

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 3rd and 4th Year Students”

Passed by:

Arenas, Joseph C.
Pacis, Lian Gil B.
BET-CPET 3A

Passed to:

Prof. Jacobo Gonzales
MATH13 Professor

October 13, 2025

Research Topic:

Preferred Integrated Development Environment

Research Title:

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

Research Questions:

1. Sex (Male or Female)
2. Year Level (3rd Year or 4th 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:

Ho: 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.

Ha: 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.

Ho: There is no significant difference in the preference of IDEs based on their perceived difficulty between 3rd and 4th year BET-CPET students of TUP-M.

Ha: There is a significant difference in the preference of IDEs based on their perceived difficulty between 3rd and 4th year BET-CPET students of TUP-M.