



## DAS Data Science and Measurement (30 ECTS)

Term	No.	Course	Prerequisites	ECTS	Year 1												Year 2											
					9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12								
Fall	400	<i>Fundamentals of Survey and Data Science</i> Choose 12 ECTS from "Electives Statistics" Choose 12 ECTS from "Electives Data Science"	No. Prereq.	6	400												400											
				12																								
				12																								
				<u>12</u>																								
				30																								
		<b>Electives Statistics</b>																										
Spring	706	<i>GLM</i>	No Prereq.	4													706											
Spring	730	<i>Measurement Error Models</i>	No Prereq.	2													730											
Fall	725	<i>Item Nonresponse and Imputation</i>	No Prereq.	2	725																		725					
Spring	726	<i>Multiple Imputation Why and How</i>	No Prereq.	2													726											
Spring	735	<i>Data Confidentiality and Statistical Disclosure Control</i>	No Prereq.	4													735											
Spring	747	<i>Practical Tools for Sampling I</i>	626	4													747											
Fall	748	<i>Practical Tools for Sampling and Weighting II</i>	626 or 747	2	748																		748					
Fall	626	<i>Sampling I</i>	No Prereq.	4	626																		626					
Spring	628	<i>Sampling II</i>	626	2													628											
Summer	702	<i>Analysis of Complex Survey Data</i>	626	4													702											
Summer	667	<i>Intro to Record Linkage with Big Data Applications</i>	No Prereq.	2													667											
Fall	662	<i>Introduction to Small Area Estimation</i>	No Prereq.	4													662											
Spring	742	<i>Practical Inference from Complex Surveys</i>	699J	4													742											
		<b>Electives Data Science</b>																										
Fall	703	<i>Computer Based Content Analysis I</i>	736, 673	2	703																		703					
Spring	704	<i>Computer Based Content Analysis II</i>	736, 673, 703	2													704											
Spring	751	<i>Intro to Big Data and Machine Learning</i>	No Prereq.	2													751											
Spring	752	<i>Intro to Data Visualization</i>	No Prereq.	2													752											
Summer	753	<i>Machine Learning II</i>	751	4													753											
Summer	736	<i>Web Scraping and API</i>	No Prereq.	2													736											
Summer	665	<i>Introduction to Real World Data Management</i>	No Prereq.	4													665											
Summer	667	<i>Intro to Record Linkage with Big Data Applications</i>	No Prereq.	2													667											
Summer	673	<i>Intro to Python and SQL</i>	No Prereq.	2													673											

Blue: mandatory courses  
 Yellow: electives statistics  
 Green: electives data science