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## 產業導向技職校院學生精密機械製造技術基本能力指標建構與

### 驗證之研究-產業導向技職校院學生精密機械製造技術

#### 實作創造力指標建構與驗證之研究

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#### 摘要

本研究旨在以產業導向為概念，針對技職校院學生精密機械製造技術實作創造力之能力指標進行建構與驗證，以建立我國技職校院學生精密機械製造技術實作創造能力指標之共通準則。其次，發展技職校院學生精密機械製造技術實作創造力教材及量表，最後驗證此能力指標使技職校院所培育的人才與產業界所需產生對焦。本研究為期三年：第一年旨在透過文獻探討、文件分析、訪談、專家座談、德懷術、層級程序分析法等研究方法，建構產業導向技職校院學生精密機械製造技術實作創造能力指標及其模組課程目標與模組課程內涵。第二年旨在透過理論分析法、文件分析、訪談、專家座談等質性研究方式，發展產業導向技職校院學生精密機械製造技術實作創造力模組教學策略及精密機械製造技術實作創造力模組教材、精密機械製造技術課程認知量表、精密機械製造技術能力量表、精密機械製造技術課程學習態度量表、精密機械製造技術實作創造力量表。第三年旨在透過試驗

性研究、專家座談、實驗教學法、訪談法質量並重之研究方法，進行技職校院學生進行精密機械製造技術實作創造力模組教學，同時預試與修正精密機械製造技術課程認知量表、精密機械製造技術能力量表、精密製造課程學習態度量表及精密機械製造技術實作創造力量表，以及精密機械製造技術實作創造力模組教材，並建立完整信效度，接著安排試驗性實驗教學，評估實驗教材及評量工具之適切性。最後實施正式實驗教學以驗證產業導向技職校院學生精密機械製造技術實作創造力能力指標之適切性。

關鍵字：精密機械製造技術；能力指標；實作創造力

# **A Study on the Construction and Verification of Institute's Student of Industry Based Precision Machinery Manufacturing Technique Technology Creativity Indicators**

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## **Abstract**

The purpose of the study is at regarding the concept of industry based. A Study on the construction and verification of institute's student of industry based precision machinery manufacturing technique technology creativity Indicators. In order to set up creativity of technology creativity indicators for institute's student of industry based precision machinery manufacturing technique. Secondly, it developed institute's student's precision machinery manufacturing technology of teaching material of technology creativity and scale form. Finally, it proved to competence indicators to produce focus for institute's school and industrial people. The plan lasts for three years. The purpose of the first year analyzed through literature probing into, file analysis, interview, expert's discussion, Delphi method, level procedure analytic. The constructing and verification of technology creativity index, course goal and group course for institute's student of industry based precision machinery manufacturing technique. The purpose of the second year studied through analytic approach of the theory, file analysis, interview, expert's discussion etc. It developed the technology model group teaching tactics, and teaching material, cognitive scale form, competence scale form, attitude scale form and technology creativity scale form. The purpose of the third year studied tentative research, expert's discussion, experiment teaching method and interview method. Proceeding group teaching of technology creativity indicators for institute's student of industry based precision machinery manufacturing technique. At the same time, trying the cognitive scale form of course precision machinery manufacturing technique, competence form, attitude scale form, technology creativity scale form and model group teaching materials of technology creativity. It is set up the validation. Additionally, arrange the teaching of tentative

experiment and measured the appropriate tool. Finally, it made formal experiment teaching in order to verification appropriate technology creativity indicators.

Key words: Precision machinery manufacturing technique;  
Competence Indicators;Technology creativity