1. Record Nr. UNINA9910484208903321 Autore Quirk Thomas J Titolo Excel 2019 for Engineering Statistics: A Guide to Solving Practical Problems / / by Thomas J. Quirk Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2020 **ISBN** 3-030-39278-3 Edizione [2nd ed. 2020.] Descrizione fisica 1 online resource (XVII, 250 p. 166 illus., 161 illus. in color.) Excel for Statistics, , 2570-4605 Collana 519.5 Disciplina Soggetti Statistics Applied mathematics **Engineering mathematics** Statistics for Engineering, Physics, Computer Science, Chemistry and Earth Sciences Statistics and Computing/Statistics Programs Mathematical and Computational Engineering Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto Preface -- Acknowledgements -- 1 Sample Size, Mean, Standard Deviation, and Standard Error of the Mean -- 2 Random Number Generator -- 3 Confidence Interval About the Mean Using the TINV Function and Hypothesis Testing -- 4 One-Group t-Test for the Mean -- 5 Two-Group t-Test of the Difference of the Means for Independent Groups -- 6 Correlation and Simple Linear Regression -- 7 Multiple Correlation and Multiple Regression -- 8 One-Way Analysis of Variance (ANOVA) -- Appendix A: Answers to End-of-Chapter Practice Problems -- Appendix B: Practice Test -- Appendix C: Answers to Practice Test -- Appendix D: Statistical Formulas -- Appendix E: t-table -- Index. Sommario/riassunto Newly revised to specifically address Microsoft Excel 2019, this book shows the capabilities of Excel in teaching engineering statistics effectively. Similar to the previously published Excel 2016 for Engineering Statistics, this volume is a step-by-step, exercise-driven guide for students and practitioners who need to master Excel to solve

practical engineering problems. Excel, a widely available computer

program for students and professionals, is also an effective teaching and learning tool for quantitative analyses in engineering courses. Its powerful computational ability and graphical functions make learning statistics much easier than in years past. Excel 2019 for Engineering Statistics capitalizes on these improvements by teaching readers how to apply Excel to statistical techniques necessary in their courses and work. Each chapter explains statistical formulas and directs the reader to use Excel commands to solve specific, easy-to-understand engineering problems. Practice problems are provided at the end of each chapter with their solutions in an appendix. Separately, there is a full practice test (with answers in an appendix) that allows readers to test what they have learned. This new edition features a wealth of new sample problems and solutions, as well as updated chapter content throughout.