

Department: MATH**Program: Master of Science degree in Statistical Analytics, Computing and Modeling (SACM)**

Skill Set	Professional Application	Delivery of Skill Set Courses, extracurricular activities, etc. in which the skill set is introduced (I), reinforced (R), or mastered (M)
Oral & Written Communication	Important to be able to compose and communicate ideas in written form and during face-to-face discussions	MATH 5306 Thesis and MATH 5305 Graduate Research Project
Analytical and Logical thinking/Reasoning	Helps people process facts and pursue reasonable solutions instead of acting on their emotions.	MATH 5360 Analytic Decision Theory (M), STAT 5343 Applied Regression Analysis (R), STAT 5344 Predictive Analytics (M),
Using statistical computer software	Use software to run computations and analyze data	STAT 5331 Statistical Computing (I), STAT 5370 Survey Sampling Analytics (M)
Data collection, analysis & interpretation	To discover relevant information, draw or propose conclusions and support decision-making to solve problems.	STAT 5331 Statistical Computing (I), STAT 5332 Big Data and Computing (I), STAT 5343 Applied Regression Analysis (R), STAT 5344 Predictive Analytics (M), STAT 5361 Multivariate Statistics (M), STAT 5362 Nonparametric Statistics (M)
Ability to carry-out research independently	Being innovative in solving problems: discover relevant information, draw or propose conclusions and support decision-making to solve problems.	STAT 5345 Analysis of Research Data (I), STAT 5346 Design of Experiments (M), STAT 5351 Inferential Analytics (M), STAT 5370 Survey Sampling Analytics (M)