

**V&V&UQ Two-Week Short Course for Engineers, Detail Syllabus**  
**Alexandria Validation Consulting, LLC**  
 Subject to Change as Appropriate

	<b>Monday Day One</b>	<b>Tuesday Day Two</b>	<b>Wednesday Day Three</b>	<b>Thursday Day Four</b>	<b>Friday Day Five</b>
08:00AM- 09:20AM	Course Overview	Epistemology	Dempster-Shafer, Fuzzy, and Hierarchy	Response Surfaces via Polynomial Chaos	Statistical Inference Overview
					Bayesian Inference
09:20AM- 10:40AM	UQ Overview	Interpreting Probability	Dependency Issues	Supplemental Margins	Neyman-Pearson Confidence
10:40AM- 12:00PM	Probability Theory	Intervals, P-Box, and Credal Set	- Early start on workshop -	- Early start on Workshop -	Predictive Distributions and Tolerance Structures
01:00PM- 05:00PM	WORKSHOP ONE	WORKSHOP TWO	WORKSHOP THREE	WORKSHOP FOUR	WORKSHOP FIVE
07:00PM- 09:00PM	RECITATION	RECITATION	RECITATION	RECITATION	Long workshop, no recitation

**V&V&UQ Two-Week Short Course for Engineers, Detail Syllabus**  
**Alexandria Validation Consulting, LLC**  
 Subject to Change as Appropriate

	<b>Monday Day Six</b>	<b>Tuesday Day Seven</b>	<b>Wednesday Day Eight</b>	<b>Thursday Day Nine</b>	<b>Friday Day Ten</b>
08:00AM-09:20AM	Markov Chain Monte-Carlo	Validation Overview	Verification Overview	Numerical Stability	Verification Wrap-Up
		Validation, Inference Approach			
09:20AM-10:40AM	P-values	Validation, Roy-Oberkampf Approach	Benchmarks	Iterative Convergence	
	NP Hypothesis Tests		Software Practice		
10:40AM-12:00PM	- Early start on workshop -	- Early start on workshop -	- Early start on workshop -	Grid Convergence	Course Wrap-Up
01:00PM-05:00PM	WORKSHOP SIX	WORKSHOP SEVEN	WORKSHOP EIGHT	WORKSHOP NINE	No workshop, open question session
07:00PM-09:00PM	RECITATION	RECITATION	RECITATION	RECITATION	No recitation, course complete