Necessary first step in the "Admission procedure to the Master of Science in Data Science for Business"

Follow the steps described below in order to take the test:

1. You will need to enroll to Connect, the online learning platform of McGraw-Hill. Follow the steps described below in order to successfully complete the enrolment:

   a. Go to the web address
   https://connect.mheducation.com/class/l-schetgen-entrance-exam
   b. Enter your e-mail and click BEGIN
   c. Fill in the required details on the following page and click CONTINUE
   d. Select the "Buy it" option to purchase access for Connect (€14,16). The payment will happen via your credit card (Visa, Mastercard, American Express).
   e. Follow the steps to purchase
   f. Once purchase is complete, click "Go to connect". You are now at your instructor's course. This is where you can access your assignments and study resources.

2. Once you are at the instructor's course, you will have several options.

   a. You can perform an **Exercise assignment**. This practice run will have the same types of questions, the same content and the same points distribution as the real test. You can do it as many times as you want (questions are randomly chosen from a bigger set of questions, so you will probably get new questions when you redo the assignment). You can get hints and see the solution of every question with feedback. The results of this exercise will not be taken into account for the final grade.
   b. You can enhance your knowledge by looking into the **'SmartBook and LearnSmart'** tab. This will open a new window where you can interactively learn each chapter. The program will automatically focus on your specific learning points.
   c. You can also look into the **e-book**.
   d. You can take the exam (**Admission Test**). You can only take the exam once. In order to prevent you from starting the admission test unintended, you will be asked for a password when starting the test. The password is 'MMA20'. There will be two hours to complete the test. Hints will not be given. The total score and detailed feedback will be shown right after your test. We recommend taking at least one exercise assignment to make you feel comfortable with the way questions are asked.
   WARNING: some questions have embedded Excel-files enclosed. It is recommended to use a Windows computer to run the assignment and test to avoid unwanted effects.

3. Not all chapters of the book must be known. A list of the chapters is included below, along with directions whether this will be tested or not.

   i. Chapter 1: What is statistics, must be known.
   ii. Chapter 2: Describing data: Frequency tables, frequency distributions and graphic presentation, must be known.
   iii. Chapter 3: Describing data: Numerical Measures, must be known.
   iv. Chapter 4: Describing data: Displaying and Exploring data, must be known.
   v. Chapter 5: A survey of probability concepts, must be known.

vi. Chapter 6: Discrete probability distributions, must be known.
vii. Chapter 7: Continuous probability distributions, must be known.
viii. Chapter 8: Sampling methods and the Central limit Theorem, must be known.
ix. Chapter 9: Estimation and Confidence intervals, must be known.
x. Chapter 10: One-sample Tests of Hypothesis, must be known.
xi. Chapter 11: Two-sample Tests of Hypothesis, must be known.
xii. Chapter 12: Analysis of variance, must be known, except :
    LO 12.4 (Use a blocking variable in a two-way ANOVA)
    LO 12.5 (Perform a two-way ANOVA with interaction)
xiii. Chapter 13: Correlation and Linear Regression, must be known.
xiv. Chapter 14: Multiple regression analysis, must be known, except:
    LO 14.7 (Stepwise selection)
xv. Chapter 15: Nonparametric Methods: Nominal Level Hypothesis Tests, must be known.
xvi. Chapter 16: Nonparametric Methods: Analysis of Ordinal Data, must be known.
xvii. Chapter 17: Index Numbers, must **not** be known
xviii. Chapter 18: Time series and forecasting, must **not** be known
xix. Chapter 19: Statistical Process control and quality management, must **not** be known
xx. Chapter 20: An introduction to Decision Theory, must **not** be known

4. The test will focus on your ability to apply the statistical knowledge, and less on definitions (e.g. Central Limit Theorem, Chebyshev's theorem). However, there will be some questions related to the knowledge and understanding of concepts that are crucial during the course.

5. Make sure you have distribution tables with you (certainly of normal, t, F, and chi-square distributions).