Guideline of MSDS Master Tutorial Course (Internship)

MSDS students must take the master tutorial course (internship) to earn the required 3 credits, to fulfill the requirement of the program. The internship can be either work in an industrial company, a research lab in the medical center, a government agency, or a college research and teaching entity. The detailed requirements are as follows.

- 1. Student will need to find, with the help of the MSDS faculty, an internship offered by one of the aforementioned sponsors, approved by the MSDS program.
- 2. Student will work on at least one data science project for the internship of 6+ weeks, under the supervision of one investigator of the sponsor with 15-30 hours per week.
- 3. The project may include data management, study design, programming, statistical modeling, and/or machine learning for data analysis, writing technical report.
- 4. To earn the required 3 credits for the master tutorial course to fulfill the program requirement, student will need to write a technical report of 10+ pages in the form of a research paper and submit to CANVAS for MATH 6315. The technical report should contain the following contents.

Content of the technical report for the requirement of the master tutorial credits (10+ pages)

- 1. Title and abstract
- 2. Introduction (background of the internship project, and the motivation of the study)
- 3. Data and methods
- 4. Simulation and/or data analysis results
- 5. Conclusion and discussion.
- 6. Reference for the methods used and any background.
- 7. Table and figures of data analysis
- 8. References/Bibliography

Note

- 1. Student needs to ask the sponsoring supervisor for permission of using the project data to write the technical report. If the sponsor does not allow the use of project data for writing the technical report, the student will need to find a similar publicly available data set on the internet, upon the approval of the MSDS program (associate) director, as a replacement data set for the technical report.
- 2. Visa student need to obtain a CPT for any internship off campus, regardless whether the student will be paid for the internship work or not. However, internship with an UH faculty on UH campus does not require a CPT. The CPT needs an early application submitted to the OISSS with the approval of the program director, upon an offer letter of the internship by the sponsor.

The student will compile all contents into one PDF file of the report and submit the report by the end of the course to earn a grade of the master tutorial course.