

**DATA SCIENCE MSc Program (without Thesis)**

REMEDIAL COURSES				
Dept.	Code	Course Name	CR.	ECTS
MATH	131	Calculus I	NC	
MATH	132	Calculus II	NC	
MATH	133	Elementary Mathematics	NC	
MATH	134	Advanced Mathematics	NC	
MATH	221	Linear Algebra	NC	
MATH	341	Probability and Statistics	NC	
CSE	211	Data Structures	NC	
CSE	348	Database Management Systems	NC	
ES	112	Algorithms and Computer Programming	NC	
PROGRAM COURSES				
Dept.	Code	Course Name	CR.	ECTS
DATS	501	Fundamentals of Data Science	3	10
DATS	511	Applied Statistics and Data Analysis	3	10
CSE	585	Machine Learning	3	10
		Area Elective I	3	10
		Free Elective I	3	10
		Free Elective II	3	10
		Free Elective III	3	10
		Free Elective IV	3	10
		Free Elective V	3	10
		Free Elective VI	3	10
DATS	599	Term Project	NC	10
		TOTAL	30	110
EXTRA/NON-DEGREE COURSES				
Dept.	Code	Course Name	CR.	ECTS
		Extra/Non-degree	NC	

Course Group	Description
Area Elective I	CSE 548, ACM 502.
Free Elective I-VI	Unrestricted, by approval of advisor and DATS department.
Extra/Non-degree	Optional non-credit (NC) courses that are not part of the program.
Remedial Courses	Undergraduate level courses offered by department.