

B.S. in Data Science and Analytics at Thomas Edison State University, with UPI Study courses

UPI Study made this plan; TESU did not provide, review or approve it. Students ask us for plans like this all the time, so we built it ourselves from TESU's published catalog and its posted equivalency list for UPI Study courses, as carefully as we can. Catalogs and transfer rules change, and TESU alone decides what counts toward your degree. Please check every line of this plan and sheet with your TESU advisor before you enroll or pay. UPI Study takes no responsibility for decisions made from this plan; it is a planning tool to help you.

Page 1

Requirement	TESU course	UPI Study course	Status
I. General Education - D. Scientific Knowledge 			7 of 7 credits from UPI Study
Computer Concepts and Applications (TESU features CIS-1070) 3 credits	CIS-1070 Computer Concepts and Applications	Computer Concepts and Applications (Computer Science 150, 3 cr) Counts as CIS-1070 Computer Concepts and Applications	Covered
Any Lab Science 4 credits	Any Lab Science	Chemistry I (Chemistry 111, 3 cr) Counts as CHE-1110 General Chemistry I Chemistry Lab (CHEM 111L, 1 cr) Counts as CHE-1280 General Chemistry I Lab	Covered
I. General Education - C. Knowledge of Human Cultures 			12 of 15 credits from UPI Study
Social Sciences 3 credits	CRJ-2800 Forensic Science	Introduction to Psychology (Psychology 110, 3 cr) Counts as PSY-1010 Introduction to Psychology	Covered
History 3 credits	HIS-1130 American History I	UPI suggests trying US History 1.	UPI suggests trying
Humanities 3 credits	FIL-1100 Exploring American Cinema	Principles of Philosophy (Philosophy 200, 3 cr) Counts as PHI-1010 Introduction to Philosophy	Covered
Two more courses from Social Sciences, History or Humanities 6 credits	SOC-2910 Criminology HIS-1140 American History II HUM-1030 Introduction to the Humanities III: Music	Macroeconomics (Economics 252, 3 cr) Counts as ECO-1110 Macroeconomics Microeconomics (Economics 251, 3 cr) Counts as ECO-1120 Microeconomics	Covered
I. General Education - B. Civic and Global Leadership 			6 of 9 credits from UPI Study
Diversity / Intercultural Literacy 3 credits	SOC-1010 Our Changing World: An Introduction to Sociology	Introduction to Sociology (Sociology 110, 3 cr) Counts as SOC-1010 Our Changing World: Intro to Sociology	Covered
Ethical Leadership 3 credits	ETH-2200 Leading the Way: A Path Towards Ethical Leadership	Business Ethics (Business 211, 3 cr) Counts as PHI-3840 Ethics and the Business Professional	Covered
Civic Engagement and Awareness 3 credits	POS-1100 American Government	Ask your advisor about this.	Ask your advisor about this
II. Area of Study - Data Science and Analytics (42 credits) - Math and Lab Science (7 credits) 			3 of 7 credits from UPI Study
Any Math Course 3 credits	Any Math Course	Calculus 1 (Math 165, 4 cr) Counts as MAT-2310 Calculus I	Covered
Any Lab Science 4 credits	Any Lab Science	Physics I (Physics 200, 3 cr) Ask the TESU advisor: TESU-confirmed as PHY-1110 Physics I (3 cr, no lab); UPI Study's Physics Lab is only UPI Study's suggestion, so this is short of a 4-credit lab science.	Ask your advisor
I. General Education - A. Intellectual and Practical Skills 			3 of 15 credits from UPI Study
Written Communication (English Composition I and II) 6 credits	ENC-1010 Writing for Success ENC-1020 Writing for Success II	UPI suggests trying English Composition 1.	UPI suggests trying

Requirement	TESU course	UPI Study course	Status
Oral Communication 3 credits	COM-2090 Public Speaking	UPI suggests trying Business Communication.	UPI suggests trying
Quantitative Literacy and Mathematical Skills 3 credits	MAT-1150 Intermediate Algebra	Quantitative Analysis (Math 250, 3 cr) Counts as BUS-2100 Quantitative Skills for Business	Covered
Information Literacy (SOS-1100, TESU institutional requirement) 3 credits	SOS-1100 Fact, Fiction, or Fake? Information Literacy Today	Take this at TESU.	Take this at TESU

II. Area of Study - Data Science and Analytics (42 credits) - A. Core Area of Study Courses (23 credits) 0 of 23 credits from UPI Study



Principles of Statistics 3 credits	STA-2010 Principles of Statistics	Principles of Statistics (Statistics 101, 3 cr) Ask the TESU advisor: TESU's equivalency is ECO-2700 Business & Economic Statistics, not the STA-2010 named here.	Ask your advisor
Analytics core (Predictive Analytics I-III, Optimization, Network Analysis, Forecasting, Interactive Data Visualization) 20 credits	Predictive Analytics I - Machine Learning Tools; Predictive Analytics II - Neural Nets and Regression; Predictive Analytics III - Dimension Reduction, Clustering and Association Rules; Optimization - Linear Programming; Introduction to Network Analysis; Forecasting Analytics; Interactive Data Visualization	UPI's Introduction to Artificial Intelligence already counts in this plan as COS-4510 Artificial Intelligence. Ask your advisor if UPI's Introduction to Artificial Intelligence could count for this.	Ask your advisor

II. Area of Study - Data Science and Analytics (42 credits) - B. Area of Study Electives (four courses, 12 credits) 0 credits from UPI Study



Area of Study Electives (SQL, Regression, R, Python for Analytics, Integer and Nonlinear Programming, Risk Simulation) 12 credits	SQL - Introduction to Database Queries; Regression Analysis; Introduction to R Programming; Python for Analytics; Integer and Nonlinear Programming and Network Flow; Risk Simulation and Queuing	Programming in Python (Computer Science 230, 3 cr) Ask the TESU advisor: TESU-confirmed as COS-2050 Python Programming; the elective list names Python for Analytics, a different course, so the advisor decides. Database Programming (Computer Science 381, 3 cr) Ask the TESU advisor: TESU-confirmed as ITS-2310 Database Programming; the elective list names SQL - Introduction to Database Queries, so the advisor decides.	Ask your advisor
---	---	---	------------------

Made by UPI Study, not by TESU. Check every line with your TESU advisor before you enroll. What each UPI Study course counts as comes from TESU's posted equivalency list for UPI Study courses. A suggested course is one to try, not an official equivalency, and is never counted. ACE and NCCRS have over 2,100 cooperating colleges that will consider accepting credits; the final decision is with the universities.

The live plan, the plan builder, the Excel sheet and the sources: <https://www.upistudy.com/degree-plans/tesu/bs-data-science-analytics>