M.S. in Chemistry

Learning Outcomes

The chemistry department has set a list of learning outcomes that MS-Thesis and MS-non-Thesis students are expected to have upon graduation with a MS degree in chemistry. The learning outcomes for the MS level are built on the assumption that the corresponding learning outcomes articulated at the BS level have been achieved. In other words, expectations at the master level include those listed for the undergraduate degree. Specifically, both MS-thesis and Non-Thesis students upon graduation will be able to:

- Perform statistical calculations related to analytical techniques.
- Use discipline specific computer tools such as ChemDraw.
- Use primary literature databases to research a topic in any of the sub-disciplines of chemistry, specifically, to be able to
  - choose relevant and higher impact published work on a topic, b. critically evaluate and extract the major findings of a paper,
  - summarize the major findings and conclusions of selected papers concisely, accurately and effectively in written form, and
  - effectively present the summary orally.

Additionally, MS-Thesis graduates will be able to:

- Provide context that explains/describes how the boundaries of knowledge are advanced through research.
- Explain the limitations of the research undertaken and to be able to suggest ways of overcoming these in future research.
- Disseminate the research results in publishable work such as a thesis of a standard which satisfies peer review.