

## **Mechanical Engineering**

## PhD Graduate Milestone Examination (GME) Evaluation Form 2

Please consult the Graduate Program in Mechanical Engineering (MEGP) Guidelines for the GME before completing this form.

The supervisor(s) and the student should receive Form 2, fully signed, within 3 business days after the exam.

## The purpose of the GME is two-fold:

- 1- To assess the student's <u>fundamental knowledge</u> in mechanical engineering and/or the subject matter directly related to the dissertation; and
- 2- To assess the student's potential to conduct <u>independent research of highest quality</u> by the time of graduation, based on the research done to the date of the GME and the proposed research thereafter.

Student's Name:		
Student Number:	Student's Start Date:	
Supervisor Names:(In case of joint supervision, please provide nam	nes of all co-supervisors.)	
Research Project Title:		
Date of GME:	Time of GME:	
Location of Oral Exam:		

Evaluation of Student's Research Proposal					
	Exceeds Expectations	Meets Expectations	Needs Improvement	Unsatisfactory	Not Applicable
Explained the research gaps, hypotheses, and questions based on a thorough literature review					
Demonstrated originality and significance of the work: Show research need, novelty and potential impact on society, health, environment, economy, etc.					
Stated clear and achievable research goals, objectives, and milestones					
Proposed research methodologies that are appropriate to undertake the milestones and answer research questions					
Stated reasonable research timelines for milestones with the use of Gantt Charts or other tools					
Presented and interpreted results professionally and scientifically					
Discussed the results and compared with literature to demonstrate novel contributions					
Formatting and organization of the written proposal (see ME GME guideline document, section 2)					

Specific comments on the written proposal criteria that need improvement or are unsatisfactory must be solicited by the GME Committee chair and presented to the student here:

Evaluation of Student's Oral Qualifying Examination - Pr	esent	ation	sessio	on	
	Exceeds Expectations	Meets Expectations	Needs Improvement	Unsatisfactory	Not Applicable
Presentation was a clear reflection of the written proposal					
Clearly stated the topic and motivation behind the research					
Established the relevance/significance of the topic by presenting relevant literature and providing research gaps, hypotheses and questions					
Discussed relevant theory and/or background and its applicability to the research gaps and questions					
Explained the main theoretical and/or experimental goals, objectives, methodologies, setups, etc.					
Discussed the results in a concise manner (e.g., trends, significant data points, statistical analysis and/or comparison).					
Results addressed or have the potential to address the research questions					
Provided comprehensive concluding remarks or presented a solid plan for continuation of research in the next years					
Slides clarity and quality with effective use of tables, figures, graphs, videos, and/or animations, etc.					
Logical flow and organization throughout the presentation and adhering to the time limits					
Confidence, clear voice, & reasonable pace that engaged the audience					
Response to audience questions and convincing the audience of the importance of the research topic					

Specific comments on the presentation session criteria that need improvement or are unsatisfactory must be solicited by the GME Committee chair and presented to the student here:

Evaluation of Student's Oral Qualifying Examination - GME Committee					
	Exceeds Expectations	Meets Expectations	Needs Improvement	Unsatisfactory	Not Applicable
<u>Candidate background knowledge</u> : the candidate demonstrates that they have sufficient background and fundamental knowledge to complete the research project. This will include relevant undergraduate and graduate course work and relevant theories and background knowledge related to the specific research topic.					
Candidate demonstrates a good working knowledge of the field of study related to the research proposal: the candidate should be well versed in the existing literature related to the proposed research topic. The candidate should be able to cite important contributions of other researchers to the field of study. The candidate must also be able to identify and articulate gaps and shortcomings in the current research literature and relate these deficiencies to the proposed research project. The candidate should be able to demonstrate the immediate need for the proposed research project.					
The candidate is able to explain theories and techniques related to the proposed research: The candidate should be able to thoroughly explain any relevant theories or techniques related to the results project. The candidate should be able to explain in depth key equations or theories related to the research project.					
The candidate can explain how they will approach the research topic:  Using appropriate techniques and approaches, the candidate can explain how they will approach their research (milestones, methodologies). The candidate must also be able to explain in detail the time plan for conducting the proposed research.					
Candidate provides satisfactory answers to the committee member questions: The candidate must be able to convincingly respond to the examiners questions by drawing upon their knowledge of the existing literature in the field of study and by citing appropriate theories and techniques.					

Specific comments for the GME Committee exam criteria that need improvement or are unsatisfactory must be solicited by the chair and provided to the student in this section:

GME Comminee Decision dilei Delibero	<u> IIIOII</u>			
This is the first or the second GME for this	s student?	☐ First GME	□ Second GME	
The outcome of the GME is:				
□ Passed				
	tha tabla bala			
☐ Passed with Conditions (please fill in t			/	L CAAE)
Specific Condition	Completion	ilmeline (not to excee	ed 6 months after the firs	(GME)
1-				
2-				
3-				
4-				
Add more lines if needed				
☐ Unsuccessful Outcome (please choo	se one optior	n below)		
$\square$ this was the first GME and the s	tudent will be	re-examined on this a	ate:	
this was the second GME and tengineering graduate program a			rom the mechanical	
GME Committee Chair Name and Signat	rure:		Date:	
GME Committee Examiner Name and Sig	gnature:		Date:	
GME Committee Member Name and Sig.	nature:		Date:	
GME Committee Member Name and Sig.	nature:		Date:	_
Supervisor(s) Name and Signature:			Date:	
Student Name and Signature:			Date:	

GPD Name and Signature: \_\_\_\_\_\_\_Date: \_\_\_\_\_\_