Goal: Analytical Thinking

The MSU graduate uses ways of knowing from mathematics, natural sciences, social sciences, humanities, and arts to access information and critically analyzes complex material in order to evaluate evidence, construct reasoned arguments, and communicate inferences and conclusions.

### Dimensions of Analytical Thinking

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Emerging</th>
<th>Developing</th>
<th>Proficient</th>
<th>Exemplary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acquires, analyzes, and evaluates information from multiple sources</td>
<td>Seeks information from basic types of sources with minimal regard for relevance or quality.</td>
<td>Retrieves information from a limited range of sources and identifies biases, strengths, and weaknesses within those sources.</td>
<td>Designs and implements effective strategies to find relevant sources based on purpose. Critiques biases, strengths, and weaknesses of information sources.</td>
<td>Uses analysis to defend information choices and reach original conclusions.</td>
</tr>
<tr>
<td>Synthesizes and applies information within and across disciplines</td>
<td>Recognizes multiple perspectives among sources of information.</td>
<td>Identifies how information can be conceptualized differently within various disciplines.</td>
<td>Examines and integrates relevant information sources from multiple disciplinary perspectives.</td>
<td>Creates a defensible, compelling work using multiple disciplinary perspectives.</td>
</tr>
<tr>
<td>Identifies and applies, as appropriate, quantitative methods for defining and responding to problems</td>
<td>Recognizes the need for and performs basic quantitative methods.</td>
<td>Identifies a range of quantitative methods and employs them to make judgments.</td>
<td>Selects quantitative methods for making sound judgments and drawing plausible conclusions based on the situation.</td>
<td>Critiques biases, strengths, and weaknesses of quantitative approaches to reflect on conclusions and propose responses to a situation.</td>
</tr>
<tr>
<td>Identifies the credibility, use and misuse of scientific, humanistic and artistic methods</td>
<td>Recognizes a range of inquiry methods and acknowledges that they can be misused.</td>
<td>Describes the effective use of methods and identifies their misuse in a given context.</td>
<td>Judges if methods are credible and ethical in given contexts.</td>
<td>Selects inquiry methods ethically and with an understanding of the consequences of their misuse.</td>
</tr>
</tbody>
</table>

Source: [http://learninggoals.undergrad.msu.edu/goal/thinking](http://learninggoals.undergrad.msu.edu/goal/thinking)