PRELIM EXAM: Should be taken within first two semesters in the program or completing 12 hours whichever is earlier. Should clear this requirement during first 18 hours (or 1.5 years) with at most two attempts. Students who could not pass the prelim by this time will be dismissed from PhD program (e.g., transferred to MSIE program).

- 1. Requires 3.25 GPA from 700 and above level PhD courses.
- 2. A **3.5** GPA from 700 and above level WSU PhD courses is required.
- 3. Portfolio:
 - a. Copy of the PSIT and POS signed by the advisor;
 - b. 8-10 pages long first year paper (1-inch margins, double space, Times New Roman);
 - c. Detailed resume (including Industrial and Research experience, Current GPA, courses at WSU, related courses at UG/MS, Scholarly activity); and
 - d. 2-page self-reflection paper on PhD student's progress in his/her first year and plans for the second year.
- 4. Student submits the portfolio at least one week prior to the exam date (or earlier as announced by the graduate coordinator).
- 5. The content of the first year paper may vary from student to student, can be one or more of the items from the non-exhaustive list below:
 - a. review of papers on a potential research topic;
 - b. a paper which may reflect the research activities with your advisor (e.g., research report, journal paper or extended conference proceeding).
- 6. Exams are scheduled during the week before or the first week of the Fall and Spring semesters. There is no exam in the summer term.
- 7. Student presents the paper in 15 minutes. Advisor and Grad Committee members evaluate the paper and presentation.
- 8. The committee provides feedback to the student in two weeks.
- 9. A student who does not have an advisor is assessed over 90 points (i.e., would lose 10 points for not having an advisor).
- 10. All papers will be submitted to safe assignment tool for plagiarism. If there is plagiarism, student will have automatic failing grade and dismissal from the program (i.e., no second chance).

PhD Prelim Rubric

WRITING CONTENT							
	Poor			Excellent			
Objective and motivation	Does not adequately convey topic. Does not describe subtopics to be reviewed or studied. Lacks adequate thesis statement.	Conveys topic, but not key question(s). Describes subtopics to be reviewed or studied. General thesis statement.	Conveys topic and key question(s). Clearly delineates subtopics to be reviewed or studied. General thesis statement.	Strong introduction of topic's key question(s), terms. Clearly delineates subtopics to be reviewed or studied. Specific thesis statement.			
Clarity	Little evidence material is logically organized into topic, subtopics or related to topic. Many transitions are unclear or nonexistent.	Most material clearly related to subtopic, main topic. Material may not be organized within subtopics. Attempts to provide variety of transitions	All material clearly related to subtopic, main topic and logically organized within subtopics. Clear, varied transitions linking subtopics, and main topic.	All material clearly related to subtopic, main topic. Strong organization and integration of material within subtopics. Strong transitions linking subtopics, and main topic.			
Evidence/Support	Few sources supporting thesis. Sources insignificant or unsubstantiated.	Sources generally acceptable but not peer-reviewed research.	Sources well selected to support thesis with some research in support of thesis.	Strong peer reviewed research based support for thesis.			
Summary of contribution	Does not summarize evidence with respect to thesis statement. Does not discuss the impact of researched material on topic.	Review of key conclusions. Some integration with thesis statement. Discusses impact of researched material on topic.	Strong review of key conclusions. Strong integration with thesis statement. Discusses impact of researched material on topic.	Strong review of key conclusions. Strong integration with thesis statement. Insightful discussion of impact of the researched material on topic.			
WRITING MECHANICS							
	Poor			Excellent			
Grammar & Mechanics	Grammatical errors or spelling & punctuation substantially detract from the paper.	Very few grammatical, spelling or punctuation errors interfere with reading the paper.	Grammatical errors or spelling & punctuation are rare and do not detract from the paper.	The paper is free of grammatical errors and spelling & punctuation.			
Citations & References	Reference and citation errors detract significantly from paper.	Two references or citations missing or incorrectly written.	One reference or citations missing or incorrectly written.	All references and citations are correctly written and present.			

Flow of Idea	 Inappropriate or confusing order of sections No transition between sections Repetitive content throughout the 	 Acceptable order of sections Missing some transitions between sections Some repetitive content 	Easy to read, follow and understand	Reads like an outstanding publication.
	document	content		
	PRI	ESENTATION MECH	HANICS	
	Poor			Excellent
Prelim Presentation Content	Rambled; dwelt too long on less important aspects. Had difficulty with questions.	Understands where thesis research fits in the body of knowledge.	Research voids, objectives and contributions are clearly identified.	Future research directions are well thought and analyzed.
Prelim Presentation Style	Not well organized;	Organized	Well thought out slides and handouts	Well organized, very professional,
		SELF-REFLECTIO	DN	
	Poor			Excellent
Self-assessment of relevant experience	Only PhD level classes taken, no additional preparation	Attending seminars, study groups and other training courses, and there is some research activity	Student demonstrated significant research capability	Excellent research activity and a good pathway to scholarly development
Personal development plan	D=Have a good understanding of industrial engineering tools and techniques needed for their research	C=D+ Delineate on scope of potential PhD work	B=C+ Discusses a development plan for being an effective scholar	A=B+ Have a good understanding of expectations of research advisor
	L	PROGRESS	1	1
	Poor			Excellent
WSU PhD GPA	3.25<=x<=3.49	3.50<=x<=3.769	3.70<=x<=3.84	3.85<=x<=4.00
Commitment of the research advisor	Low Lower 50%	Medium About average	High Top 20 %	Exceptional (Top 5 in our program)