

Program: Management Engineering

1. Learning goals and rubrics

Learning Goal	Learning Objectives	Where to measure?	How to Measure?
L1. Research Qualification: Our graduates will have skills (or ability) to conduct quality research.	L11. Our students will have basic quantitative skills for research.	Qualification Exam	Qualification exam evaluation
	L12. Our students will have basic theory, analytical research tools, and background about their research area.	Qualification Exam	Qualification exam evaluation
L2. Professional Communication: Our graduates will be effective professional communicators.	L21. Our students will create well-written professional papers on a research topic.	Defense of Dissertation	Dissertation evaluation
	L22. Our students will deliver an effective oral presentation on a research topic.	Defense of Dissertation	Dissertation evaluation
L3. Analytical and Creative Thinking: Our graduates will be capable researchers.	L31. Our students will identify and diagnose management/research problems.	Defense of Dissertation	Dissertation evaluation
	L32. Our students will engage in management research and present the findings of such research effectively.	Defense of Dissertation	Dissertation evaluation
L4. Academic Teamwork: Our graduates will use team building successfully.	L41. Our students will know how to build an academic team successfully.	Course-embedded Project	Course-embedded survey

2. Rubric to assess achievements of learning objectives

L1. Research Qualification: Our graduates will have skills (or ability) to conduct quality research.			
L11. Our students will have basic quantitative skills for research			
Traits	Performance Levels		
	1 (Fails to Meet Expectations)	2 (Meets Expectations)	3 (Exceeds Expectations)
1. Logic and organization	Arguments are poorly organized, do not flow well, and are hard to follow.	Most but not all of the arguments are well organized, flow logically, and are easy to follow.	All arguments are well organized, flow logically, and are easy to follow.
2. Identification of research problems	Neglects to identify case issues; recounts facts of case with little analysis	Clearly identifies the key issues in the case and demonstrates understanding of the research issues	Develops a well-integrated statement of the complex research issues
3. Effective literature search skills	No literature or used of inappropriate web-based sources; sources are not come from professional literature; sources are not current and/or relevant.	Uses more than one research source but demonstrates no attempt to incorporate current information; most sources are authoritative or come from professional literature; sources are generally current and relevant.	Uses multiple research sources and makes effective use of current and reliable information; sources are authoritative or come from the professional literature; includes current relevant sources.
4. Application of quantitative tools	Misuses quantitative analysis tools, concepts, and techniques	Appropriately quantitative analysis tools, concepts, and techniques	Shows strong understanding and application of quantitative analysis tools, concepts, and techniques
5. Consistent conclusions	No or very weak connection between analysis and conclusions	Reasonable connection between analysis and conclusions; there may be minor inconsistencies	Very strong connection between analysis and conclusions; there are no inconsistencies.

L1. Research Qualification: Our graduates will have skills (or ability) to conduct quality research.			
L12. Our students will have basic theory, analytical research tools, and background about their research area.			
Traits	Performance Levels		
	1 (Fail to expectations)	2 (Meets Expectations)	3 (Exceed Expectations)
1. Understanding Theory.	Misunderstands or superficially understands assumptions, motivations, justifications and implications of basic theory.	Understands most but not all aspects of basic theory.	Correctly understands all aspects of basic theory.
2. Application of Theory	Derivation or application of theory is not strong enough to support research arguments.	Derivation or application of theory supports research arguments, but with some logical gap or unnatural assumptions.	Derivation or application of theory strongly supports research arguments.
3. Proper use of effective research tools.	Methods and tools used for research is irrelevant with research arguments.	Methods and tools used for research is relevant with research arguments. But there is a room for improvement.	Methods and tools used for research is perfectly adequate to address a research arguments.
4. Understanding currently important issues on research area.	Has no knowledge of currently important or actively discussed topics in their research area.	Has some knowledge of currently important or actively discussed topics in their research area.	Fully aware of currently important or actively discussed topics in their research area.

L2. Professional Communication: Our graduates will be effective professional communicators			
L21. Our students will create well-written professional papers on a research topic			
Traits	Performance Levels		
	1 (Fail to expectations)	2 (Meets Expectations)	3 (Exceed Expectations)
1. Logic & Organization	Does not develop ideas cogently Uneven and ineffective overall organization Weak logical flow Unclear or missing introduction or conclusion. Few headings or paragraph breaks Weak or unfocused thesis statement	Develops unified and coherent ideas within paragraphs with generally adequate transitions Clear overall organization relating most ideas together, but some ideas seem illogical and/or unrelated Adequate introduction and conclusion Provides organized analysis that generally maintains focus Opens with clear statement of research problems/issues	Develops ideas cogently, organizes them logically with paragraphs and connects them with effective transitions Clear, effective introduction and conclusion. Provides clear organization scheme to guide reader through logic of analysis Hooks reader with clever/insightful opener to clearly identify research issues
2. Language	Employs words that are unclear or inappropriate Sentence and structures problems. Errors are seriously distracting	Word forms are correct Uses some academic terms Sentence structure is quite effective Presence of a few errors is not distracting.	Employs words with fluency Develops concise standard English/Korean sentences Uses many academic terms appropriately
3. Spelling and Grammar	Writing contains numerous errors in spelling and grammar which interfere with comprehension. Was not even briefly edited Uses many misspelled words and shows only elementary vocabulary feel	While there may be minor errors, the writing follows normal conventions of spelling and grammar throughout, and has been proofread Has spell-checked, but may miss a typo of use an inappropriate word/term	The writing is essentially error-free in terms of spelling and grammar The writing is carefully proofread Uses correct spelling throughout and demonstrates strong vocabulary skills

<p>4. Development of Ideas</p>	<p>Most ideas unsupported, confusion between personal opinion and evidence Includes much information that is not relevant.</p>	<p>Supports most ideas with effective examples references, and details Minor support for ideas is inconsistent, reasoning unclear.</p>	<p>Explores ideas thoroughly supports points fully using a balance of subjective and objective evidence, reasons effectively making useful distinctions</p>
<p>5. Purpose and Audience</p>	<p>The purpose and focus of the writing are not clear to the reader Never addresses the right audience.</p>	<p>The writer has made adequate decisions about focus, organization, style, and content so as to achieve the purpose of the writing Address the right audience more than once</p>	<p>The writer's decision about focus, organization, style and content fully elucidate the purpose and keep the purpose at the center of the piece Always addresses the right audience.</p>
<p>6. Format</p>	<p>Not in memo format No or sloppy exhibits. Does not refer to exhibits</p>	<p>Uses correct format with minor error Appropriate, titled exhibits Refers to exhibits in body of paper Looks professional (fonts, etc.).</p>	<p>Correct format. Seamless references. Uses bullets where appropriate to make good use of space Attractive exhibits. Attractive, professional looking memo</p>

L2. Professional Communication: Our graduates will be effective professional communicators			
L22. Our students will deliver an effective oral presentation on a research topic			
Traits	Performance Levels		
	1 (Fail to expectations)	2 (Meets Expectations)	3 (Exceed Expectations)
1. Organization	No opening statement, or irrelevant statement Loses focus more than once. Does not manage time effectively.	Has opening statement relevant to topic, and gives outline of speech. Mostly organized with some transitions. Allows enough time to deliver speech, although it could have been better edited	Has a clear opening statement that catches audience's interest and gives overview. Stays focused throughout. Has transition statement, ties sections together. Effective time management.
2. Quality of slides	Sloppy and/or unprofessional. May be difficult to read. Many slides are superfluous.	Readable, professional, appropriate number	Readable, professional, imaginative and/or high quality (without being a distraction).
3. Voice quality and pace	Demonstrates one or more of the following: mumbling, hard to understand English, too soft, too loud, too fast, too slow, "umms."	Can easily understand -- appropriate pace and volume. Delivery is mostly clear and natural	Excellent delivery. Conversational attitude, modulating voice, Projects enthusiasm, interest, confidence.
4. Mannerisms	Demonstrates one or more distracting mannerisms, which may include bad posture, shifting feet, etc.	No distracting mannerisms. Decent posture.	Uses body language effectively (and naturally) to maintain audience's interest
5. Professionalism	Does not meet minimum requirements for formal dress. Makes excuses for the presentation. Word choice is not appropriate for audience. Inappropriately informal, does not stay "in role."	Meets minimum standards for recent-graduate formal dress Treats audience professionally, word choice is acceptable (does not use slang) Keeps nervousness under control	Dresses as if already a working professional (quality, style, color choices) Treats audience professionally Confident, shows command of topic

<p>6. Use of media/rapport with audience</p>	<p>Relies heavily on slides or notes. Makes little eye contact. Inappropriate number of slides (too many or too few).</p>	<p>Looks at slides to keep on track with presentation. Appropriate number of slides. Maintains eye contact most of the time.</p>	<p>Slides are use effortlessly to enhance speech. Speech are perfectly supported by slides Perfect eye contact.</p>
<p>7. Ability to answer questions.</p>	<p>Cannot address basic questions.</p>	<p>Can address most questions with correct information</p>	<p>Answers all questions with relevant, correct information. Speaks confidently.</p>

L3. Analytical and Creative Thinking: Our graduates will be capable researchers.			
L31. Our students will identify and diagnose management/research problems			
Traits	Performance Levels		
	1 (Fails to Meet Expectations)	2 (Meets Expectations)	3 (Exceeds Expectations)
1. Identify management / research issues and concepts	Management/research issues are not identified or identified inappropriately	Addresses most of the major management issues appropriately but omits or inappropriately a few of the minor ones	Addresses all the major management / research issues and most of the minor ones
2. Identify alternative options	Does not identify alternatives	Identifies and discusses a set of feasible alternatives	Identifies a set of feasible options that demonstrates creativity and the ability to integrate knowledge
3. Quantitative evaluation	Evaluation is poor, not consistent with the criteria or does not use facts correctly	Evaluation is adequate, relatively consistent with criteria and facts are generally used correctly	Evaluation is effective, consistent with criteria and facts are used correctly
4. Qualitative evaluation	Evaluation is poor, not consistent with the criteria incoherent or does not use facts correctly	Evaluation is adequate, coherent, relatively consistent with criteria and facts are generally used correctly	Evaluation is effective, demonstrates creativity, coherent, consistent with criteria and facts are used correctly
5. Present and organize work in a logical manner	Analysis is poorly organized and does not flow effectively	Analysis is reasonably well organized and flow is adequate	Analysis is very well organized and flow is effective
6. Use new ideas and analysis methods not includes in the problem	Absence of any new ideas and creative analytical methods	Integrates ideas and analytical methods from other sources not directly presented in the case reasonably well	Effectively integrates ideas and analytical methods from other sources not directly presented in the problem
7. Use ethical and professionally responsible	Sources are inappropriate, not well documented and poorly cited. Decisions are not ethically sound,	Sources are fair, reasonably well documented and cited. Where appropriate the decision is ethically	Sources are appropriate, well documented and effectively cited.

documentation and propose ethical and responsible solutions	credible, or are frivolous	sound, credible, and not frivolous	Where appropriate the decision is ethically sound, credible, and not frivolous
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L3. Analytical and Creative Thinking: Our graduates will be capable researchers.			
L32. Our students will engage in management research and present the findings of such research effectively.			
Traits	Performance Levels		
	1 (Fails to Meet Expectations)	2 (Meets Expectations)	3 (Exceeds Expectations)
1. Preparation: “fact finding”	No significant research	At least 3 sources of relevant research	Research that goes beyond “literal” categories into “lateral” for points of comparison
2. Preparation: “problem/objective finding”	No clear cut problem or objective identified	A problem identified but no or only vague objectives	All problems clearly stated and multiple objectives prioritized toward solution opportunities
3. Incubation: “idea finding”	Not many ideas generated with little novelty or diversity	Good number of ideas but not overly novel or diverse	Many ideas of a diverse nature
4. Illumination: “solution finding”	Selection fails to meet objective(s)	Selection solves problem stated in main objective	Selection meets all objectives/maximizes solutions to all problems
5. Verification: “acceptance finding” (idea is proven)	Not a successful solution	Minimally successful (modification or improvement)	Highly successful solution (uniquely creative)

L4. Academic teamwork: Our graduates will use team building successfully.			
L41. Our students will know how to build an academic team successfully			
Traits	Performance Levels		
	1 (Fails to Meet Expectations)	2 (Meets Expectations)	3 (Exceeds Expectations)
1. Commitment	Seems reluctant to engage fully in discussions and task assignments	Consistently demonstrates commitment to the project by being prepared for each group meeting	Follows up on ideas and suggestions from previous meetings and reports findings to the group
2. Balance between task and interpersonal relations	Focuses exclusively on task to be accomplished without regard to team member or focuses exclusively on interpersonal relations without regard to task	Balances the need for task accomplishment with the needs of individuals in the group	Volunteers to assist others and shares information openly
3. Contributions	Does not offer ideas or suggestions that contribute to problem solving	Frequently offers helpful ideas or suggestions	Listens actively and shows understanding by paraphrasing or by acknowledging and building on others' ideas
4. Stays on track	Takes the group off track by initiating conversations or discussions unrelated to the task	Introduces suggestions and ideas that are relevant to the task	Uses tact and diplomacy to alert group that focus has strayed from the task at hand