The Modeling and Simulation professional organization started in the early twenty first century spurred by the advent of
the computers and ultimately the vast networking capabilities of contemporary computing. Compared to other
disciplines, such as Engineering, Computer Science, and Math, Modeling and Simulation is still in its infancy. However,
because of the varied use of Modeling and Simulation techniques and tools used within almost every discipline Modeling
and Simulation as a profession has experienced significant growth.
Consequently, there does not appear to be synchronization between the three primary stakeholder groups of the
Modeling and Simulation profession: academia, government and industry. The discipline’s professional organization
does not recognize a single Body of Knowledge as an authoritative reference for Modeling and Simulation knowledge,
skills and abilities. Academic institutions do not have unanimity from one institution to another regarding targeted
knowledge, skills and abilities. Industry lacks the confidence to hire Modeling and Simulation professionals who have
core understanding of knowledge, skills and abilities directly associated with the version of Modeling and Simulation
used by each separate industry.
This research study attempted to take the first coordinated step in unifying the Modeling and Simulation discipline by
assessing and prioritizing the current competencies required of Modeling and Simulation professionals. A survey
instrument was developed and distributed to Modeling and Simulation stakeholders to ascertain the breadth of the
needed and required knowledge, skills and abilities within the domain.

Major: Modeling and Simulation

Educational Career:
Bachelor's of Criminal Justice, BS, 1995, Southern Utah University
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Approved for distribution by Bruce D. Caulkins, Committee Chair, on February 12, 2019.

The public is welcome to attend.