

The study of practical competence indicator analysis and establish for automatic measurement technology course

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Abstract

This study aimed to establish the practical competence indicators for automatic measurement technology course (AMTC) of industry-oriented needs and expect to promote technical quality and ability of students. Furthermore, by the literature review and the expert interview will be developed Delphi questionnaire is, and it answered by the industrial supervisors, engineers and university scholars. Finally, the collected data was analyzed using Mode, Mean, Standard Deviation and Kolmogorov-Smirnov one sample test to obtain competence indicators for this course. The results of this study included the following. The practical competence indicators can be divided into six dimensions for AMTC. 1. There are 4 items revealed as the competence indicators for virtual instrument. 2. There are 8 items revealed as the competence indicators for LabVIEW programming design . 3. There are 4 items revealed as the competence indicators for the interface of signal transmission. 4. There are 4 items revealed as the competence indicators for sensing and measuring devices. 5. There are 3 items revealed as the competence indicators for Automatic measurement platform. 6. There are 4 items revealed as the competence indicators for Automatic measurement applications. It totals 27 competence indicators, and these indicators will be developed and constructed into a suitable teaching syllabus and teaching materials for teaching reference and further research use.

Key words: Automatic measurement; Delphi;
Competence indicator; Course arrangement