

2019 AOL Report

Business and Technology Management Graduate Program

The Business and Technology Management (BTM) Graduate Program pursues excellence in academic research based on great emphasis on scientific methodology and theoretical expertise.

The research areas include Strategy, Marketing, Accounting, Finance, HR/OT, MIS/OM, and Economics. Students in this program intensively learn various theories and analytical skills to be highly achieved scholars.

Overall Review

□ Summary of Learning Goals

Learning Goal 1: Research Qualification - Our graduates will have skills (or ability) to conduct quality research.

Learning Goal 2: Professional and Global Communication - Our graduates will be effective professional and globalized communicators.

Learning Goal 3: Creative and Analytical Thinking - Our graduates will be creative academic researchers.

Learning Goal 4: Cross-disciplinary Study - Our graduates will integrate business and technology management.

□ Overall summary of findings and Limitations

Generally, the BTM graduate students received more than expected level in all aspects. Students' abilities to create professional research paper, deliver research ideas in English, and identify the gap in the literature and develop new research ideas were distinctive. It signals that the students have developed satisfactory academic aptitude consistent with the learning goals of the program. Although most of students' performance exceeded the expectation, the results suggest that the students' ability could be more improved when they understand cross-disciplinary study between business and technology management areas (L4). The department must focus on helping students to accumulate and to expand the expertized knowledge of interrelationship.

- Total number of courses: 19 (Spring: 9, Fall: 5, Spring-Fall: 5)
- Total number of graduates: 30
- Total number of enrollment:
 - Spring - 111 (Master: 47 & Ph.D: 64)
 - Fall - 110 (Master: 46 & Ph.D: 64)
- Sample: more than 5 (Necessary sample: 15% of graduates = 4.5)

- Assessment courses

Learning Goal 1	L11	MSB500. Advanced Statistics for Management
	L12	Qualification Exam
Learning Goal 2	L21	MSB535. Technology Management and Corporate Finance
	L22	MSB535. Technology Management and Corporate Finance
Learning Goal 3	L31	Dissertation Evaluation
	L32	Dissertation Evaluation
Learning Goal 4	L41	MSB510. Innovation Management and Strategy

Overview of Assessment

Business and Technology Management Graduate Program: 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) Graduates will have fundamental quantitative analytical skills	Students enrolled in MSB500. (N = 22)	Test evaluation
L12) Graduates will have basic knowledge on theory, literature, and trend in their research field	Students enrolled in Qualification Exam. (N = 20)	Qualification exam evaluation
Findings		
<ul style="list-style-type: none"> ✓ The mean scores of test evaluation and qualification exam evaluation for both L11 and L12 exceeded 2 (meets expectations); the scores for L11 and L12 were 2.71 and 2.53 respectively. ✓ The overall score implies that most graduates were able to conduct quality research through BTM courses. <p>*1 = Fails to Meet Expectations, 2 = Meets Expectations, 3 = Exceeds Expectations</p> <p>An overall average score for L11 was 2.71. The ratio of students who received 3points in all traits for L11 is 31.8%. 95.45% (21/22) of students meet expectations for L11. (No points lower than 2 for all traits in L11). 4.54% (1/22) of students have difficulty in understanding statistical theory, identification of research problems, effective methodology search skills (T1, T2, T3). The results imply that students have fundamental quantitative analytical skills. It was evaluated by the professor who assessed the tests</p> <p>An overall average score for L12 was 2.53. 90% (18/20) of students meet expectations for L12 (No points lower than 2 for all traits in L12). The results imply that students can have a basic knowledge on theory, literature, and trend in their research field. The average score for ‘Understanding currently important issues on research area (Trait 4)’ is 2.40. 40.9% (9/20) of students exceed expectations, 50% (10/20) of students meet expectations, which was relatively lower than other Traits. The results suggest that there is room to understand currently important or actively discussed topics in their research area. It was evaluated by professors who administered and assessed the qualification exam</p>		

Business and Technology Management Graduate Program: Assessment Learning Goal 2		
Learning Goal 2 Professional and Global Communication - Our graduates will be effective professional and globalized communicators.		
Learning Objective	Sample	Methods
L21) Graduates will create well-written professional research papers in English.	Students enrolled in MSB535 (N = 15)	Project report evaluation
L22) Graduates will be able to efficiently deliver their research ideas, analytical results, and academic contribution in English.		Project report evaluation
Findings		
<p>✓ The mean scores of project report evaluation for both L21 and L22 exceeded 2 (meets expectations); the scores for L21 and L22 were 2.83 and 2.91 respectively.</p> <p>✓ The overall score implies that most graduates were able to communicate effectively and professionally through BTM courses.</p> <p>*1 = Fails to Meet Expectations, 2 = Meets Expectations, 3 = Exceeds Expectations</p> <p>An overall average score for L21 was 2.83. All of students (15/15) meet expectations for L21 (No points lower than 2 for all traits in L21). The results imply that students are able to write well-written professional research papers in English. In particular, the average score for ‘Spelling and grammar (Trait 3)’ were 3.00. ‘Format (Trait 6)’ was 2.93 which means graduate students are skillful at using correct format with minor error. The average scores in almost every trait are near the overall average score.</p> <p>An overall average score for L22 was 2.91. All of students (15/15) meet expectations for L22 (No points lower than 2 for all traits in L22). The results imply that students can efficiently deliver their research ideas, analytical results, and academic contribution in English. The highest average score was 3.00, which were the scores for ‘Use of media/rapport with audience (Trait 4)’. Even the lowest score was 2.80 for ‘Logic and Organization (Trait 1)’. The results show that students can organize logical arguments, deliver messages very clearly, reply most questions with correct information.</p>		

Business and Technology Management Graduate Program: Assessment Learning Goal 3		
Learning Goal 3 Creative and Analytical Thinking - Our graduates will be creative academic researchers.		
Learning Objective	Sample	Methods
L31) Graduates will be able to identify the gap in the literature, and develop new research idea about their research field.	Student enrolled in Dissertation Defense (N = 33)	Dissertation evaluation
L32) Graduates will be able to analyze the new research ideas using qualitative or quantitative analytical skills.		Dissertation evaluation
Findings		
<ul style="list-style-type: none"> ✓ The mean scores of dissertation evaluation for both L31 and L32 exceeded 2 (meets expectations); the scores for L31 and L32 were 2.62 and 2.61 respectively. ✓ The overall score implies that most graduates developed to be creative academic researchers through BTM courses. <p style="margin-left: 40px;">*1 = Fails to Meet Expectations, 2 = Meets Expectations, 3 = Exceeds Expectations</p> <p>An overall average score for L31 was 2.62. 93.9% of the students meet expectations for L31 (No points lower than 2 for all traits in L31). The results imply that the graduates are able to identify the gap in the literature, and develop new research idea about their research field. The average scores for ‘Solution finding (Trait 4)’ and ‘Contribution (Trait 5)’ were relatively lower than other traits (both are 2.57). The results show that students need to enhance ability to find the appropriate solution for research problem.</p> <p>An overall average score for L32 was 2.61. 90.9% (30/33) of students meet expectations for L32 (No points lower than 2 for all traits in L32). The results show that the graduates are able to analyze the new research ideas using qualitative or quantitative analytical skills. The graduate students show solid understanding of business analytical model, generate several feasible alternatives for resolving the key issues, use appropriate quantitative or qualitative analysis tools, econometric models, methodologies. ‘Use new ideas and analysis methods not includes in the problem (Trait 5)’ is the lowest score among traits. It has relatively lower number of students (17/33) who exceed expectations compared to other Traits. This result suggest that students need to improve ability to integrate new ideas and analytical methods from other sources</p>		

Business and Technology Management Graduate Program: Assessment Learning Goal 4		
Learning Goal 4 Cross-disciplinary Study - Our graduates will integrate business and technology management.		
Learning Objective	Sample	Methods
L41) Graduates will be able to integrate the analytical subjects between business and technology management areas.	Student enrolled in MSB510 (N = 27)	Project presentation evaluation/report evaluation
Findings		
<ul style="list-style-type: none"> ✓ The mean scores of project presentation and report evaluation for L41 exceeded 2 (meets expectations); the score for L41 was 2.27. ✓ The overall score implies that most graduates were able to integrate business and technology management through BTM courses. ✓ <p>*1 = Fails to Meet Expectations, 2 = Meets Expectations, 3 = Exceeds Expectations</p> <p>An overall average score for L41 was 2.27. 77.8% of students meet expectations (No points lower than 2 for all traits in L41). The results imply that the graduates are able to integrate the analytical subjects between business and technology management areas. The average scores for ‘Analyzing social issues (Trait 2) was 2.33, which was the highest score among the Traits in L41. 11.1% (3/27) of students have difficulty in all traits for L41. The average score for ‘Awareness of interrelationships (Trait 5) was 2.19, which is lowest. It shows that more emphasis on demonstrating an awareness of interrelationships among self, discipline, business, and society.</p>		

Data Analysis and Results

Assessment Learning Goal 1 (L1): MSB500_Advanced Statistics for Management(L11) & Qualification Exam(L12)					
Learning Goal	L1: Research Qualification - Our graduates will have skills (or ability) to conduct quality research				
	L11: Graduates will have fundamental quantitative analytical skills				
Traits	T1. Understanding statistical theory	T2. Identification of research problems	T3. Effective methodology search skills	T4. Solution finding	T5. Consistent conclusions
Students	22	22	22	22	22
1	3	2	2	3	3
2	3	3	2	2	3
3	3	2	2	3	3
4	3	2	3	3	2
5	2	3	3	2	3
6	3	2	2	3	3
7	3	2	3	3	3
8	3	3	3	2	3
9	3	3	2	3	3
10	3	2	3	3	3
11	3	3	3	3	3
12	3	3	3	3	3
13	3	3	3	3	3
14	3	3	3	3	3
15	3	3	3	3	3
16	3	3	3	3	3
17	3	3	3	3	3

18	3	2	3	2	2
19	1	1	1	3	2
20	3	3	2	3	2
21	3	2	3	3	2
22	3	3	2	3	2
# of 3 point	20	13	14	18	16
# of 2 point	1	8	7	4	6
# of 1 point	1	1	1	0	0
Total Score	63	56	57	62	60
Average	2.864	2.545	2.591	2.818	2.727
Total Average	2.709				

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

Assessment Learning Goal 1 (L1): MSB500_Advanced Statistics for Management(L11) & Qualification Exam(L12)				
Learning Goal	L1: Research Qualification - Our graduates will have skills (or ability) to conduct quality research			
	L12: Graduates will have basic knowledge on theory, literature, and trend in their research field			
Traits	T1. Understanding Theory	T2. Application of Theory	T3. Understanding of principle of research tools	T4. Understanding currently important issues on research area
Students	20	20	20	20
1	3	2	2	3
2	3	3	3	2
3	3	3	3	2
4	2	1	2	1
5	3	3	3	3
6	3	3	3	3
7	3	2	3	3
8	3	3	3	3
9	3	3	3	3
10	2	3	3	2
11	2	3	3	2
12	2	3	3	2
13	3	3	3	3
14	3	2	3	2
15	2	3	3	2
16	2	2	2	2
17	2	2	1	2
18	2	2	2	2
19	2	2	3	3

20	2	2	3	3
# of 3 point	10	11	15	9
# of 2 point	10	8	4	10
# of 1 point	0	1	1	1
Total Score	50	50	54	48
Average	2.500	2.500	2.700	2.400
Total Average	2.525			

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

Assessment Learning Goal 2 (L2): MSB535_Technology Management and Corporate Finance						
Learning Goal	L2: Professional and Global Communication - Our graduates will be effective professional and globalized communicators					
	L21: Graduates will create well-written professional research papers in English					
Traits	T1. Logic & Paper Construction	T2. Language delivery	T3. Spelling and Grammar	T4. Development of Ideas	T5. Objectives of research ideas and Consideration on Specific Audience	T6. Format
Students	15	15	15	15	15	15
1	3	3	3	3	3	3
2	3	3	3	3	3	3
3	3	3	3	3	3	3
4	3	3	3	3	3	3
5	3	3	3	3	3	3
6	2	2	3	2	2	3
7	3	3	3	3	3	3
8	3	3	3	3	3	3
9	3	3	3	3	3	3
10	3	3	3	3	2	3
11	3	2	3	2	2	3
12	3	3	3	3	3	3
13	3	3	3	3	3	3
14	2	3	3	2	2	2
15	2	2	3	3	2	3
# of 3 point	12	12	15	12	10	14

# of 2 point	3	3	0	3	5	1
# of 1 point	0	0	0	0	0	0
Total Score	42	42	45	42	40	44
Average	2.800	2.800	3.000	2.800	2.667	2.933
Total Average	2.833					

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

Assessment Learning Goal 2 (L2): MSB535_Technology Management and Corporate Finance					
Learning Goal	L2: Professional and Global Communication - Our graduates will be effective professional and globalized communicators				
	L22: Graduates will be able to efficiently deliver their research ideas, analytical results, and academic contribution in English				
Traits	T1. Logic and Organization	T2. Quality of slides	T3. Voice quality, pace, and mannerism	T4. Use of media/rapport with audience	T5. Ability to answer questions.
Students	15	15	15	15	15
1	3	3	3	3	3
2	3	3	3	3	3
3	3	3	3	3	3
4	3	3	3	3	3
5	3	3	3	3	3
6	2	3	3	3	3
7	3	3	3	3	3
8	3	3	3	3	3
9	3	3	3	3	3
10	3	2	2	3	3
11	3	3	2	3	3
12	3	3	3	3	3
13	3	3	3	3	3
14	2	3	3	3	2
15	2	3	3	3	3
# of 3 point	12	14	13	15	14

# of 2 point	3	1	2	0	1
# of 1 point	0	0	0	0	0
Total Score	42	44	43	45	44
Average	2.800	2.933	2.867	3.000	2.933
Total Average	2.907				

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

Assessment Learning Goal 3 (L3): Dissertation Evaluation					
Learning Goal	L3: Creative and Analytical Thinking - Our graduates will be creative academic researchers				
	L31: Graduates will be able to identify the gap in the literature, and develop new research idea about their research field				
Traits	T1. Fact finding	T2. Research gap	T3. Idea finding	T4. Solution finding	T5. Contribution
Students	33	33	33	33	33
1	3	3	3	2	3
2	2	3	3	2	2
3	3	3	3	3	2
4	3	2	3	2	3
5	3	3	3	3	3
6	2	2	1	2	2
7	2	2	2	2	2
8	1	2	2	2	2
9	3	2	2	3	3
10	3	3	3	2	3
11	2	3	3	2	3
12	2	3	2	3	3
13	2	3	2	3	3
14	3	3	3	3	2
15	3	2	2	2	2
16	3	3	3	2	2
17	3	3	3	3	3
18	3	2	3	3	2
19	3	3	3	3	3

20	2	2	3	3	2
21	3	2	3	3	2
22	3	2	3	2	3
23	2	2	3	3	2
24	2	3	2	3	2
25	3	3	3	2	3
26	3	3	3	3	3
27	3	3	3	3	3
28	3	3	3	3	3
29	2	3	3	2	3
30	3	3	3	3	3
31	2	3	3	2	2
32	3	2	3	3	3
33	3	3	3	3	3
# of 3 point	21	21	25	19	19
# of 2 point	11	12	7	14	14
# of 1 point	1	0	1	0	0
Total Score	86	87	90	85	85
Average	2.606	2.636	2.727	2.576	2.576
Total Average	2.624				

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

Assessment Learning Goal 3 (L3): Dissertation Evaluation					
Learning Goal	L3: Creative and Analytical Thinking - Our graduates will be creative academic researchers				
	L32: Graduates will be able to analyze the new research ideas using qualitative or quantitative analytical skills				
Traits	T1. Business analytics	T2. Generation of alternatives	T3. Quantitatively or Qualitatively analytical evaluation	T4. Utilize analytical tools in a logical manner	T5. Use new ideas and analysis methods not includes in the problem
Students	33	33	33	33	33
1	3	3	2	2	3
2	3	2	3	3	2
3	3	2	3	3	2
4	3	2	3	3	2
5	3	3	3	3	3
6	2	2	2	2	1
7	1	2	3	3	2
8	1	2	3	2	2
9	3	2	3	3	3
10	3	2	3	3	3
11	2	3	3	2	3
12	3	3	3	2	3
13	2	2	3	3	3
14	3	3	3	3	3
15	2	2	2	2	2
16	3	3	3	3	2
17	3	2	3	3	3
18	3	3	3	3	2
19	3	3	3	3	3

20	2	3	2	2	2
21	2	3	2	3	2
22	3	3	2	3	2
23	2	3	2	2	2
24	3	2	3	3	2
25	2	2	3	3	2
26	3	3	3	3	3
27	3	3	3	3	3
28	3	3	3	3	3
29	3	2	2	3	3
30	3	3	3	3	3
31	2	2	2	2	2
32	3	2	3	3	3
33	3	3	3	3	3
# of 3 point	22	17	24	24	17
# of 2 point	9	16	9	9	15
# of 1 point	2	0	0	0	1
Total Score	86	83	90	90	82
Average	2.606	2.515	2.727	2.727	2.485
Total Average	2.612				

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

Assessment Learning Goal 4 (L4): MSB510_Innovation Management and Strategy					
Learning Goal	L4: Cross-disciplinary Study - Our graduates will integrate business and technology management				
	L41: Graduates will be able to integrate the analytical subjects between business and technology management areas				
Traits	T1. Integrating cross disciplinary study	T2. Analyzing social issues	T3. Advanced analytical techniques	T4. Intellectual ability	T5. Awareness of interrelationships
Students	27	27	27	27	27
1	2	2	3	3	3
2	3	3	3	3	3
3	1	1	1	1	1
4	1	1	1	1	1
5	2	2	3	2	3
6	3	3	2	3	2
7	1	1	1	1	1
8	1	2	1	1	1
9	2	3	3	3	2
10	2	3	2	2	3
11	3	3	3	2	2
12	3	2	2	3	2
13	3	3	3	2	2
14	2	3	2	3	3
15	3	3	3	2	2
16	3	3	2	3	2
17	1	2	2	2	2
18	1	1	1	1	1
19	3	2	3	3	2
20	3	3	2	2	3
21	2	3	3	3	2
22	2	3	2	3	3

23	3	3	3	2	2
24	3	2	3	3	2
25	3	2	2	3	3
26	2	2	3	3	3
27	3	2	3	2	3
# of 3 point	13	13	13	13	10
# of 2 point	8	10	9	9	12
# of 1 point	6	4	5	5	5
Total Score	61	63	62	62	59
Average	2.259	2.333	2.296	2.296	2.185
Total Average	2.274				

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