



# Priority Standards

## BioMedical Engineering I – Grade 10

### BioMedical Engineering Academy

Below is a table of the priority standards.

Priority Standards	Description
1.1	Implement techniques that minimize bias and reduce error.
1.2	Create experiments which generate data that enables the optimization of a given design criteria.
1.3	Ask and investigate secondary questions derived from an initial dataset.
1.4	Demonstrate thorough exploration of the design space by practicing divergent thinking strategies.
2.1	Interpret ecological, cultural, economic and political interactions as they impacted solutions deployed in the past.
2.2	Explain the ecological, cultural, economic and political interactions influencing current case studied.
3.1	Interrogate data to connect health outcomes to ecological, cultural, economic, and political issues .
3.2	Leverage foundational spreadsheet logic to visualize data tendencies and patterns.
3.3	Characterize the nature of various datasets (normal, continuous, categorical, etc.).
4.1	Predict the interactions between molecules, with a focus on polymers.
4.2	Describe the basic characteristics of a reaction mechanics.
4.3	Extrapolate the effects of local changes to a complex ecosystem.
4.4	Explain and predict the interactions between biotic and abiotic factors affected by an intervention.
4.5	Describe the effect of global environmental factors as they relate to human health.
4.6	Identify and predict the effect of cultural practices on human health.
5.1	Locate, analyze, manipulate, and interpret information in an investigation.
5.2	Summarize research findings.
5.3	Work individually and collaboratively to obtain, synthesize, and evaluate information.
5.4	Produce clear and coherent writing appropriate to different tasks and audiences.

Priority Standards	Description
5.5	Apply information technology tools to perform tasks assigned to bioengineers.
5.6	Identify and use a variety of web-based tools for real world application involving global communication for collection and dissemination of information.