

## Example 4 year plan (Start with CS 1400)

### Year 1

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Fall Semester (16 credits)

- CS 1400, Intro to Computer Programming \_\_\_\_\_(3)
- Math 1310, Engineering Calculus I (QR) \_\_\_\_\_(4)
- [[Wrtg 2010, Intermediate Writing (WR2) \_\_\_\_\_(3)]]
- [[American Institutions (AI) \_\_\_\_\_(3)]]
- [[Humanities (HF): \_\_\_\_\_(3)]]

Spring Semester (14 credits)

- CS 1410, Object-Orient. Prog. \_\_\_\_\_(4)
- Math 1320, Engineering Calculus II (QR) \_\_\_\_\_(4)
- [[Wrtg 3012 or 3014 or 3015 (CW) \_\_\_\_\_(3)]]
- [[Social/Behavioral Science (BF): \_\_\_\_\_(3)]]

### Year 2

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Fall Semester (17 credits)

- CS 2420, Algorithms/Data Struct. \_\_\_\_\_(4)
- Math 3070, Applied Statistics 1 \_\_\_\_\_(4)
- Math 2270, Linear Algebra \_\_\_\_\_(4)
- ELEC:[ATMOS 3000, Professional Dev in Atm. Sci.(2)] [[Humanities (HF):\_(3)]]

Spring Semester (16 credits)

- CS 2100, Discrete Structures \_\_\_\_\_(3)
- DS 2500, Data Wrangling \_\_\_\_\_(3)
- Math 3080, Applied Statistics 2 \_\_\_\_\_(4)
- [[Fine Arts (FF): \_\_\_\_\_(3)]]
- [[Elective]] \_\_\_\_\_(3)

### Year 3

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Fall Semester (16 credits)

- DS 3190, Foundations of Data Analysis \_\_\_\_\_(3)
- CS 3500, Software Practice I \_\_\_\_\_(4)
- CS 5630, Visualization for Data Science \_\_\_\_\_(3)
- ELEC:[CS 3540, Human Computer Interactions\_(3)] ELEC:[ATMOS 5340, Envir. Progr. & Data Analysis(3)]

Spring Semester (15 credits)

- CS 4150, Algorithms \_\_\_\_\_(3)
- DS 5140, Data Mining \_\_\_\_\_(3)
- DS 5530, Database Systems \_\_\_\_\_(3)
- ELEC:[ATMOS 5400, The Climate System \_\_\_\_\_(3)]
- [[Elective]] \_\_\_\_\_(3)

### Year 4

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Fall Semester (12 credits)

- DS 4940, Undergraduate Research \_\_\_\_\_(3)
- DS 5350, Machine Learning \_\_\_\_\_(3)
- [[CS 4962, Ethics in Data Science (BF?) \_\_\_\_\_(3)]]
- ELEC:[Math 5080, Statistical Inference 1 \_\_\_\_\_(3)]

Spring Semester (16 credits)

- DS 4970, Bachelors Thesis \_\_\_\_\_(3)
- ELEC:[Math 5090, Statistical Inference 2 \_\_\_\_\_(3)]
- ELEC:[CS 4300, Artificial Intelligence \_\_\_\_\_(3)]
- [[Fine Arts (FF): \_\_\_\_\_(3)]]
- [[Elective]] \_\_\_\_\_(4)

## Example 4 year plan (Start with CS 1420)

### Year 1

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Fall Semester (14 credits)

- CS 1420, Object-Orient. Prog. \_\_\_\_\_(4)
- Math 1310, Engineering Calculus I (QR) \_\_\_\_\_(4)
- Wrtg 2010, Intermediate Writing (WR2) \_\_\_\_\_(3)
- [[American Institutions (AI) \_\_\_\_\_(3)]]

Spring Semester (17 credits)

- CS 2420, Algorithms/Data Struct \_\_\_\_\_(4)
- DS 2500, Data Wrangling \_\_\_\_\_(3)
- Math 1320, Engineering Calculus II (QR) \_\_\_\_\_(4)
- [[Wrtg 3012 or 3014 or 3015 (CW) \_\_\_\_\_(3)]]
- [[Fine Arts (FF): \_\_\_\_\_(3)]]

### Year 2

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Fall Semester (14 credits)

- CS 2100, Discrete Structures \_\_\_\_\_(3)
- Math 2270, Linear Algebra \_\_\_\_\_(4)
- Math 3070, Applied Statistics 1 \_\_\_\_\_(4)
- ELEC:[CS 3540, Human Computer Interactions\_(3)]

Spring Semester (17 credits)

- CS 3500, Software Practice I \_\_\_\_\_(4)
- Math 3080, Applied Statistics 2 \_\_\_\_\_(4)
- [[Fine Arts (FF): \_\_\_\_\_(3)]]
- [[Elective]] \_\_\_\_\_(3)
- [[Elective]] \_\_\_\_\_(3)

### Year 3

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Fall Semester (15 credits)

- DS 3190, Foundations of Data Analysis \_\_\_\_\_(3)
- CS 4150, Algorithms \_\_\_\_\_(3)
- CS 5630, Visualization for Data Science \_\_\_\_\_(3)
- ELEC:[LING 4020, Introduction to Syntax \_\_\_\_\_(3)]
- [[DS 3390, Ethics in Data Science (BF?) \_\_\_\_\_(3)]]

Spring Semester (15 credits)

- DS 5140, Data Mining \_\_\_\_\_(3)
- DS 5530, Database Systems \_\_\_\_\_(3)
- ELEC:[CS 4300, Artificial Intelligence \_\_\_\_\_(3)]
- ELEC:[LING 5300, Computational Linguistics \_\_\_\_\_(3)]
- [[Humanities (HF): \_\_\_\_\_(3)]]

### Year 4

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Fall Semester (15 credits)

- DS 4800, Senior Capstone Design \_\_\_\_\_(3)
- DS 5350, Machine Learning \_\_\_\_\_(3)
- ELEC:[CS 5340, Natural Language Processing(3)] [[Humanities (HF): \_\_\_\_\_(3)]]
- [[Elective]] \_\_\_\_\_(3)

Spring Semester (15 credits)

- DS 4850, Senior Capstone Project \_\_\_\_\_(3)
- ELEC:[BMI 6015, Applied Machine Learn. in BMI (3)]
- [[Social/Behavioral Science (BF): \_\_\_\_\_(3)]]
- [[Elective]] \_\_\_\_\_(3)
- [[Elective]] \_\_\_\_\_(3)