

**Department of Statistics and Informatics - Research Projects for Fourth-Year Students - Academic Year 2022-2023**

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|     | <b>Supervising Professor</b>                       | <b>Project title</b>  | <b>Student Name</b>      | <b>The second student</b>           |
|-----|--|---|--------------------------|-------------------------------------|
| 1.  | • Prof. Dr. Zakaria Yahya Al-Jamal                 | • Support Vector Machine in Classifying Medical Data  | • Ahmed Bara'a Nadhim    | • Sarah Yasser Idris                |
| 2.  | • Asst. Prof. Dr. Rikan Abdulaziz Ahmed            | • Utilizing Auxiliary Variables in Simple Random Sampling   | • Hamad Tareq Hussein    | • Elaf Majid Abdulaziz              |
| 3.  | • Asst. Prof. Dr. Hiyam Abdulmajid Hayawi          | • Box–Jenkins Models Applied Using SPSS Software  | • Buraq Raad Humaidi     | • Ahmed Hais Yousif Sultan          |
| 4.  | • Asst. Prof. Dr. Ria Salim Mohammed Ali           | • Order Statistics and Their Applications   | • Manar Jamal Mohammed   | • Omar Firqad Abdulilah Najm        |
| 5.  | • Asst. Prof. Dr. Bashar Abdulaziz Majeed Al-Talib | • A Study on the Suitability of University Statistics Curricula to Meet the Needs of Postgraduate Students from Non-Statistical Backgrounds | • Ahmed Mohammed Yaseen  | • Ghusaq Muhannad Hamdallah         |
| 6.  | • Asst. Prof. Dr. Osama Basheer Shaker             | • Using the Logistic Regression Model to Classify Evaporation Variable in Nineveh Governorate   | • Haider Ali Mohammed    | • Noor Abdulhakim Abdulqader Hameed |
| 7.  | • Asst. Prof. Dr. Ban Ghanem Al-Aani               | • Applying Logistic Regression to Identify Key Factors Contributing to Student Failure at the University of Mosul (A Field Study)           | • Hussein Khairy Ibrahim | • Mohammed Ammar Hani Sheet         |
| 8.  | • Lect. Dr. Mahasen Saleh Al-Talib                 | • Using Cluster Analysis and Discriminant Analysis to Validate Intelligence Tests   | • Hadeel Ahmed Abdullah  | • Yaseen Mohammed Yaseen Mohammed   |
| 9.  | • Lect. Dr. Khalida Ahmed Mohammed Al-Hamdani      | • The Relationship Between U and C Control Charts with Application  | • Ali Shaker Muhyiddin   | • Du'aa Khalid Mohammed Sultan      |
| 10. | • Asst. Lect. Khairy Badal Rashid                  | • Mediation Variable Analysis in Structural Equation Modeling Using AMOS Software   | • Rahma Amer Mohammed    | • Omar Diaa Khalaf Ramadan          |

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| 11. | • Lect. Dr. Safwan Nadhim Rashid             | • A Study of the Pareto Distribution with Application   | • Hassan Akram Mohammed   | • Safaa Falah Hassan Mousa          |
| 12. | • Lect. Dr. Zina Mudher                      | • The Bernoulli Process with Application  | • Arkan Zuhair Thanoon    | • Zainab Tareq Jarallah Mohammed    |
| 13. | • Asst. Lect. Haila Anas Abdulmajid          | • Variable Control Charts with Application to the U Chart   | • Saad Ahmed Mohammed     | • Jinnar Mahmoud Ahmed Hamo         |
| 14. | • Lect. Dr. Alaa Abdul-Sattar Dawood Hamodat | • A Comparison Between Exponential Smoothing Model and Interference Effect Model Using Selected Criteria  | • Hala Ibrahim Abdullah   | • Hadeel Faisal Mahmoud             |
| 15. | • Asst. Lect. Mahmoud Mohammed Taher Younis  | • Using Time Series to Forecast Maximum Temperatures in Nineveh Governorate                               | • Haider Mohammed Ibrahim | • Khadija Ahmed Taha Mahmoud        |
| 16. | • Asst. Lect. Wissam Waadallah Saleem        | • Statistical Analysis of Unbalanced Factorial Experiment   | • Zainab Elias Khalil     | • Ghina Yousif Yaqoub Yousif        |
| 17. | • Lect. Dr. Omar Salim Ibrahim               | • A Statistical Study for Forecasting Environmental Pollution to Mitigate Its Risks                       | • Ahmed Kazem Mahdi       | • Azraa Asaad Shahatha Thilab       |
| 18. | • Lect. Dr. Najlaa Saad Ibrahim              | • Forecasting Iraqi Per Capita GDP Using Classical Method and Box-Jenkins Models                          | • Noor Mahmoud Hamed      | • Badran Abdulatif Mohammed Hammadi |
| 19. | • Asst. Lect. Israa Abduljawad Saleh         | • Identifying the Best Time Series Model Using the Interference Effect with Application                   | • Hassan Abbas Hussein    | • Iman Ali Hameed Ramadan           |
| 20. | • Lect. Dr. Manaf Hazem Ahmed                | • Estimating Parameters of the Generalized Extreme Value Distribution Using the Maximum Likelihood Method | • Sajjad Jabr Abbas       | • Shahd Saadi Saeed Ibrahim         |
| 21. | • Lect. Dr. Zaid Tariq Saleh                 | • Studying and Analyzing Gestational Duration Data Using Ordinal Logistic Regression                      | • Sarah Thaer Abdulhadi   | • Iman Elias Khidr Khushman         |
| 22. | • Lect. Dr. Noursel Ahmed Zain Al-Abideen    | • Using MR and $\bar{X}$ Control Charts for Variables with Application                                    | • Saja Waad Hadi          | • Huda Tareq Hamed Abbo (2A)        |

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| 23. | • Lect. Dr. Mohammed Qasim Yahya Suleiman | • Applying Queueing Theory and Enhancing Its Results Using Markov Chains                                   | • Aisha Abdulkhalik Mohammed  | • Nada Mahmoud Fadel Ali          |
| 24. | • Asst. Lect. Nada Nizar Mohammed         | • Addressing Multicollinearity in Logistic Regression Models with Application                              | • Evan Nawwaf Abdulqader      | • Ahmed Jamil Mohammed Jasim      |
| 25. | • Asst. Lect. Shaimaa Waleed Mahmoud      | • Estimating Reliability and Hazard Functions for the Weibull Distribution Using Maximum Likelihood Method | • Omar Fares Basheer          | • Yousif Salem Younis Khalil      |
| 26. | • Asst. Lect. Rihad Imad Sliwa            | • Employing Exploratory Factor Analysis to Extract Latent Variables  | • Shahd Mohammed Abd          | • Haneen Raad Abdulmoneim         |
| 27. | • Asst. Lect. Farah Abdulghani Younis     | • A Study on the Factors Influencing Autism in Children  | • Raghda Khairuddin Abdulaziz | • Aya Ihsan Hashim Idris          |
| 28. | • Asst. Lect. Farah Abdulghani Younis     | • Detection and Treatment of Outliers in Regression Analysis   | • Taha Abbas Fares            | • Aya Khalaf Hilal Sultan         |
| 29. | • Asst. Lect. Heba Suleiman Dawood        | • $\bar{X}$ and Standard Deviation Charts in Quality Control with Application                              | • Dohaa Uday Nizar            | • Sima Raed Saadi Mohammed        |
| 30. | • Asst. Lect. Noor Nozat Ahmed            | • A Comparison of Selected Hierarchical Clustering Methods with Practical Application                      | • Amer Ammi Afdel             | • Iman Ali Ibrahim Jasim          |
| 31. | • Asst. Lect. Noor Nozat Ahmed            | • Using K-means Algorithm to Analyze Desertification Risk Areas in Iraq                                    | • Haneen Mohammed Rasheed     | • Saja Basheer Younis Shahatha    |
| 32. | • Asst. Lect. Rafal Adeeb Othman          | • Monitoring Fat Percentage in Yogurt Products Using Quality Control Charts                                | • I'timad Hassan Khudhur      | • Zeina Ali Abdullah Saleh        |
| 33. | • Asst. Lect. Rafal Adeeb Othman          | • Enhancing Box-Jenkins Time Series Models Using Mathematical Transformations                              | • Naba Falah Hassan           | • Mohammed Waad Ahmed Dakhil      |
| 34. | • Asst. Lect. Ne'am Salim Fadhil          | • An Applied Study on Thalassemia Patient Data Using Multiple Linear Regression Model                      | • Nusrah Mohammed Najm        | • Mahmoud Ameer Abdullah Mohammed |
| 35. | • Asst. Lect. Ne'am Salim Fadhil          | • An Applied Study on Agricultural Evaporation Time Series Using ARIMA Model                               | • Hassan Falah Hassan         | • Manar Hashim Abdul Hammoud      |

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| 36. | <ul style="list-style-type: none"><li>• Asst. Lect. Talal Abdulrazzaq Saeed</li></ul> | <ul style="list-style-type: none"><li>• Neyman Allocation Method for Stratified Random Sampling</li></ul>  | <ul style="list-style-type: none"><li>• Abdulilah Ali Akbar</li></ul> | <ul style="list-style-type: none"><li>• Noor Iskandar Rasool Hamd</li></ul> |
| 37. | <ul style="list-style-type: none"><li>• Asst. Lect. Omar Qusay Jasim</li></ul>        | <ul style="list-style-type: none"><li>• A Study on the Importance of Variables Affecting Neonatal Jaundice Based on the Gamma Regression Model</li></ul> | <ul style="list-style-type: none"><li>• Amina Anmar Nadhir</li></ul>  | <ul style="list-style-type: none"><li>• Firdaws Ghalib Ali Saleh</li></ul>  |