



M&S Professional Certificate Program and why it matters

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Desired State

A highly professional MS&A community supported by M&S professional development and education as evidenced by broadly accepted and consistent education programs, providing highly qualified and readily accepted graduates, supported by sound, consistent and well funded research programs, leading to well known and attractive career paths.

Required Actions








Observed elements of a profession

- Strong ethics
- Cooperative professional organizations
- Well defined Body of Knowledge
- Common education programs
- Professional certification programs
- Available employment statistics
- Defined research agenda
- Recognition as a contributor of value to the solution

Examples:

- Software Engineering
- System Engineering

Status

Strong ethics	<ul style="list-style-type: none"> Statement drafted, adopted by many professional organizations 	
Cooperative professional organizations	<ul style="list-style-type: none"> Fledging efforts to increase cooperation – joint conferences, Sim-summit membership 	
Well defined Body of Knowledge	<ul style="list-style-type: none"> Program initiated 	
Common education programs	<ul style="list-style-type: none"> Program being developed 	
Professional certification programs	<ul style="list-style-type: none"> Program in place, acceptance issues 	
Available employment statistics	<ul style="list-style-type: none"> Effort underway, arguments need better support 	
Defined research agenda	<ul style="list-style-type: none"> No program in place or planned. 	

Modeling and Simulation Profession Certificate Council (MSPCC) Restructure addressing “Acceptance Issues”

The MSPCC, acting through its Board of Directors, is responsible to:

- specify the education, experience, and knowledge standards for;
- to create, maintain, and administer the business and technical process for;
- and assess the qualification of candidates desiring to become a;

Certified Modeling and Simulation Professional

Goal: Redevelop and validate test instruments and business processes in compliance with clear and open set of requirements and standards via an open, system engineering process, with adequate community involvement.

Current State

- Structure: Active, effective management

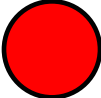
Sustained admin infrastructure

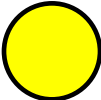
- Process: Clear, credible, executable

- Strategy: Training

Advertising

Acceptance

 BOD Inactive,
Patrick doing what
he can

 Manual, labor
intensive process

 Plan
drafted

 UAH, UCF

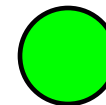
 Limited

 Limited

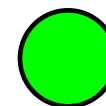
Future State

- Structure: Active, effective management

Sustained admin infrastructure

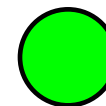


Leadership in place



Support

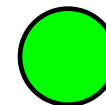
- Process: Clear, credible, executable



Plan improved, implemented

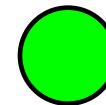
- Strategy: Training

Advertising

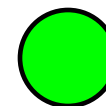


Broadly Available

Acceptance



Evident



Evident

Vision: Certified Modeling and Simulation Professional – A recognized professional license required for development of safety and mission critical models and simulations

Committees

Executive

- Planning and Oversight
- Personnel
- Professional Ethics

Product Development

- Knowledge, Process, and Requirements Committee
- Education and Training Committee
- Examination Preparation Committee

Review Team

- Product assurance

Advertising & Community Relations

- Credibility and acceptance in the M&S community
- Communication with community of certified professionals

Get Off the Stage

- M&S is a vital component of Systems Engineering
- Its criticality increases as systems become more complicated and more complex
- It is time for the community to transform from the “Art Phase” to the “Science Phase”
- We need to take action to insure our workforce is qualified.