### Rice University – Project GRAD
#### Curriculum Matrix for Advanced Summer Mathematics Academy – 2003

<table>
<thead>
<tr>
<th></th>
<th>Number &amp; Operations</th>
<th>Patterns, Functions, &amp; Algebra</th>
<th>Measurement</th>
<th>Data Analysis, Statistics, &amp; Probability</th>
<th>Processes</th>
</tr>
</thead>
</table>
| **Foundations for Algebra II** | • Integer Concepts & Operations  
• Ratio & Proportion  
• Evaluating Functions | • Linear Functions  
• Absolute Value Functions  
• Quadratic Functions  
• Exponential Functions | • Length  
• Perimeter  
• Geometric Transformations  
• Area  
• Volume | • Statistics  
• Curve Fitting  
• Mathematical Modeling | Problem solving  
Reasoning & proof  
Communicating  
Connecting  
Representing  
Assessment |
| **Foundations for Pre-Calculus** | • Evaluating Functions  
• Absolute Value Functions  
• Radical Functions  
• Polynomial Functions  
• Logarithmic Functions  
• Exponential Functions  
• Piece-Wise Functions  
• Parametric Equations | • Right Triangle Trigonometry | | • Statistics  
• Curve Fitting  
• Mathematical Modeling | |