STATISTICS, CERTIFICATE

LEARNING OUTCOMES

- 1. Frame a scientific question with the appropriate mode of data analysis, analyze such data correctly, and summarize and interpret the results in a useful manner
- 2. Apply a number of key statistical techniques, including significance testing, goodness-of-fit testing, and regression analysis
- 3. Use tools from mathematical statistics and probability to assess the quality of point estimators, confidence intervals, and hypothesis tests
- 4. Apply a statistical language to manipulate data and perform exploratory data analysis using basic statistical methods