

Bachelor of Science in Mathematics -- Data Science Concentration

0. _____ APSU 1000 (1) Freshmen Seminar

I. Communications -- 9 hours

- _____ ENGL 1010 (3) English Comp. I
- _____ ENGL 1020 (3) English Comp. II
- _____ COMM 2045 (3) Public Speaking

II. History -- 6 hours -- *Select any two courses below.*

- _____ HIST 2010 (3) Early US Hist.
- _____ HIST 2020 (3) Modern US Hist.
- _____ HIST 2030 (3) Hist. of TN
- _____ HIST 2310 (3) Early World Hist.
- _____ HIST 2320 (3) Modern World Hist.

III. Humanities and/or Fine Arts -- 9 hours

- _____ ENGL 2330 (3) Topics in World Lit. (or HON 2220)
Select one course from each of two disciplines below or complete one Foreign Language sequence
- _____ ART 1035 (3) Intro to Art
- _____ DANC 1200 (3) Intro to Dance
- _____ MUS 1030 (3) Intro to Music
- _____ MUS 2030 (3) World Music
- _____ MUS 2200 (3) Popular World Music
- _____ PHIL 1030 (3) Intro to Philosophy
- _____ PHIL 1040 (3) Intro to Ethics
- _____ PHIL 2200 (3) Religion and the World
- _____ THEA 1030 (3) Intro to Theatre
- _____ FREN 1010 (3) Intro French I
- _____ FREN 2010 (3) Intro French II
- _____ GERM 1010 (3) Intro German I
- _____ GERM 2010 (3) Intro German II
- _____ GREK 1010 (3) Intro Greek I
- _____ GREK 2010 (3) Intro Greek II
- _____ LATN 1010 (3) Intro Latin I
- _____ LATN 2010 (3) Intro Latin II
- _____ SPAN 1010 (3) Intro Spanish I
- _____ SPAN 2010 (3) Intro Spanish II

IV. Natural Sciences -- 8 hours

- _____ *Select any two courses listed below.*
- _____ ASTR 1010/1011 (4) Planetary Astr.
- _____ ASTR 1020/1021 (4) Stellar Astr.
- _____ BIOL 1010/1011 (4) Intro to Bio.
- _____ BIOL 1020/1021 (4) Diversity of Life
- _____ BIOL 1040/1041 (4) Human Bio.
- _____ BIOL 1110/1111 (4) Gen. Bio. I
- _____ BIOL 1120/1121 (4) Gen. Bio. II
- _____ BIOL 2010/2011 (4) Hum. Anat. and Phys. I
- _____ BIOL 2020/2021 (4) Hum. Anat. and Phys. II
- _____ BIOL 2400 (4) Sustaining Biodiversity
- _____ CHEM 1010/1011 (4) Intro. Chem I
- _____ CHEM 1020/1021 (4) Intro. Chem. II
- _____ CHEM 1050/1051 (4) Chem. For Everyone
- _____ CHEM 1110/1111 (4) Gen. Chem. I
- _____ CHEM 1120/1121 (4) Gen. Chem. II
- _____ CHEM/PHYS 1710/1711 (4) Intro Chem. and Phys.
- _____ GEOL 1040/1041 (4) Physical Geo.
- _____ GEOL 1050/1051 (4) Historical Geo.
- _____ PHYS 1010/1011 (4) Concepts: Motion,...
- _____ PHYS 1020/1021 (4) Concepts: Electromagnetism,...
- _____ PHYS 2010/2021 (4) Coll. Phys. I
- _____ PHYS 2020/2021 (4) Coll. Phys. II
- _____ PHYS 2110/2111 (4) Univ. Phys. I
- _____ PHYS 2120/2121 (4) Univ. Phys. II

V. Social and Behavioral Science -- 6 hours

Select one course from each of two disciplines below.

- _____ AAST 2200 (3) Intro African-American Studies
- _____ COMM 1110 (3) Media and Social Institutions
- _____ CRJ 1010 (3) - Intro Criminal Justice
- _____ ECON 2000 (3) Contemporary Economics
- _____ ECON 2100 (3) Princ. Of Macroeconomics
- _____ GEOG 1015 (3) Physical Geography
- _____ GEOG 1035 (3) World Regional Geo. I
- _____ GEOG 1045 (3) World Regional Geo. II
- _____ HHP 1250 (3) Wellness Concepts
- _____ LDSP 2100 (3) Found. Of Leadership
- _____ POLS 2000 (3) Intro to Politics
- _____ POLS 2010 (3) American Nat. Gov.
- _____ POLS 2040 (3) Intro Public Policy
- _____ POLS 2070 (3) Interntnl. Politics
- _____ PSYC 1010 (3) Intro to Psychology
- _____ PSYC 1050 (3) Psycho. of Mod Culture
- _____ SOC 1010 (3) Intro to Sociology
- _____ SOC 1040 (3) Social Problems
- _____ SOC 2900 (3) Marriage and Family
- _____ SW 2110 (3) Intro to Social Work
- _____ WGS 2050 (3) Women and Culture

VI. Mathematics Core

- _____ MATH 1910 (4) Calculus I
- _____ MATH 1920 (4) Calculus II
- _____ MATH 2110 (4) Calculus III
- _____ MATH 3010 (3) Intro Math Reasoning
- _____ MATH 3450 (3) Linear Algebra
- _____ MATH/STAT 4240 (3) Probability
- _____ MATH 4450 (3) Mathematical Models
- _____ MATH/STAT 4810 (1) Senior Seminar

VIII. Data Science Concentration

- _____ MATH 4310 (3) Machine Learning I
- _____ MATH 4320 (3) Machine Learning II
- _____ MATH 4321 (3) Data Analysis and Programming
- _____ STAT 4170 (3) Data Visualization and Exploration

Select any three courses (9 to 10 credit hours) in consultation with your advisor

- _____ MATH 3000 (3) Discrete Mathematics
- _____ STAT 3250 (3) Statistical Methods
- _____ STAT 4120 (3) Regression Analysis
- _____ STAT 4140 (3) Time Series Analysis
- _____ STAT 4200 (3) SAS Programming
- _____ STAT 4290 (3) Predictive Analytics
- _____ CSCI 1010/1011 or 2000 (4) Programming

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