to integrate various course themes and laboratory components as well as enterprise systems software tools into the ERP education. The model fosters practical principles of “lean thinking” in the course for education on ERP systems innovation and business process reengineering. The ILES model is expected to impose an impact on educational advancement and career development for the ERP education. The ultimate goal of using this model is to produce the right kind of professionals in order to faithfully reflect the recent structural change in labor market dynamics. In other words, the proposed course will help students become multi-skilled enterprise system professionals who are made to order for thriving in a lean-driven horizontal organization.