

# **A Knowledge Management Approach to Compare and Develop the ASEAN University Credit Transfer System in Thailand**

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## **Abstract**

This paper outlines a comparative study between the European Credit Transfer System (ECTS) and the ASEAN Credit Transfer System (ACTS). In 2015, ASEAN member countries will form the ASEAN Economic Community (AEC), a region promoting economic integration and the subsequent free flow of people, trade and culture. The AEC will have significant impacts on higher education across the ASEAN region, and this research investigates how knowledge management techniques can be utilized to respond effectively to the forthcoming ACTS. The ACTS is a tool created to enhance and facilitate credit transfer allocation between members of the ASEAN University Network (AUN) and will present particular challenges for Thailand's university administration and management. The paper presents a case study from Thailand, and leverages Common Knowledge Acquisition and Documentation Structuring (CommonKADS) to capture appropriate knowledge from Europe, where a successful Europe-wide credit transfer system already exists. The paper undertakes a comparative study between the ECTS and the proposed ACTS. The case study is based within the Faculties of Law, at Chiang Mai University (CMU), Thailand, and University Lumière Lyon 2, France. In Thailand, a requirement exists to prepare and provide a new framework to ensure its Credit Transfer System (CTS) procedure correlates with the needs of the ASEAN University Network CTS (AUN-CTS). The AUN-CTS is a particular aspect of the AUN, which members must adhere to. This research therefore studies the importance and usefulness of the ECTS in comparison to the ACTS and more importantly, captures existing and relevant knowledge from the ECTS to raise awareness and enhance the credit transfer procedure of the CMU law faculty. Results show that utilizing knowledge to create a successful credit transfer allocation will facilitate increased student and faculty exchange, including training programs and worker mobility.

## **Keywords**

Law, ASEAN University Network, CommonKADS, Credit Transfer, and Higher Education

## **1. Introduction**

A credit transfer system is an important facilitate instrument for academic exchange programs. A successful ASEAN credit transfer allocation will facilitate students' mobility within ASEAN universities. In 2010, there was no such a reliable international credit transfer system at Chiang Mai University (CMU). The CMU was not familiar with any cooperation of undergraduate student international exchange program. Although, the AEC 2015 was effective implemented in December 31, 2015. Up until 2016, the Faculty of Law, Chiang Mai University sought to acquire a quality assurance ASEAN Credit Transfer Model to accommodate its undergraduate students' international mobility, especially intra ASEAN University Network. In order to have a prompt and credential of grade and a number of credits transfer from host country to home country, a study of the European Credit Transfer System (ECTS) was initiated. The ECTS is a successful European Credit Transfer System, globally. In this study, a knowledge management approach was proposed and suggested by using a CommonKADS technique. This research leverages its fundamental

principle and captures appropriate knowledge from documents and an interview with an expert from France and Chiang Mai University.

## **2. Background and Justification**

### **2.1. ASEAN University Network.**

The ASEAN University Network (AUN) was created in 1995. The AUN concept was initiated at the fourth ASEAN Summit held in Singapore in 1992. [8] It means that the ASEAN members recognized an importance of cooperation in higher education and human resource development. The network now has 28 member universities within 10 ASEAN countries and is coordinated through a Board of Trustees represented member institutions, and its Secretariat is hosted by Thailand. The AUN facilitates cooperation among its member universities at both staff and student levels via academic exchange programs, such as through the distinguished scholars fellowship, and student conferences, e.g., the annual educational forum and youth cultural forum. For this reason, the major role of the AUN is to strengthen the quality assurance of higher education in the region. [9] The AUN's roles in ASEAN higher education policies are composed of 6 strategies drafted in 2010 which are: 1) S & T Collaborative Research for Community Well-being, 2) ASEAN Awareness, 3) Quality Labor Force H.E., 4) Knowledge-Based Society, 5) ICT Competency, and 6) Digital Content Shareable. These policies force each ASEAN member state to launch an individual Action Plan and to abide by its obligation by 2015. [10] More or less all universities in the AUN will be forced to improve their standards. Also, the CMU law School curriculum offering needs to be improved by guaranteeing student ICT competency and an efficient credit transfer for student mobility and exchange.

### **2.2. European Credit Transfer System (ECTS)**

European Credit Transfer System (ECTS) is a tool that helps to design, describe, and deliver programs and award higher education qualifications which can be applied to all types of programs. The ECTS mode of deliver comprises of a school based and a work based. It is applied to the learners' status both full-time and part-time. Use of ECTS can be administered with modules, course units, and dissertation work in a classroom, work placement, or laboratory work. Credits are accumulated to obtain qualifications. So credits awarded in one program may be transferred into another program. In Europe, credit transfer and accumulation are facilitated by the use of the ECTS key document. Those key documents refer to a course catalogue, student application form, learning agreement and transcript of records, and the diploma supplement. The ECTS benefits as a learner-centered credit system which shift the emphasis in program design and delivery from traditional teacher-centered approaches to approaches that accommodate for learners' needs and expectations. Also the ECTS facilitates curriculum design and delivery, leading to gives learners more choice in content, mode, pace and place of learning.

An institutions' role is to facilitate, support in order to share the students' learning pathways. Its role is to help students to build on their individual learning styles and experiences. Its major role is to create flexible learning pathways. To link between educational programs and labor markets requirements. Most of all, its important role is to facilitate mobility within a given institution or country. ECTS learning outcome expects all learners gain knowledge to understand and be able to do with expectation to know and complete a program with a particular qualification. The ECTS requires learner to complete the program with a full competence. The competence means a proven ability to use knowledge, skill and personal in social life and methodological abilities, in work or study situations and in professional and personal development. It implies to the capacity to transfer knowledge into practice. A successful assessment of learning outcome to award credits is divided into 4 types: 1) clear assessment, 2) appropriate assessment, 3) minimum requirements to obtain a pass, and 4) written as reference point.

## **3. Research Methodology and Program**

This research studies the importance and usefulness of the European Credit Transfer System (ECTS) in comparison to the ASEAN Credit Transfer System (ACTS) and, more importantly, it captures existing and relevant knowledge from the ECTS to raise awareness and enhance the credit transfer procedure for the CMU law student. The aim of this research is to investigate how the Thai higher education institutions are able to use Knowledge

Management (KM) techniques like the CommonKADS methodology to allocate the ASEAN Credit Transfer Model. In this study, the research method is Problem-Solving Research/Action Research. The hypothesis is that utilizing knowledge with the KM, CommonKADS, to create a successful credit transfer allocation will facilitate increased student and faculty exchange, including training programs and worker mobility.

### **3.1. Methodology**

The research is an analysis by a qualitative method which concentrates on investigating subjective data, in particular, the perceptions of the people involved. The intention is to illuminate the perception and, thus gain greater insight and knowledge. It is descriptive research which seeks to accurately describe current or past phenomena to answer all the questions above. I use a tool of Problem-Solving Research/Action Research which is a form of problem solving based on increasing knowledge through observation and reflection, then following this with a deliberate intervention intended to improve practice. The research process of collecting data was divided into 2 steps: firstly, documentary research with books, journals, dissertation, international agreement on education such as the UNESCO, and the ASEAN news; and, secondly, a focus group was used through an interview for tacit knowledge and experience with an expert from the University Lumier'e Lyon2, France and the CMU Office of Graduate Program. The pilot recipients in this research were randomly selected. Each of the pilot recipient has his experience regarding a credit transfer at each university. The purpose of the interview was to gain the tacit knowledge from an expert who knows a best practice of the credit transfer process in the U. of Lumiere Lyon2, France and Chiang Mai U. The interview took place in Chiang Mai, Thailand. Its plan was prepared under the CommonKADS technique starting from a Scoping Meeting, Knowledge Capture Meeting, Case Study Meeting, and Validation Meeting. The pilot recipients both accepted that they learned and understood thoroughly the credit transfer process. The purpose was to equip prospective pilot recipients with strong background information and practical daily work.

For this study, the AUN practical demands regarding ASEAN higher education was applied to the questionnaire of the interview. In addition, a study of the Bologna Process, and the U-Map of European Union Higher Education Credit Transfer System was illustrated as a model and some of its detail relating to the CMU and the University Lumier'e Lyon2 were integrated into the preparation interview-questions.

### **3.2. Analysis of Data Test**

An interview with an expert from Lyon II University, France at Chiang Mai University during 2011-2016 was performed to get more insight knowledge regarding the European Union Credit Transfer System.

Table 1. Interview questions and answers data

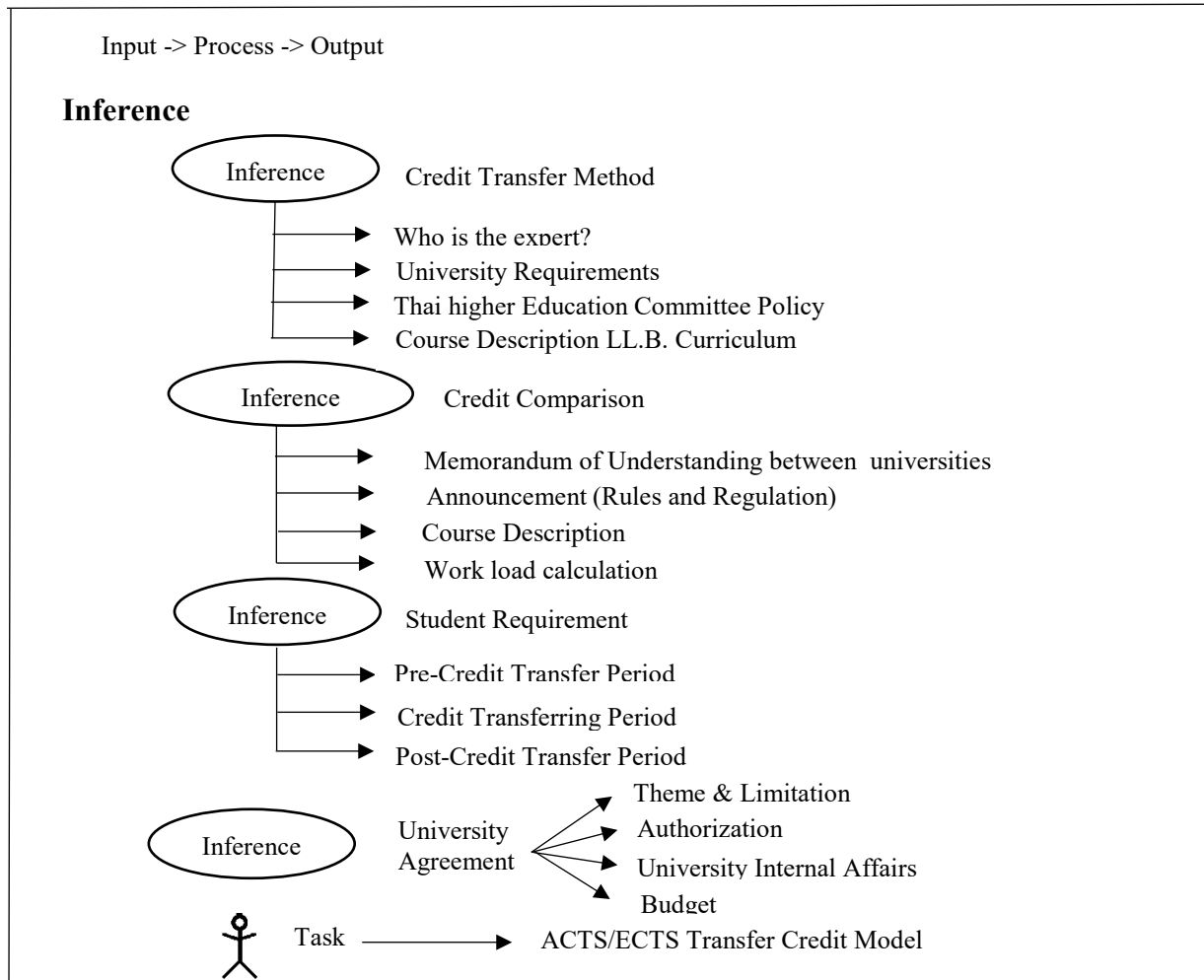
No of Question	ECTS-Question	ECTS-Expert Answer
1	What is the ECTS benefit?	The ECTS benefits of harmonization between education institutions and recognition for the mobility students.
2	How does Lyon II administer successful assessment of learning outcome to award credit?	As part of EU Higher Education Institution, Lyon 2 follows the Bologna process and deliver the 3 levels of degrees (Bachelor, Master, Doctorate).
3	Please explain ---Two approaches to get credits at Lyon 2.	Actually we have several approaches depending on the nature of students: a) Initial learning: for normal students with classical evaluation and examinations. b) Co-op learning (for students enrolled for half of their time in companies). c) Continuous learning (special tracks for people coming from industry) d) Experience validation learning (for people coming from industry with a high

		knowledge and experience to validate their skills)
4	How to create the European Qualification Framework for law school student?	European Qualifications Framework (EQF) acts as a translation device to make national qualifications more readable across Europe. It is a Reference Model that enables a much easier comparison between national qualifications in EU, talking about levels (level 1 to level 8). To create a EQF for Law Schools it would be interesting to create An EQF Advisory Group that brings together representatives from authorities, schools and other stakeholders.
5	Under ECTS, who is the role players in the learning process at the Lyon 2?	At Technology Institute we have Teaching Department and the Players are mainly the heads of and teachers of these department.
6	What is the learning outcomes the Lyon 2 law school expecting from law students?	The learning outcomes' describe what a learner knows, understands and is able to do.
7	What are the ECTS key features of the Lyon 2?	Information about sending and receiving institution, Course unit titles, Semesters, Number of ECTS, Earned ECTS, Grades (A, B, C...) + Optional information. Observations related to the behavior of the student (adaptability and team work, Delivery of assigned work on time, participation, Punctuality and autonomy...)
8	What is the National Qualification Frameworks of the Lyon2?	The National QF for the IUT is designed by the National Commissions of the programs so called CPN (National Pedagogical Commission) that work with 115 institutions like the Lyon 2.
9	Please explain a way of measuring and comparing learning achievement, transferring credits from one institution to another.	The best way is the concrete acceptance by the sending institution the ECTS given to the student to continue his next level in this institution and get recognition by the other stakeholders ( international companies, for example).
10	What is the principle of mutual trust and confidence between higher education institutions?	The trust is mainly based on mutual achievements through common projects and programs such as Erasmus-Mundus.
11	How many credits per academic year are accounted for the student workload in Lyon 2?	There are 60 ECTS per academic year, so 60 for master degree and 180 for PhD degree.
12	Please specify ---what is the appropriate degree level for Lyon 2?	Lyon 2 provides Bachelor degree, Master degree, PhD degree.
13	From question 12 where can student get this information?	By contacting the heads of departments in the different faculties and institution of the university.
14	How does Lyon 2 calculate the estimation of workload?	The estimation of workload should be regularly refined through monitoring and student feedback. IUT equals to Coop: 80 % defined at the national level National Pedagogy Commission (20% at the IUT level) in both cases Specific Commissions.

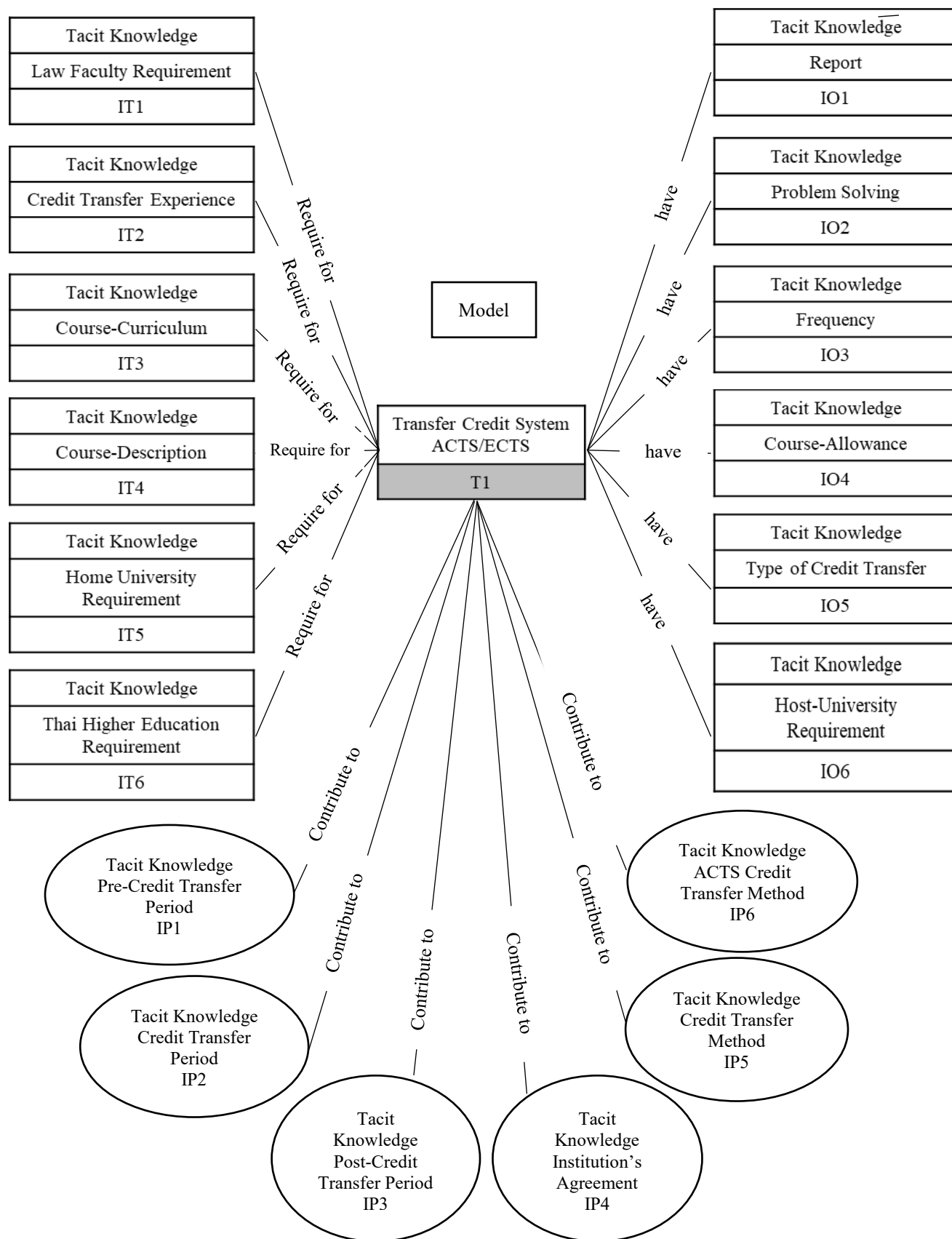
15	How often the workload estimation should be refined?	I think it is every 4 years.
16	Whether Lyon 2 use either the national or institution regulation?	The number of credits allocated to the entire qualification or program depends on the national or institution regulation. As public university, the national regulation, with the autonomy the institutions are having more flexibility but the total number is the one given by the EU.
17	How does the Lyon 2 keep on “good practice “of learning outcomes and credit allocation for work placements?	It is done through meetings and agreements with representatives from the business field. There are some official representatives from different business sectors that work with the institutions on their needs and expectations.

#### 4. Results

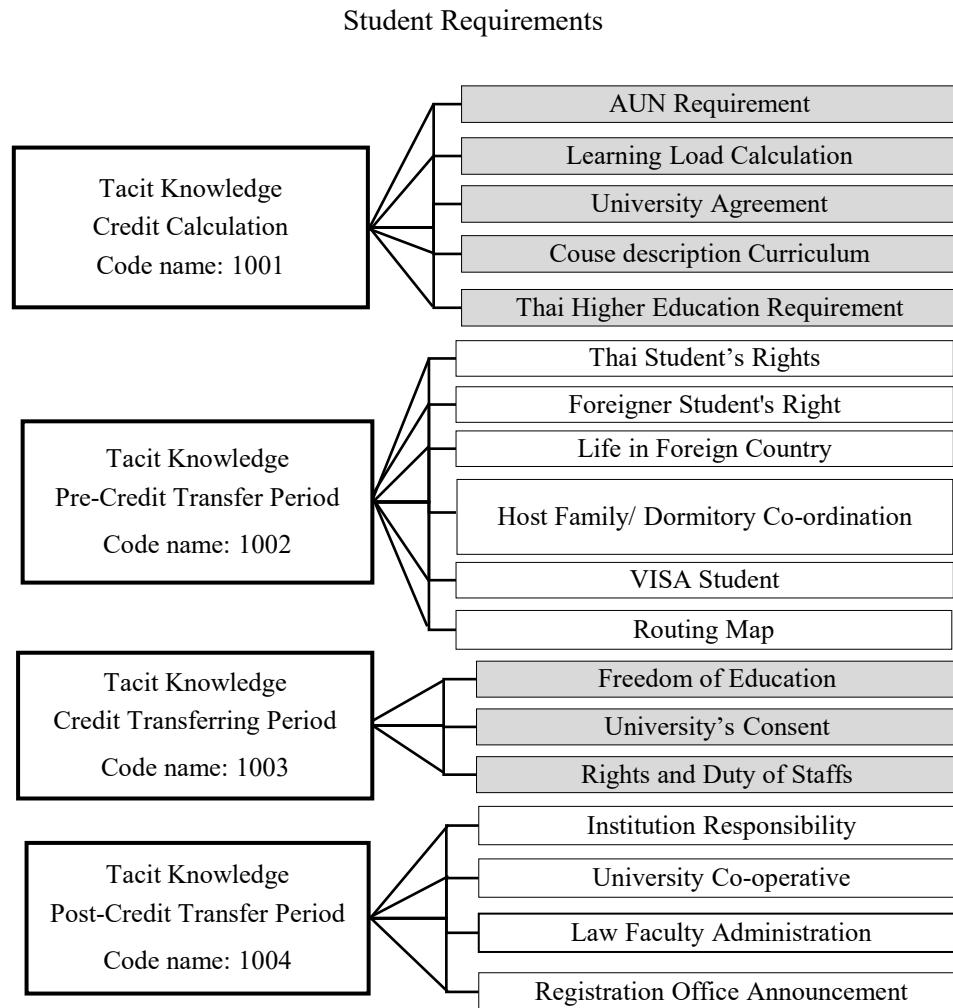
Using ECTS expert interview data analysis combines with the CommonKADS technique so-called “Design” to draw a concept of “Inference” as shown in picture 1, 2 and 3.



Picture 1. Inference demonstration



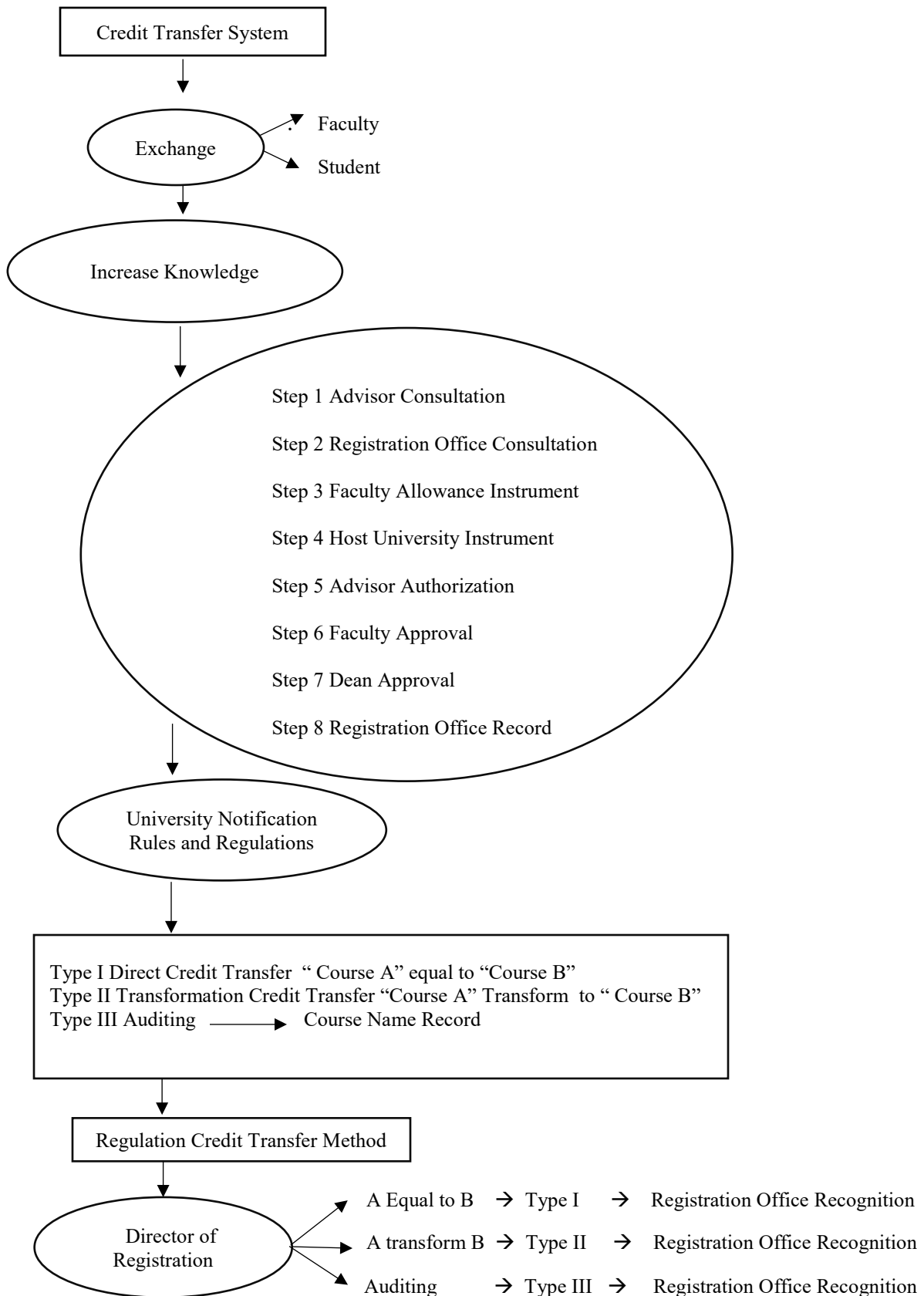
Picture 2. Transfer Credit System ACTS/ECTS Model



Picture 3. Student Requirements Illustration and a CommonKADS technique

These 3 pictures above have shown a CommonKADS technique leverages to capture appropriate knowledge from the ECTS, Europe and University Lumiere Lyon 2, France. The CommonKADS analysis was illustrated step by step from “Design” Pattern to a “comparison of ECTS/ACTS”, and “Students Requirements”. Finally, the Model of ACTS-CMU Credit Transfer System was designed.

### A Model of ACTS-CMU Credit Transfer System



Picture 4. Shows A Model of ACTS-CMU Credit Transfer System



## 5. Discussion & Conclusion

In this study, the 2 groups of expert interview from CMU and University Lumiere' Lyon 2 were performed with the ECTS model was examined. A CommonKADS technique is applied to capture appropriate knowledge from Europe. The case study is based within the Faculties of Law, at Chiang Mai University, Thailand, and University Lumiere Lyon2, France. This research therefore studies the importance and usefulness of the ECTS in comparison to the ACTS. As of 2016, there is no AUN credit transfer system in CMU and ASEAN University Network. In this research, a model of ASEAN University Network Credit Transfer System was created. It provides a process for student and faculty academic exchange through the University Notification Rules and Regulations. There are 3 types of ACTS-CMU credit transfer: Type I Direct Credit Transfer, Type II Transformation Credit Transfer and Type III Auditing. The AUN-CTS is a particular aspect of the AUN, which members must adhere to. Results show that utilizing knowledge to create a successful credit transfer allocation will facilitate increased student and faculty exchange, including training programs and worker mobility.

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## **Biographies**

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