## ABSTRACT

Today is the "knowledge era" where's the only organization capable of managing it's knowledge optimally are able to survive in a competitive environment (Kwalek, 2004). To be able to compete in a competitive environment that universities must be able to optimize the entire resources of the institution by managing the potential knowledge that exist within the institution. Faculty of Industrial Engineering is one unit of the Institut Teknologi Telkom, which consists of two courses of Industrial Engineering and Information Systems.

Knowledge management system is a method that can ensure to manage of knowledge management processes are running. In an effort to ensure the knowledge is delivered at the right time, available in the right place, and are present in the correct form then needs to be built KMS Laboratory at the Faculty of Industrial Engineering (FRI). At the beginning of the formation of knowledge will be preceded by the conversion of knowledge to the SECI model (Nonaka and Tekeuchi, 1995). This model consists of phases of socialization, externalization, combination, and internalization. Making knowledge management system carried out by using the knowledge management lifecycle. Based on the model of knowledge management lifecycle cycle there are four stages of knowledge creation, storage or retrieval, transfer and application (Alavi & Leidner, 2001).

At the stage of creation in the knowledge management lifecycle at Faculty of Industrial Engineering Institut Teknologi Telkom, the process of knowledge creation through the conversion of tacit knowledge becomes explicit with the SECI model and make business processes. Storage stage is a process undertaken to ensure that the knowledge gained is stored and categorized so it can be used. Designing knowledge management systems on the Faculty of Industrial Engineering Institute of Technology Telkom using Moodle software.

Keyword: Laboratory, Faculty Of Engineering Indusri, Knowledge Management Lifecycle, Knowledge Management System, SECI Model.