

**Technological University of the Philippines – Manila**  
**Engineering Data Analysis (MATH13)**

**Questionnaire, Null and Alternative Hypothesis for the Study “Preferred Integrated  
Development Environment (IDE) of TUP-M BET-CPET 3<sup>rd</sup>  
and 4th Year Students”**

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**Research Topic:**

Preferred Integrated Development Environment

**Research Title:**

Preferred Integrated Development Environment (IDE) of TUP-M BET-CPET 3<sup>rd</sup> and 4<sup>th</sup> Year Students

**Research Questions:**

1. Sex (Male or Female)
2. Year Level (3<sup>rd</sup> Year or 4<sup>th</sup> Year)
3. Which Integrated Development Environment do you primarily use? (*Select one*) (Visual Studio Code, Atom, Eclipse, IntelliJ, Xcode, Sublime Text, Vim, Notepad++, NetBeans, PyCharm, and Spyder)
4. What features of your preferred IDE do you find most useful? (*Select your top three*) (Code Autocomplete, Syntax Highlighting, Extensions, Debugging Tools, Error Detection, Code Suggestions, Code Navigation, Collaboration Features, Cross-Platform Support, Cloud Integration, Artificial Intelligence (AI) Integration, Git/GitHub Integration, Beginner Friendly User Interface, Customizable User Interface, Integrated Terminal/Command Line and Multi-Language Support)
5. How easy was it for you to learn and start using your preferred IDE? (Likert Scale: 1- Very Difficult, 2 – Difficult, 3 – Moderate, 4 – Easy, 5 – Very Easy).

**Hypotheses:**

**H<sub>0</sub>:** There is no significant difference in the preference of IDEs based on their perceived difficulty between male and female BET-CPET students of TUP-M.

**H<sub>a</sub>:** There is a significant difference in the preference of IDEs based on their perceived difficulty between male and female BET-CPET students of TUP-M.

**H<sub>0</sub>:** There is no significant difference in the preference of IDEs based on their perceived difficulty between 3<sup>rd</sup> and 4<sup>th</sup> year BET-CPET students of TUP-M.

**H<sub>a</sub>:** There is a significant difference in the preference of IDEs based on their perceived difficulty between 3<sup>rd</sup> and 4<sup>th</sup> year BET-CPET students of TUP-M.