

Undergraduate Analytics Minors

May 13, 2021

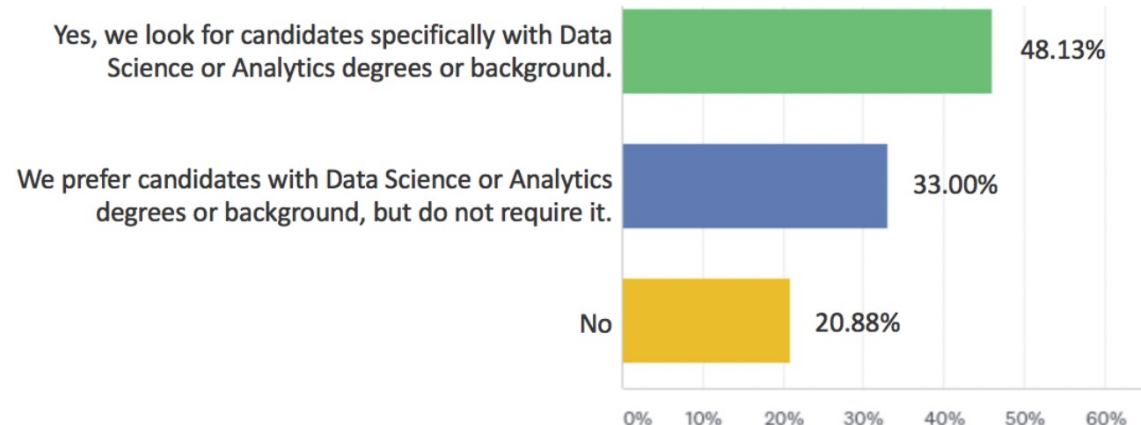
Jiang Li, Nimet Alpay, Laurie Crawford



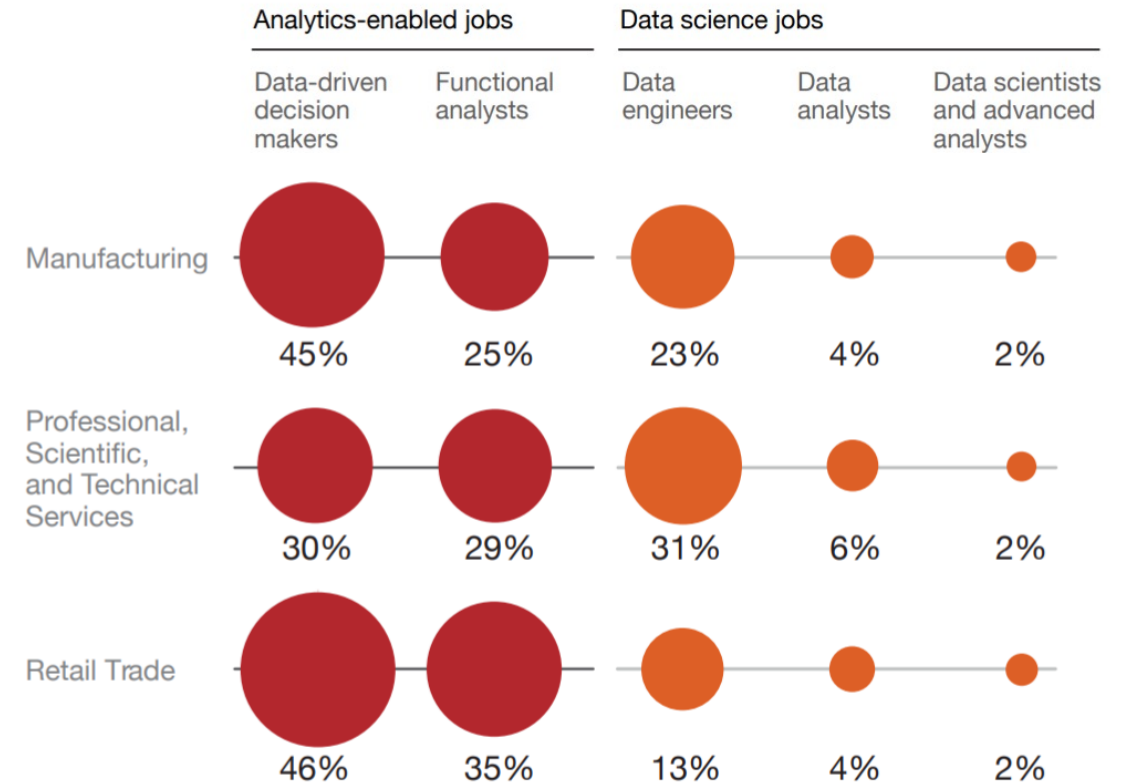
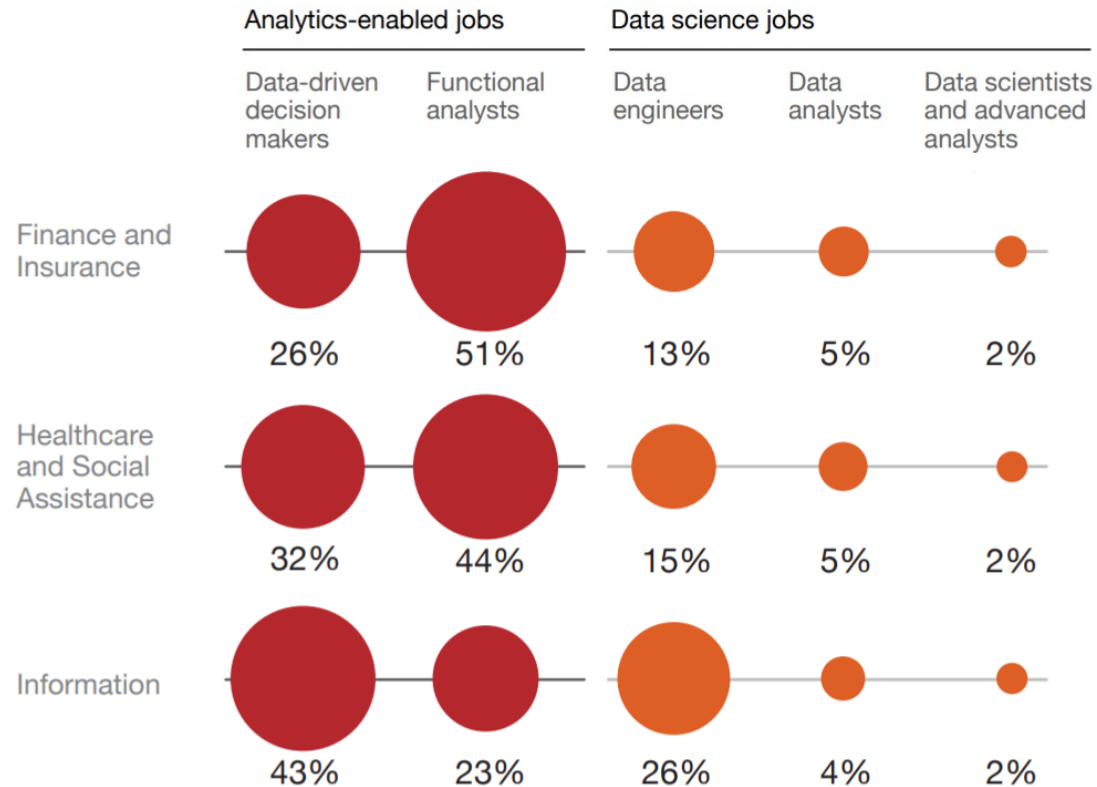
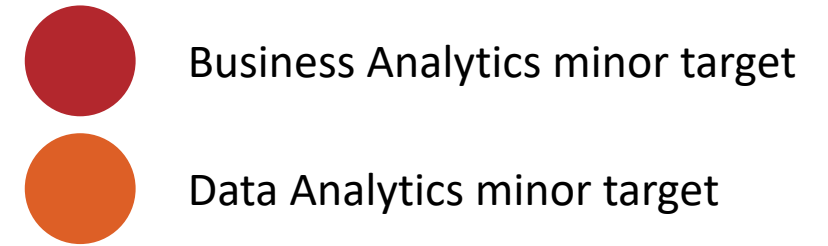
DATA/BUSA Minors Goals

- Provide a valuable skill option to **all Franklin undergraduates**.
- Cover **industry standard tools** (Excel, SQL, Tableau, Python, R) as determined by jobs research.
- Cover **essential knowledge** units for industry relevance.
- **Reuse** as much curriculum as possible.

Do you look for undergraduate job candidates with analytics/data science background?
Industry Survey, 2021



Analytics Skills Make Students Highly Marketable

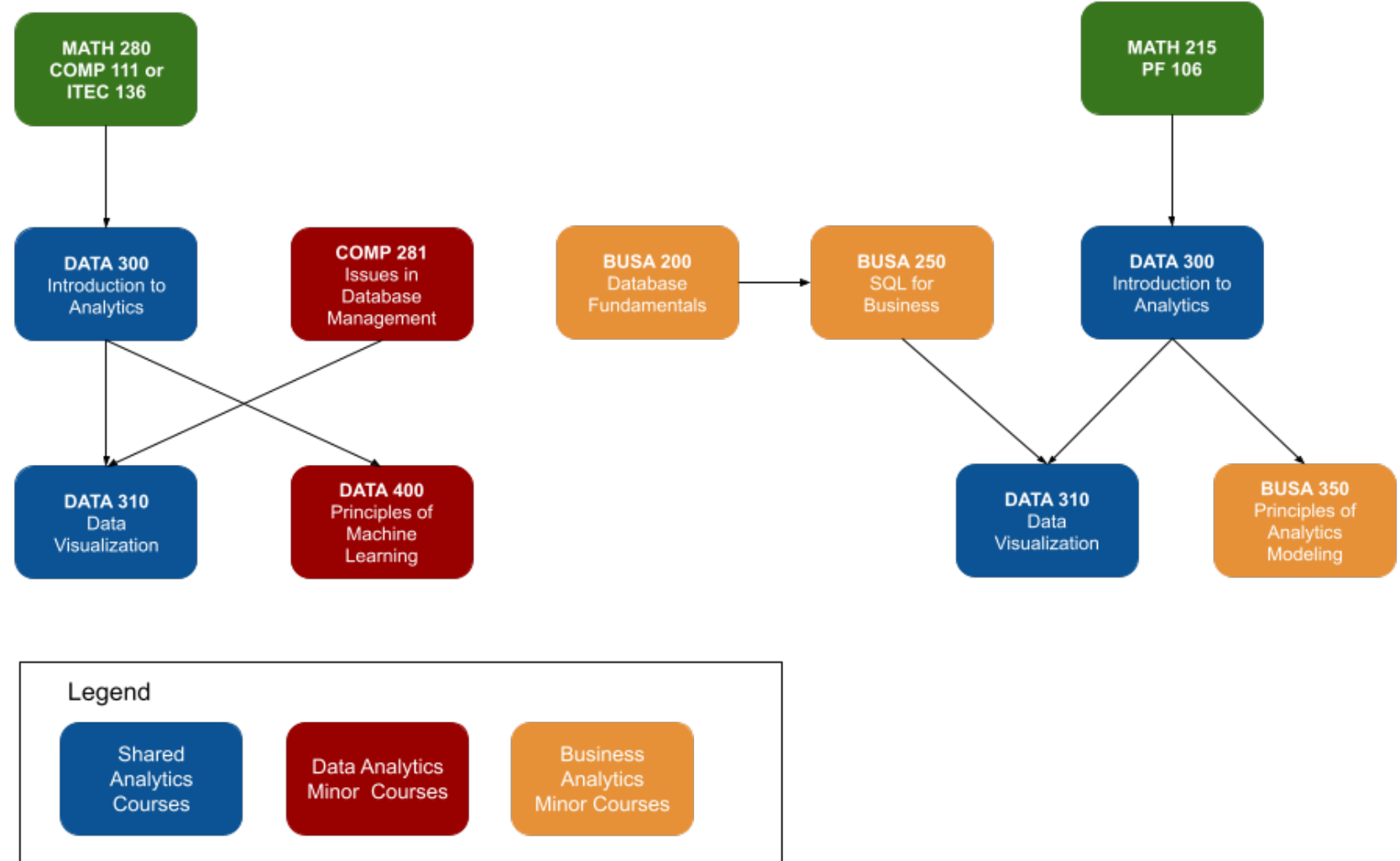


Curriculum

Data Analytics Minor

Effective Fall 2021

Business Analytics Minor



Prerequisites and Schedules

COMP 281 – Database Management Systems (existing course, 4 credit hrs, LF Laurie Crawford)

- Schedule: 21FA, onlineR

DATA 300 – Introduction to Analytics (redesigned from INFA 300, 4 credit hrs, LF Jiang Li)

- Prerequisites: MATH 215 or MATH 280, PF 106 or COMP 111 or ITEC 136

– Schedule: 21FA onlineU

Notes: a **direct substitute for INFA 300**; a **major elective in many business-school bachelor programs**

DATA 310 – Data Visualization (redesigned from INFA 350, 4 credit hrs, LF Nimet Alpay)

- Prerequisites: DATA 300, BUSA 250 or COMP 281
- Schedule: 22SP
- Note: a **direct substitute for INFA 350**

DATA 400 – Principles of Machine Learning (same as COMP 411, 4 credit hrs, LF Jiang Li)

– Schedule: 21FA, onlineR

BUSA 200 – Database Fundamentals

(new course, a general education course to replace PF 108, 2 credit hrs, LF Laurie Crawford)

- Prerequisites: PF 121 or PF 321
- Schedule: 21FA onlineF

BUSA 250 – SQL for Business (new course, 2 credit hrs, LF Jiang Li)

- Prerequisites: BUSA 200, MATH 215 or MATH 280
- Schedule: 21FA onlineH

BUSA 350 – Principles of Analytics Modeling (redesigned from INFA 420, 4 credit hrs, LF Jiang Li)

- Prerequisites: DATA 300
- Schedule: 21FA onlineH

Note: **a direct substitute of INFA 420**

Suggestions

1. Please let the INFA students know INFA 300 and INFA 420 will be replaced by DATA 300 and BUSA 350 from Fall 2021. Also, BUSA 350 is a 6-week course.
2. If students are interested in analytics but hesitate to take DATA 300, please let them know this course is to introduce analytics principles, and the hands-on course design using McGraw Hill's interactive textbook and web-based assignment platform can help them to learn much smoothly.
3. Please clarify the differences between BUSA 200 and BUSA 250: The former is an introduction to database fundamentals. The zyBooks, which is an interactive platform similar to McGraw Hill's , has been applied. The latter focuses on the hands-on applications of SQL in real-world business problem. A convenient web-based database interface will be used.