

2020 AOL Report

Management Engineering (ME)

The Management Engineering (ME) Program pursues excellence in academic research based on great emphasis on scientific methodology and theoretical expertise. The research areas include Accounting, Managerial Economics, Finance, Organization & Strategic Management, Marketing, IT Management, and Operations Strategy & Management Science. Students in this program intensively learn various theories and analytical skills to be highly achieved scholars.

Overall Review

Our program targets four learning goals such as research qualification, professional communication, analytical and creative thinking, and academic teamwork. We assess quantitative skills and basic theory, analytical tools, and background for research qualification, writing professional papers and effective oral presentation skills for professional communication, identification problems and engagement in management research for analytical and creative thinking, and building academic team for academic teamwork.

In general, all average scores related to each learning goal except academic teamwork exceed 2.5, which implies our graduates successfully meet expectations. Their research qualification skills are outstanding and almost exceed expectations. However, our graduates have the most difficulty in academic teamwork. Especially, they need to be improved for the trait 2 of L41 (Balance between task and interpersonal relations) in academic teamwork. So, our college will intensify lectures related to academic team building skills. In particular, college needs to put more emphasis on how to build an academic team successfully, with enough commitment and contribution.

- Total number of courses: 42 (Spring: 26, Fall: 16)
- Total number of graduates: 55 (Master: 35, Ph.D.: 20)
- Total number of enrollment: Spring 149 / Fall 132 (Master: 58/53, Ph.D.: 91/79)
- Sample: more than 9 (Necessary sample: 15% of graduates 55 = 8.25).¹
- Assessment courses

Learning Goal 1	L11	Qualification Exam
	L12	Qualification Exam
Learning Goal 2	L21	Defense of Dissertation
	L22	Defense of Dissertation
Learning Goal 3	L31	Defense of Dissertation

¹ For a qualification exam, a sample requirement is more than 5 because only doctoral students have a qualification exam (25% of graduates 20 = 5).

	L32	Defense of Dissertation
Learning Goal 4	L41	BA562 Business Modeling Analysis

Overview of Assessment

Management Engineering : Assessment Learning Goal 1		
Learning Goal 1) Research Qualification : Our graduates will have skills (or ability) to conduct quality research		
Learning Objective	Sample	Methods
L11) Our students will have basic quantitative skills for research.	Qualification Exam (N= 12). ²	Qualification Exam evaluation
L12) Our students will have basic theory, analytical research tools, and background about their research area.	Qualification Exam (N= 12)	Qualification Exam evaluation
Findings		
<ul style="list-style-type: none"> - The average scores for L11 and L12 are 2.733 and 2.729. - The results imply that L11 and L12 meet expectation successfully. - The achievement in understanding theory, analytical tools, and background (L12) is lower than that in employing quantitative skills (L11) - 66.7% (8/12) students exceed expectations for logic and organization (Trait 1 for L11) - 83.3% (10/12) students exceed expectations for consistent conclusions (Trait 5 for L11) - No student fails to meet expectations for each trait. - The ratio of students exceeds expectations (scored over 3) L12 is 41.7%. <p>* Criteria: 1 (Fails to Meet Expectations), 2 (Meet Expectations), 3 (Exceeds Expectations)</p>		

Management Engineering : Assessment Learning Goal 2		
Learning Goal 2) Professional Communication : Our graduates will be effective professional communicators		
Learning Objective	Sample	Methods
L21) Our students will create well-written professional papers on a research topic	Defense of Dissertation (N= 19)	Dissertation evaluation
L22) Our students will deliver an effective oral presentation on a research topic	Defense of Dissertation (N= 19)	Dissertation evaluation
Findings		

² For a qualification exam, a sample requirement is more than 5 because only doctoral students have a qualification exam (25% of graduates 19 = 4.75).

- The average scores for L21 and L22 are 2.561 and 2.648
 - L21 and L22 meet expectation successfully.
 - The achievement in writing professional papers well (L21) is lower than that in effective oral presentation (L22)
 - 1 student fails to meet expectations for 8 traits.
 - 68.4% (13/19) students exceed expectations for logic and organization (Trait 1 for L21).
 - The ratio of students exceeds expectations (scored over 3) for L21 and L22 is 26.3% and 42.1% respectively.
- * Criteria: 1 (Fails to Meet Expectations), 2 (Meet Expectations), 3 (Exceeds Expectations)

Management Engineering : Assessment Learning Goal 3		
Learning Goal 3) Analytical and Creative Thinking : Our graduates will be capable researchers.		
Learning Objective	Sample	Methods
L31) Our students will identify and diagnose management/research problems	Defense of Dissertation (N= 19)	Dissertation evaluation
L32) Our students will engage in management research and present the findings of such research effectively.	Defense of Dissertation (N= 19)	Dissertation evaluation
Findings		
<ul style="list-style-type: none"> - The average scores for L31 and L32 are 2.647 and 2.621. - L31 and L32 meet expectation successfully. - The achievement in identification of management/research problems (L31) is higher than that in engagement in management research (L32). - 1 student fails to meet expectations for 6 traits. - 68.4% (13/19) students exceed expectations for Identify management / research issues and concepts (Trait 1 for L31) - The ratio of students exceeds expectations (scored over 3) for L31 and L32 is 42.1% and 42.1% respectively. <p>* Criteria: 1 (Fails to Meet Expectations), 2 (Meet Expectations), 3 (Exceeds Expectations)</p>		

Management Engineering : Assessment Learning Goal 4		
Learning Goal 4) Academic Teamwork : Our graduates will use team building successfully.		
Learning Objective	Sample	Methods

L41) Our students will know how to build an academic team successfully	Students enrolled in BA562 (N= 20)	Course-embedded survey
Findings		
<ul style="list-style-type: none">- The average score for L41 is 1.938.- L41 fails to meet expectations.- 4 students fail to meet expectations for Balance between task and Interpersonal relations (Trait 2 for L41)- 10.0% (2/20) students exceed expectations for commitment (Trait 1 for L41)- No student exceeds expectations (scored over 3) for L41.- No student exceeds expectations for balance between task and interpersonal relations (Trait 2 for L41) <p>* Criteria: 1 (Fails to Meet Expectations), 2 (Meet Expectations), 3 (Exceeds Expectations)</p>		

Data Analysis and Results

Assessment Learning Goal 1 (L1): Qualification exam									
Learning Goal	L1: Research Qualification: Our graduates will have skills (or ability) to conduct quality research.								
	L11: Our students will have basic quantitative skills for research.					L12: Our students will have basic theory, analytical research tools, and background about their research area.			
Traits	T1. Logic and organization	T2. Identification of research problems	T3. Effective literature search skills	T4. Application of quantitative tools	T5. Consistent conclusions	T1. Understanding Theory	T2. Application of Theory	T3. Proper use of effective research tools	T4. Understanding currently important issues on research area
Students	12	12	12	12	12	12	12	12	12
1	3	3	3	2	3	3	3	3	3
2	2	3	3	3	2	2	2	2	2
3	3	3	3	3	3	3	3	3	3
4	3	3	3	3	3	2	3	3	3
5	3	3	3	3	3	3	3	3	3
6	2	2	2	2	2	2	2	2	2
7	3	3	3	3	3	3	3	3	3
8	3	3	3	3	3	3	3	3	3
9	2	3	2	3	3	2	3	3	3
10	2	2	2	3	3	3	2	3	3
11	3	3	2	3	3	2	3	3	3
12	3	2	2	3	3	3	2	3	3
# of 3 points	8	9	7	10	10	7	8	10	10
# of 2 points	4	3	5	2	2	5	4	2	2
# of 1 points	0	0	0	0	0	0	0	0	0
Total Score	32	33	31	34	34	31	32	34	34
Average	2.667	2.75	2.583	2.833	2.833	2.583	2.667	2.833	2.833
Total Average	2.733					2.729			

Criteria: 1 (Fails to Meet Expectations), 2 (Meet Expectations), 3 (Exceeds Expectations)

Only doctoral students have qualification exam, so the number of sample (12) meets the sample requirements (25% of graduates 19 = 4.75).

Assessment Learning Goal 2 (L2): Dissertation Evaluation													
Learning Goal	L2: Professional Communication: Our graduates will be effective professional communicators.												
	L21: Our students will create well-written professional papers on a research topic.						L22: Our students will deliver an effective oral presentation on a research topic.						
Traits	T1. Logic & Organization	T2. Language	T3. Spelling and Grammar	T4. Development of Ideas	T5. Purpose and Audience	T6. Format	T1. Organization	T2. Quality of slides	T3. Voice quality and pace	T4. Mannerisms	T5. Professionalism	T6. Use of media/report with audience	T7. Ability to answer questions
Students	19	19	19	19	19	19	19	19	19	19	19	19	19
1	3	3	3	3	3	2	3	2	3	3	3	3	3
2	3	2	2	3	3	3	3	3	3	3	3	3	3
3	3	3	3	3	3	3	3	3	3	3	3	3	3
4	3	3	2	3	3	3	3	2	2	3	3	3	3
5	2	2	2	2	2	2	3	3	3	3	3	3	3
6	3	3	3	3	3	3	3	3	3	3	3	3	3
7	3	2	2	3	2	2	2	3	3	2	2	3	2
8	2	2	2	3	2	2	2	3	3	2	2	2	2
9	3	3	3	3	3	2	3	3	3	3	3	3	3
10	2	3	3	1	1	1	2	1	1	1	1	2	1
11	3	2	2	3	3	2	3	3	3	3	3	3	3
12	3	3	3	3	3	3	3	3	3	3	3	3	3
13	3	3	3	3	3	3	3	3	2	3	3	3	3
14	3	2	2	3	3	3	3	2	3	3	3	3	2
15	2	2	2	2	2	2	2	2	2	3	3	2	2

16	2	2	2	2	3	2	2	2	3	2	2	2	2
17	3	3	2	3	3	3	3	3	3	3	3	3	3
18	3	3	3	3	3	3	3		3	2		3	2
19	2	2	2	2	2	2	2	2	3	2	2	2	2
# of 3 points	13	10	8	14	13	9	13	11	15	13	13	14	11
# of 2 points	6	9	11	4	5	9	6	6	3	5	4	5	7
# of 1 points	0	0	0	1	1	1	0	1	1	1	1	0	1
Total Score	51	48	46	51	50	46	51	46	52	50	48	52	48
Average	2.684	2.526	2.421	2.684	2.632	2.421	2.684	2.556	2.737	2.632	2.667	2.737	2.526
Total Average	2.561						2.649						

Criteria: 1 (Fails to Meet Expectations), 2 (Meet Expectations), 3 (Exceeds Expectations)

12	3	3	3	3	3	3	3	3	3	3	3	3
13	3	3	3	3	3	3	3	3	3	3	3	3
14	2	2	2	3	2	2	3	3	2	2	2	3
15	2	2	3	2	2	2	2	3	3	2	2	2
16	2	2	2	2	3	2	2	2	2	2	2	2
17	3	3	3	2	3	3	3	3	3	2	3	3
18	3	3	3	3	3	3	3	3	3	3	3	3
19	2	2	2	2	2	2	2	3	2	2	2	2
# of 3 points	13	12	14	10	13	13	14	15	12	11	12	12
# of 2 points	6	7	4	8	5	6	5	3	6	8	7	6
# of 1 points	0	0	1	1	1	0	0	1	1	0	0	1
Total Score	51	50	51	47	50	51	52	52	49	49	50	49
Average	2.684	2.632	2.684	2.474	2.632	2.684	2.737	2.737	2.579	2.579	2.632	2.579
Total Average	2.647							2.621				

Criteria: 1 (Fails to Meet Expectations), 2 (Meet Expectations), 3 (Exceeds Expectations)

Assessment Learning Goal 4 (L4): BA562 Business Modeling Analysis				
Learning Goal	L4: Academic Teamwork: Our graduates will use team building successfully.			
	L41: Our students will know how to build an academic team successfully.			
Traits	T1. Commitment	T2. Balance between task and interpersonal relations	T3. Contributions	T4. Stays on track
Students	20	20	20	20
1	2	1	2	1
2	2	2	2	2
3	3	2	2	3
4	3	1	1	2
5	2	2	2	2
6	2	2	2	2
7	2	2	2	1
8	2	1	2	2
9	2	2	2	2
10	2	1	2	2
11	2	2	2	2
12	2	2	1	2
13	2	2	2	2
14	2	2	2	2
15	2	2	2	2
16	2	2	2	2
17	2	2	2	2
18	2	2	2	2
19	2	2	2	2
20	2	2	2	2

# of 3 points	2	0	0	1
# of 2 points	18	16	18	17
# of 1 points	0	4	2	2
Total Score	42	36	38	39
Average	2.1	1.8	1.9	1.95
Total Average	1.938			

Criteria: 1 (Fails to Meet Expectations), 2 (Meet Expectations), 3 (Exceeds Expectations)