Students' Perspective on Implementing Non- Destructive Testing (NDT) Professional Certificate Training at University Level: Universiti Malaysia Sabah Chapter

ABSTRACT

The non-destructive testing (NDT) is the process of testing, inspecting, or evaluating materials, components, structures, or assemblies for discontinuities, or differences in characteristics without demolishing the serviceability of the part or system. Today there are several NDT boards worldwide offer professional certificate for those who complete the course successfully e.g., BINDT and ASNT. This study was done at Universiti Malaysia Sabah, where a professional certificate provider service trained 42 students and graduate students to sit for three different courses of NDT, i.e. the visual welding inspection (VWI), magnetic particle technique (MT), and dve penetrant technique (PT). This is one of Malaysia's government plan to address the issue of low graduate employability, where those who have professional certificate apart from a bachelor's degree have more chances to get a better job prospect. An online guestionnaire i.e., google form was sent at the end of the course. A total of 37 out of 42 participants completed the survey. From the participants' feedback, 94.6% of them are satisfied with the program, where 94.6% of them said the content of the program achieved the objectives of the participants. The way the program was done where 50% theory and 50% practice gave an impact on students' motivation, where 94.6% agreed that the level of effectiveness of this course in terms of giving them understanding on the technique is high. Additionally, 91% of the participants also agreed that the NDT professional course should be merged with the Industrial Physics program. Almost all participants also will recommend this course to others as this is a very prospectus program that can up their skills and enhance their knowledge that fit the industrial needs. Subjective feedbacks also discussed at the end of the paper. Despite some challenges, it was a successful program of NDT CSWIP, MT, and PT that was done at the Faculty of Science and Natural Resources of UMS. Participants appreciated the opportunity of this program. Hence, given an indication and clear view from the participants' perspective, where merging professional certificates at the undergraduate level is possible. Syllabuses need to restructure, and coordination between faculty, university, an industrial player, and the board of professional body of NDT needs to be arranged carefully to make this merging program become a reality.