

# BS in Data Science (DSCI)

## Four-Year Plan

The DSCI degree requires a minimum of 120 hours to complete.

YEAR	FALL SEMESTER	SPRING SEMESTER
<b>Freshman</b>	COSC 10403: Intro to Programming	COSC 20203: Techniques in Programming
	MATH 10524: Calculus I	MATH: 20123: Discrete Math I
	TCU Core <sup>1</sup>	MATH: 20524: Calculus II
	TCU Core <sup>1</sup>	TCU Core <sup>1</sup>
<b>Sophomore</b>	TCU Core <sup>1</sup>	TCU Core <sup>1</sup>
	COSC 20803: Data Structures	COSC/MATH 30103: Intro to Data Science
	CITE 30103: Unix/Linux System Admin	MATH 30224: Linear Algebra
	MATH 30123: Discrete Math II	TCU Core - NSC <sup>1</sup>
<b>Junior</b>	TCU Core <sup>1</sup>	TCU Core <sup>1</sup>
	TCU Core <sup>1</sup>	TCU Core <sup>1</sup>
	COSC 30603: Database Systems	COSC 40023: Data Mining and Visualization
	COSC 40403: Analysis of Algorithms	COSC 40503: Artificial Intelligence
<b>Senior</b>	MATH 30803: Probability	MATH 30853: Statistics
	TCU Core <sup>1</sup>	TCU Core <sup>1</sup>
	Free Elective	Free Elective
	COSC 40943: Software Engineering <sup>4</sup>	COSC 40993: Senior Design Project <sup>4</sup>
<b>Senior</b>	COSC 40523: Deep Learning	COSC Elective <sup>3</sup>
	MATH Elective <sup>2</sup>	Free Elective
	Free Elective	Free Elective
	Free Elective	Free Elective

**Note:** 42 hours must be in advanced courses (30000 or 40000 level) **taken at TCU.**

<sup>1</sup> Must be selected from university approved courses. The approved courses are identified in the schedule of classes.

<sup>2</sup> Must be an approved MATH elective.

<sup>3</sup> Must be an approved CITE/COSC elective.

<sup>4</sup> COSC 40943 and COSC 40993 are writing emphasis courses (TCU Core WEM).