

## DS-Eng Sample Schedule (Fall 2015 – Summer 2022)

The sample schedule below summarizes the program requirements. DS-Eng students need 128 total credits towards their program and at least 42 credits in the major, excluding prerequisites.

Note that General Electives are intended to help students reach 128 total credits required for graduation and may vary from student to student, with 15 credits being the maximum needed. Please discuss with your advisor if you are unsure of the necessary number of General Elective credits for your degree.

	Total	1	2	3	4	5	6	7	8
<b>Data Science in Engineering</b>									
<b>Subjects Required by all Programs (55 credits)</b>									
Mathematics 115, 116, and (214 or 217)	12	4	4		4				
Mathematics 215	4			4					
Engineering 100, Introduction to Engineering	4		4						
Engineering 101, Introduction to Computers	4	4							
Chemistry 125/126 and 130, or Chemistry 210 and 211	5	5							
Physics 140 and Lab 141	5			5					
Physics 240 and Lab 241	5				5				
Intellectual Breadth	16	4			4	4	4		
<b>Program Core (30 credits)</b>									
Discrete Mathematics: EECS 203 or MATH 465	4		4						
EECS 280, Programming and Elementary Data Structures	4		4						
EECS 281, Data Structures and Algorithms	4			4					
STATS 412, Introduction to Probability & Statistics	3				3				
STATS 413, Applied Regression Analysis	4					4			
Databases and Applications: EECS 484 or EECS 485	4						4		
Machine Learning/Data Mining: EECS 445 or STATS 415	4					4			
Data Science Applications elective (see online list)	3								3
<b>Advanced Technical Electives and Capstone (12 credits)</b>									
Advanced Technical Electives in Data Science. 300-level or higher from online list of approved courses, or with advisor approval prior to taking the course.	8						4		4
Capstone Experience Course	4							4	
<b>Other Requirements</b>									
Flexible Technical Electives. 200-level or higher from a pre-approved list of courses, or with advisor approval prior to taking the courses.	11					4		4	3
TCHNCLCM 300	1						1		
EECS 496 Major Design Experience Professionalism	2							2	
TCHNCLCM 496, TCHNCLCM 497, TCHNCLCM 499, STATS 404, or STATS 485	2							2	
<b>General Electives (15 credits) – See note above</b>	15			3			3	3	6
<b>Total</b>	<b>128</b>	<b>17</b>	<b>16</b>	<b>16</b>	<b>16</b>	<b>16</b>	<b>16</b>	<b>15</b>	<b>16</b>