

## DATA SCIENCE CDSM UNIT ACCOUNTING TABLE

Course	Units	STAT	STAT minor	CSC	CS Minor
<b>Preliminary Coursework (included in both CSC and STAT majors)</b>					
CSC 101: Fundamentals of CS I	4	required in major		required in major	
MATH 143: Calculus III	4	Required in major		required in major	
MATH 206/244: Linear Algebra/ Linear Analysis	4	required in major		required in major	
STAT 302: Introduction to Statistics II or STAT 312: Statistical Methods for Engineers	4	required in major (302)		required in major (312)	
CSC 348: Discrete Structures  Or  MATH 248: Methods of Proof	4	required in major (248)		required in major (348)	
<b>SUBTOTAL</b>	<b>20</b>				
<b>Data Science Minor Coursework</b>					
CSC 202: Data Structures	4	Elective B		required in major	
CSC 203: Project-Based Object-Oriented Programming and Design	4	Elective B		required in major	
STAT 305 Introduction to Probability and Simulation	4	required in major		Math/Stat elective	
CSC 365: Intro to Databases	4	Approved elective		technical elective (1)	
CSC 369: Distributed Computations	4	Approved elective		technical elective (2)	
CSC 349: Algorithms	4	Elective B		required in major	
STAT 331: R Programming	4	required in major		technical elective (3)	
STAT 334: Applied Linear Models	4	required in major		Free elective	
STAT 419: Applied Multivariate analysis	4	Elective A		<b>Minor</b>	<b>4</b>
CSC 466: Knowledge Discovery from Data	4	Free elective		technical elective (4)	
DATA 301: Introduction to Data Science	4	<b>Minor</b>	<b>4</b>	<b>Minor</b>	<b>4</b>

DATA 401: Data Science	4	Minor	4	Minor	4
DATA 451: Data Science Capstone I	2	Minor	2	Minor	2
DATA 452: Data Science Capstone II	2	Minor	2	Minor	2
Technical electives (CS, STAT, DATA)	8	Elective A (if STAT)		technical elective (5- 6)	
SUBTOTAL	60		12		16
<b>TOTAL</b>	<b>80</b>		<b>12</b>		<b>16</b>

**Note:** B.S. in Computer Science students will use up the following elective units from the B.S. in CS curriculum:

- Math/State elective: 4 units
- Free Elective: 4 units
- Technical Elective: 24 units

These are **all** elective units allowed in the B.S. in Computer Science (note: 8 of the 24 technical elective units can be used for any approved technical elective)

**Note:** B.S. in Statistics students will use up the following elective units from the B.S. in Statistics curriculum:

- Approved elective: 8 units
- Elective B: 12 units
- Elective A: 12 units
- Free elective: 4 units