Data Science (BMath) Checklist

Terms	Calendar F2018-F21	Terms	Calendar F2022	lf you liked	Try
Core					
FWS	MATH 135, 145	FWS	MATH 135, 145	STAT 330	STAT 450
FWS	MATH 106, 136, 146	FWS	MATH 106, 136, 146	STAT 331/371	STAT 431
FWS	MATH 127, 137, 147	FWS	MATH 127, 137, 147		STAT 443
FWS	MATH 128, 138, 148	FWS	MATH 128, 138, 148	STAT 332/372	STAT 454
FWS	MATH 235, 245	FWS	MATH 235, 245		STAT 430
FWS	MATH 237, 247 ⁷	FWS	MATH 237, 247 ⁷	STAT 333	STAT 433
FWS	STAT 230, 240	FWS	STAT 230, 240	STAT 340/341	STAT 440
FWS	STAT 231, 241	FWS	STAT 231, 241		STAT 441
FWS	CS 115, 135, 145	FWS	CS 115, 135, 145		STAT 442
FWS	CS 116, 136, 146	FWS	CS 116, 136, 146		STAT 444
FWS	MATH 239 ⁷ , 249 ⁷	FWS	MATH 239 ⁷ , 249 ⁷	STAT 337	STAT 431
FWS	Communications Course ¹	FWS	Communications Course ¹		STAT 436
Data Science Mandatory Courses					STAT 437
		<u>FW</u>	CS 136L		
FWS	CS 240	<u>FWS</u>	CS 240	Going to	Try
FWS	CS 241	FWS	CS 241	Industry	STAT 435
FWS	CS 245	FWS	CS 245	Computers	STAT 440
FWS	CS 246	FWS	CS 246	(Big Data)	STAT 441
FWS	CS 251	FWS	CS 251		STAT 442
FWS FWS	CS 341 CS 348	FWS FWS	CS 341 CS 348	Grad School	STAT 444
	STAT 330 ⁹		STAT 330 ⁹		STAT 450
FWS		FWS		Finance	STAT 433
FWS	STAT 331 ²	FWS	STAT 331 ²		STAT 443
FWS	STAT 332 ³	FWS	STAT 332 ³	Biology/Health	STAT 431
FWS	STAT 333 ⁹	FWS	STAT 333 ⁹		STAT 436
FW	STAT 341	FW	STAT 341		STAT 437
FWS	ENGL 378 ⁴	FWS	ENGL 378 ⁴		STAT 438
	Data Science Mandat	ory with C	•	l	
10	One Of	10	One Of		Schema
10 10	CS 431 CS 451	10 10	CS 431 CS 451		CS 115
10	One Of	10	One Of	•	l CS 116< CS 135
10	CS 480	10	CS 480		C3 116< C3 135
10	CS 485	10	CS 485		MATH 135 CS136
10	CS 486	10	CS 486	•	/ \
FW	STAT 441	FW	STAT 441		CS 245 CS 246 <i>CS 251</i>
	Two Of		Two Of		1/ 1
10	CS 480	10	CS 480	STAT 230>	CS240 CS 241
10	CS 485	10	CS 485	1	\ \
10	CS 486	10	CS 486	MATH 239>	CS341 CS 348 CS 350
FWS	STAT 431	FWS	STAT 431		\ /
WS	STAT 440	WS	STAT 440	CS 251>	CS 431 CS 451
FW	STAT 441	FW	STAT 441		
FW	STAT 442	FW	STAT 442		
FWS	STAT 443	FWS	STAT 443		
WS	STAT 444	WS	STAT 444		
	An additional		An additional		
	4 Total Math ⁸ 3XX/4XX in		4 Total Math ⁸ 3XX/4XX in		
	addition to your STAT 3XX/4XX		addition to your STAT 3XX/4XX		
	courses - these can include CS		courses - these can include CS		
	431, 341 and 348 but not CS		431, 341 and 348 but not CS		
	485/486 if you are using them		485/486 if you are using them		
	as a STAT 4XX.		as a STAT 4XX.		
	Thus minimums of		Thus minimums of		
	>=10 non math		>=10 non math		
	>= 3 STAT 4XX ^{5,6}		>= 3 STAT 4XX ^{5,6}		
	>=26 math ⁸ courses ⁶		>=26 math ⁸ courses ⁶		
15.	>=40 courses		>=40 courses	j	
'Please see ugrad	calendar.uwaterloo.ca for a list of course	S.			

Please see ugradcalendar.uwaterloo.ca for a complete list of rules.

Where this list and the Undergraduate Calendar deviate, the Undergraduate Calendar takes precendence.

²STAT 331 can be replaced by STAT 371

³STAT 332 can be replaced by STAT 372.

⁴MTHEL 300

⁵One of these can be selected from: CS 457, 486, 485

⁶These can come from the "Mandatory with Options" section

 $^{^{7}\}mbox{For core, in most plans, you need one of MATH 237, 239. In DS you need both.}$

⁸A MATH course is any course offered in the Faculty (i.e. CS, STAT, ACTSC, ...) except COMM or MTHEL

 $^{^{9}}$ STAT 334 is not an acceptable course for any STAT plan. Please take STAT 330, 333.

¹⁰For CS courses please see https://cs.uwaterloo.ca/current/courses/course_descriptions for offerings

The Undergraduate Calendar is the official set of rules.