Massachusetts Institute of Technology

Models in Engineering

TA Sample Project Evaluation: Crankshaft V&V

WEEK 4: MODELS IN VERIFICATION AND VALIDATION

Step 1: Verification and Validation Framework

Did you insert questions specific to your industry in the blue boxes (Framework Labels)? As necessary, did you customize the V&V framework by changing the grey label boxes to fit with your industry?

Points: 3- All blue boxes are completed, and gray boxes are appropriate for project context.

Step 2: Verification and Validation Options

Did you identify the V&V options across all the levels identified in Step 1?

Points: 3- Gray boxes match gray boxes in step 1. V&V options are identified across all levels with every box completed.

Step 3: Elaborate on One Model

A. *Did you state the name of the product and a give brief description of what the model does?*
B. *Did you identify the critical issues that you would need to verify and validate?*
C. *Did you identify the name of the model and give a brief description of how the model should work?*
D. *Did you provide a scale describing how well you think the model will accomplish the V&V task?*

Points: 3—Response identifies crankshaft as the product and describes the role within the overall internal combustion engine. Two critical issues are numbered. Model appears to be named "Finite Analysis Model", but the response could be clearer about that in the first sentence using capital letters for a title. The brief description is detailed but seems to be ambiguous about whether the "M" in FEM refers to "model" or "method". The response provides a numerical representation for scale between 1 and 10.