## BS in Data Science (DSCI) Four-Year Plan

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

YEAR	FALL SEMESTER	SPRING SEMESTER
	COSC 10403: Intro to Programming	COSC 20203: Techniques in Programming
	MATH 10524: Calculus I	MATH: 20123: Discrete Math I
Freshman	ENGL 10803: Introductory Comp	MATH: 20524: Calculus II
	Elective – Religious Traditions <sup>1</sup>	ENGL 20803: Intermediate Comp
	Elective – Historical Traditions <sup>1</sup>	Elective – Cultural Awareness <sup>1</sup>
	COSC 20803: Data Structures	COSC/MATH 30103: Intro to Data Science
	CITE 30103: Unix/Linux System Admin	MATH 30224: Linear Algebra
Sophomore	MATH 30123: Discrete Math II	Elective – Science <sup>1</sup>
	Elective – Science <sup>1</sup>	Elective – Literary Traditions <sup>1</sup>
	Elective – Fine Arts <sup>1</sup>	Elective – Global Awareness <sup>1</sup>
	COSC 30603: Database Systems	COSC 40023: Data Mining and Visualization
	COSC 40403: Analysis of Algorithms	COSC 40503: Artificial Intelligence
Junior	MATH 30803: Probability	MATH 30853: Statistics
	Elective – Oral Communication <sup>1</sup>	Elective – Citizenship/Social Values <sup>1</sup>
	Elective – Free	Elective – Free
Senior	COSC 40943: Software Engineering	COSC 40993: Senior Design Project
	COSC 40523: Deep Learning	Elective – Computer Science <sup>3</sup>
	Elective – Math <sup>2</sup>	Elective – Free
	Elective – Free	Elective – Free
	Elective – Free	Elective – Free

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

<sup>&</sup>lt;sup>1</sup> Must be selected from university-approved courses and meet core requirements.

<sup>&</sup>lt;sup>2</sup> Must be selected from MATH 30524, MATH 40223, MATH 40663, MATH 40853 and MATH 40883.

<sup>&</sup>lt;sup>3</sup> Must be selected from approved computer science electives at the 30000 level or above.