Texas A&M University

Marketable Skills: Master’s

Program: Master's in Analytics
Degree: MS
Department: MBA Programs Office
Contact Name: Myra Gonzalez
Contact Phone: 979-845-6855

Outcome
Master degree-program requirements, including theories, concepts, principles, and practice, and develop a coherent understanding of the subject matter through synthesis across courses and experiences.

Marketable Skills
- Analyze and interpret statistical data to identify significant differences in relationships among sources of information.
- Prepare data for processing by organizing information, checking for inaccuracies, and adjusting and weighting the raw data.
- Perform validation and testing of models to ensure adequacy and reformulate models as necessary.

Outcome
Apply subject matter knowledge in a range of contexts to solve problems and make decisions.

Marketable Skills
- Fit models in a wide variety of statistical analysis software tools: SAS, R, Tableau, Python, and SQL
- Determine appropriate methods for data analysis
- Analyzing information and evaluating results to choose the best solution and solve problems

Outcome
Use a variety of sources and evaluate multiple points of view to analyze and integrate information and to conduct critical, reasoned arguments.

Marketable Skills
- Create supporting documentation, such as metadata and diagrams of entity relationships, business processes, and process flow.
- Examine theories, such as those of probability and inference, to discover mathematical bases for new or improved methods of obtaining and evaluating numerical data.
- Providing guidance and expert advice to management or other groups on technical, systems-, or process-related topics.

Outcome
Communicate effectively.

Marketable Skills
- Talking to others to convey technical and complex information effectively
- The ability to apply general rules to specific problems to produce answers that make sense
- Prepare reports of findings, illustrating data graphically and translating complex findings into written text.

Outcome
Use appropriate technologies to communicate, collaborate, conduct research, and solve problems.
<table>
<thead>
<tr>
<th>Marketable Skills</th>
<th>Use of SAS, JMP, R, SQL, Python, Tableau, Oracle to fit statistical models and solve problems</th>
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<tr>
<td><strong>Outcome</strong></td>
<td><strong>Develop clear research plans and conduct valid, data-supported, theoretically consistent, and institutionally appropriate research.</strong></td>
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| Marketable Skills | • Synthesize current business intelligence or trend data to support recommendations for action.  
                     • Collect business intelligence data from available industry reports, public information, field reports, or purchased sources.  
                     • Evaluate the statistical methods and procedures used to obtain data to ensure validity, applicability, efficiency, and accuracy |
| **Outcome**       | **Choose ethical courses of action in research and practice.** |
| Marketable Skills | • Practice ethical data sharing.  
                     • Ability to debate difficult ethical situations involving the use of data.  
                     • Mindful of broader consequences of data and analysis practices. |