Summary of answers to Questionnaire for students

#	Question	The most distinctive answers and conclusions
Project completion/final audit stage		
1	How much, in general, do you know about this project? Please elaborate.	My knowledge and experience are better than in the past. This program is to develop a Master's Program in Industrial Engineering to support Smart Industry 4.0. In the future, it will be used to teach both in Thailand And European countries. 1. Communications Course: It will help the learner to build and develop in leadership communication skills and people skill. 2. Applied Data Analytics Course: I heard about Data Analytics in computer engineering faculty. It is the tool, which helps to develop competences on statistical techniques needed for data analysis. Moreover, it is a process of discovering patterns in large data sets involving methods at the intersection of machine learning, statistics, and database systems. Not much. I just know that there are many universities such as Chiang Mai university, Asian institute of technology, etc. are collaborated in order to develop the curriculum. **From students' answers one can conclude that some did and some did not know all the facts/data about this project.*1**
2	How many pilot courses, offered within the project realization, did you attend? Please, list which courses.	On my understanding had only one. That was I attended. There are 2 pilot courses: Digital Factory Course and Communications and People Skills Development for Engineering Leaders Course. 2 courses. I took 2 courses in the last semester. First is Applied Data Analytics and another one is Communications and People Skills Development for Engineering Leaders. **Student were attending the courses that were at their disposal, at certain universities two pilot courses were offered and at some others only one.**
3	Why did not you attend more/all the courses?	Because my teaching location and address are far apart, for example teaching in the south of the country and I am in the central part of the country. I heard only two courses in my department. **The first answer is indicative. Student insists on having courses "closer" and probably online.**
4	Did you want to?	Yes, I wanted it. I want to study online or have all my courses taken at the university where I am studying. Yes. **Again, student wants to study online.**

5	How do you evaluate the course/ courses you did attend? Please give grade: From 1 (poor) to 5 (excellent). Please evaluate all the courses that you attended.	I appreciate on this class because my knowledge is better than in the past. For example in coding and decision marking design. I evaluated the courses I participated in under the topic teacher's knowledge transfer, participation, modern teaching materials, teamwork, case study to visit in the factory and open opportunities to show talent, etc. Grade of Digital factory course is 5 and grade of Communications and People Skills Development for Engineering Leaders Course is 5. Communications Course: Grade 4 Applied data analytics: Grade 5. For Applied Data Analytics, I give 4. For Communications and People Skills Development for Engineering Leaders, I give 3. **Some students were evaluating courses according to the procedure(s) at their universities, while some gave concrete grades here.**
6	Were the conditions for the course adequate? 1) Number of students in the class? 2) Teaching equipment? 3) Course materials? 4) Were the course materials provided? (In advance, in time, later). 5) Teacher's attitude? 6) Number of credits? Please, elaborate on each issue.	No. 1) Suitable on this class; 2) Maybe to have more than this; 3) Maybe to have more than this; 4) Provided but not more; 5) Good attitude because he taught like active thinking; 6) The credit is 3 units. The conditions for the course were adequate. 1) The number of students in a class is no more than 15, it is appropriate. 2) The teaching equipment was studied and practiced from the laboratory and real factory. 3) The learning materials are theoretically sufficient and include video clips and multimedia. 4) Have documents for teaching and learning in advance from google classroom. 5) The attitude of the teachers changed from the teacher to the teaching director. 6) Number of credits: 3 credits of each subject are sufficient. Yes. 1) Yes for Communications and People Skills Development for Engineering Leaders but for Applied Data Analytics no, because there are many students interesting in this course. 2) Yes for both. 3) Yes for both. 4) The course materials provide in advance for both courses. 5) For both courses, teachers care for their students a lot. 6) Number of credits for both courses is 3, which are enough. **All the answers to the first question were positive, except for the first one. Student even explained what he considered as insufficient.**
7	What would you change/improve?	The code, decision marking design and implementation based on design decision. N/A. For communications course, The study time should separate to 2 sections, which is different days because the student can review the lesson of lecture time.

		For Applied Data Analytics, this courses should add a condition about the former course that the student should be taken before taking this course because this course need knowledge about basic statistics. If we do this, I think we will get more benefit from this course. For Communications and People Skills Development for Engineering Leaders, no need to change anything. **The third answer contains the proper suggestion for organizing the lecturing. There should be a time gap between the theoretical and practical (lab) parts of the course, so that students can have time to "digest" the theory and prepare for the second part of classes.**
8	Did you work in the lab? If not, would you like to?	Yes. I liked it. N/A. Yes. No lab for Communications and People Skills Development for Engineering Leaders and no need to work in lab for this course. There is a lab for Applied Data Analytics. **Students that were using the lab in their courses were very positive about that experience, while those who did not have that chance were expressing desire to do so.**
9	Did you find the course(s) that you attended useful for your further studies? Which one(s) and how was it useful? Please, elaborate.	Of course, it must be continued for those who are interested. The Application of the coding of the Decision Process. Of course, the digital factory course useful for my further studies. The teaching and learning have built real working skills such as presenting the concept of converting a traditional factory into a digital factory. Students can bring Virtual Reality: VR, Augmented Reality: AR, Robotics, Automated Guided Vehicle (AGV) are used to improve factories to suit the industrial 4.0 includes solving complex problems, presenting and communicating for real-time connection between users and machines by applying applications based on the learning outcomes of the subjects. A digital factory where students can use digital technology for modeling and communication for design. Evaluate and implement production processes to suit the industrial age 4.0. Communications course: It develops my communications whatever speaking, writing, listening and reading. Applied data analytics course: It helps me to manage the big data about statistics. - For Applied Data Analytics, of cause I can use the knowledge I learned from this course to deal with the data in my further studies because data is everywhere. - For Communications and People Skills Development for Engineering Leaders, I can apply

		the skill I learned from this course during meeting or working with foreigners. **All the answers to this question were quite detailed, providing the useful information how the courses brought benefits to them and how they would profit for them.**
10	Did you find the course(s) that you attended useful for your future employment? Which one(s) and how was it useful? Please, elaborate.	This is mega trend for the future. Yes, Communications and People Skills Development for Engineering Leaders Course, which brings knowledge in practical teaching science on communication skills Leadership Motivate students to learn Develop communication with society and allow students to learn Practice effective presentation methods. Students will be keen learners to practice skills, not only in decision-making, problem solving, critical thinking. Also including writing and communication Verbal communication, gestures, presentations, discussions, and teamwork. Both courses are useful for my further my future life. - Nowadays, data is very important for everyone and in every company also. So, after taking this course I can know how to analyze the data that we have or how to categorize the data that have the relationship. - For Communications and People Skills Development for Engineering Leaders, this course provide courage for me while talking with foreigners or presenting in public. **Here applies the same remark as for question # 9.**
11	Would you suggest some new courses to be held? Or the new topic to be considered within the courses that were offered? Please, elaborate.	Data science based on SQL and NoSQL N/A. N/A. **The first student provided suggestion which new topic should be considered within the proposed master's curriculum.**
12	*Is there anything you would like to add?*	Everyone must know that code. N/A. N/A. **Students filling the questionnaire were not very eloquent here, though the students during the auditing interview had some concrete suggestions.**

*1The similar conclusion was drawn during the audit interview with students. Those students did not fill in this questionnaire, but gave answers in direct communication with the auditor. The same goes for almost all the answers, so that is the reason that these answers are given almost verbatim, as obtained from the project administrator (except for some language corrections).