

# DATA SCIENCE CERTIFICATE IN APPLIED SCIENCE

## Overview

*Anticipated 2025FA start – Pending State Tech System and DOE approvals.*

## Program Description

The embedded Data Science Certificate equips students with the foundational skills and knowledge required to analyze and interpret large data sets using statistical techniques and modern computing tools. This program focuses on essential topics such as data visualization, machine learning, statistical analysis, and database management. Students will gain hands-on experience working with real-world data, preparing them for roles in data analytics, data engineering, or advanced studies in the field of data science.

## Mission Statement

The mission of the Data Science Embedded Certificate is to provide students with the analytical, computational, and critical thinking skills necessary to extract insights from data. By focusing on practical applications and industry-relevant tools, the program aims to develop graduates who are capable of solving complex problems and driving data-driven decision-making in a variety of industries..

## Entrance Requirements

High school diploma or GED

## Type of Program

Day

## Requirements for Completion

A grade of "C" or higher in all courses is required.

## Employment Opportunities

## Recommended Program Schedule

Listed below is the ideal grouping of courses in order by semester. This plan assumes a full-time schedule. Note, however, that many variables can affect this plan, and not every course is offered every semester. Please see your advisor to map out your own personalized progression toward graduation.

**Note:** Please contact your advisor for recommended evening schedules.

### Preferred Sequence

First Semester		Hours
CPT 113	Information Systems	3
CPT 257	Operating Systems	3
CPT 170	Computer Applications I	3
<b>Total Semester Hours</b>		<b>9</b>
Second Semester		
CPT 127	Python Programming I	3
IST 272	Relational Database	3
<b>Total Semester Hours</b>		<b>6</b>

### Third Semester

CPT 227	Python Programming II	3
CPT 189	Data Science I	3
Select One of the Following		3
IST 239	Javascript	
CPT 236	Java Programming I	
<b>Total Semester Hours</b>		<b>9</b>

### Fourth Semester

CPT 273	Data Visualization	3
CPT 289	Data Science II	3
IST 278	Database Programming	3
<b>Total Semester Hours</b>		<b>9</b>
<b>Total Required Credit Hours</b>		<b>33</b>