

2020 AOL Report**School of 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

Our program targets 4 Learning Goals such as research qualification, professional and global communication, creative and analytical thinking, cross-disciplinary study. To assess the accomplishment of each learning goal, we utilize course-embedded test evaluation, project report evaluation qualification exam evaluation and dissertation evaluation by faculty.

L1. Research Qualification

- Our graduates will have skills (or ability) to conduct quality research

L2. Professional and Global Communication

- Our graduates will be effective professional and globalized communicators

L3. Creative and Analytical Thinking

- Our graduates will be creative academic researchers

L4. Cross-disciplinary Study

- Our graduates will integrate business and technology management

Generally, the BTM graduate students received more than expected level in all aspects. The average scores are 2.67, 2.85, 2.63, 2.72 for each learning goal. It signals that the students have developed satisfactory academic aptitude consistent with the learning goals of the program. Students' abilities to create skills to conduct quality research, professional global communication, and cross-disciplinary study were distinctive. Among the learning goals, professional and global communication has the highest score. Most student exceed expectation for making a professional English communication.

Although most of the students' performance meet the expectation, the results suggest that the students' ability could be more improved when they make creative and analytic thinking (L3). The department must focus on helping students to analyze the new research ideas using qualitative or quantitative analytical skills

- Total number of courses: 18 (Spring: 6, Fall: 7, Spring-Fall: 5)
- Total number of graduates: 27 (February: 20, August: 7)
- Total number of enrollment:

- Spring: 109 (Master:44, PhD: 65)
- Fall: 121 (Master:58, PhD:63)
- Sample: more than 5 (Necessary sample: 15% of graduates = 4.05)
- 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: 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 = 29)	Test evaluation
L12) Graduates will have basic knowledge on theory, literature, and trend in their research field	Students enrolled in Qualification Exam. (Sample number = 20)	Qualification exam evaluation
Findings		
<p>The average scores for L11 and L12 are 2.766 and 2.575 respectively.</p> <p>* 1 (Fails to Meet Expectations) 2 (Meets Expectations) 3 (Exceed Expectation)</p> <p>The average scores for L11 and L12 are higher than last year's(2.71 for L1, 2.53 for L2)</p> <p>The achievement in fundamental quantitative analytical skills (L11) is higher than that in basic knowledge on theory, literature and trend in their research field.</p> <p>All students meet expectation for L11</p> <p>79%(23/29) of students exceed expectations for understanding statistical theory (Trait 1 for L11)</p> <p>96%(27/29) of students exceed expectations for the consistent conclusion when they conduct research (Trait 5 for L11)</p> <p>Most of student meet the expectation for L12, but 5%(1/20) of students has difficulty in understanding of principles of research tools (Trait 3 for L12)</p>		

Business and Technology Management Graduate Program Assessment: 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 = 27)	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 average scores for L21 and L22 are 2.772 and 2.926 respectively.</p> <p>* 1 (Fails to Meet Expectations) 2 (Meets Expectations) 3 (Exceed Expectation)</p> <p>The overall score implies that most graduates were able to communicate effectively and professionally through BTM courses.</p> <p>The average scores for L2 is lower than last year's(2.83 for L21, 2.91 for L22)</p> <p>The achievement in efficiently delivering research idea, results, and academic contribution in English (L22) is higher than that in creating well-written professional research papers in English (L21).</p> <p>All students meet expectation for L21.</p> <p>Especially, 100%(27/27) of students received 3 point in English spelling and grammar. (Trait 3 for L21)</p> <p>78%(21/27) of students have a high level of language delivery skill. (Trait 2 for L21)</p> <p>All students meet expectation for L22.</p> <p>100% of students exceed the expectation successfully for quality of slides, use of media/rapport with audience when they make presentation. (Trait 2, 4 for L22)</p>		

Business and Technology Management Graduate Program Assessment: 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.	Dissertation Defense (Sample number = 18)	Dissertation evaluation
L32) Graduates will be able to analyze the new research ideas using qualitative or quantitative analytical skills.		Dissertation evaluation
Findings		
<p>The average scores for L31 and L32 are 2.644 and 2.611 respectively. * 1 (Fails to Meet Expectations) 2 (Meets Expectations) 3 (Exceed Expectation)</p> <p>The overall score implies that most graduates developed to be creative academic researchers through BTM courses.</p> <p>The average score for L31 is higher than last year's(2.62) and L32 is the same as last years'(2.611)</p> <p>The achievement in identifying the research gap in the literature, and develop new research idea (L31) is higher than that in analyzing the new research ideas using qualitative or quantitative analytical skills (L21).</p> <p>All students meet expectations for L31.</p> <p>72%(13/28) of students exceed expectation for fact-finding when they make academic research (Trait 1 for L31)</p> <p>66%(12/18) of students exceed expectation for finding research gap (Trait 2 for L31)</p> <p>All students meet expectations for L32.</p> <p>5.6%(1/18) of students has difficulty in using new ideas and analysis methods not includes in the problem (Trait 5 for L32)</p>		

Business and Technology Management Graduate Program Assessment: 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 = 34)	Project presentation evaluation / Report evaluation
Findings		
<p>The average score for L41 is 2.724 * 1 (Fails to Meet Expectations) 2 (Meets Expectations) 3 (Exceed Expectation)</p> <p>The overall score implies that most graduates were able to integrate business and technology management through BTM courses.</p> <p>The average score is higher than last year's(2.27)</p> <p>All of students meet expectations for all traits.</p> <p>73.5%(25/34) of students exceed expectation successfully for integrating cross-disciplinary study and intellectual ability (Trait 1 and 4 for L4)</p> <p>79.4%(27/34) of students exceed expectation for awareness of interrelationships between business and technology management area (trait 5 for L4)</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	29	29	29	29	29
1	3	2	3	3	3
2	3	2	3	3	3
3	3	2	2	3	3
4	3	2	2	3	3
5	3	2	2	3	3
6	3	2	3	3	3
7	3	2	3	3	3
8	3	2	2	3	3
9	3	2	3	3	3
10	3	3	3	3	2
11	3	3	3	3	3
12	3	3	3	3	3
13	3	2	2	3	2
14	3	2	3	3	3
15	3	3	3	3	3
16	3	3	3	3	3
17	3	3	3	3	3
18	3	2	2	3	3
19	3	3	3	3	3

20	2	2	3	3	3
21	3	2	3	3	3
22	2	3	2	3	3
23	2	3	2	3	3
24	2	3	2	3	3
25	2	3	3	2	3
26	3	3	3	3	3
27	3	3	3	3	3
28	2	2	2	3	3
29	3	3	3	3	3
# of 3 point	23	14	19	28	27
# of 2 point	6	15	10	1	2
# of 1 point	0	0	0	0	0
Total Score	81	72	77	86	85
Average	2.793	2.483	2.655	2.966	2.931
Total Average	2.766				

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	3	3	3
2	2	2	1	2
3	3	2	3	3
4	2	2	2	2
5	3	2	3	2
6	2	2	2	2
7	2	2	2	2
8	2	2	2	2
9	3	3	3	2
10	3	3	3	3
11	3	3	3	3
12	3	2	3	3
13	3	2	2	3
14	3	3	3	3
15	3	3	3	3
16	2	2	3	2
17	3	2	3	3
18	2	2	3	3
19	3	3	3	3
20	3	3	3	3
# of 3 point	13	8	14	12
# of 2 point	7	12	5	8
# of 1 point	0	0	1	0
Total Score	53	48	53	52
Average	2.650	2.400	2.650	2.600
Total Average	2.575			

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	27	27	27	27	27	27
1	2	3	3	3	3	3
2	3	3	3	3	3	3
3	3	3	3	2	2	3
4	3	3	3	3	3	3
5	2	3	3	3	2	3
6	3	3	3	3	2	3
7	2	2	3	2	2	3
8	3	3	3	3	3	3
9	2	3	3	2	3	3
10	3	3	3	3	3	3
11	3	3	3	3	3	3
12	3	3	3	2	3	3
13	3	3	3	2	3	3
14	2	2	3	2	2	3
15	2	3	3	2	3	3
16	3	3	3	3	3	3
17	3	3	3	2	2	3
18	3	3	3	3	3	3
19	2	2	3	3	3	3
20	3	3	3	3	3	3

21	3	2	3	2	2	3
22	3	3	3	3	3	3
23	2	3	3	2	2	3
24	3	3	3	2	3	3
25	3	2	3	3	3	3
26	3	3	3	3	3	3
27	2	2	3	2	2	2
# of 3 point	18	21	27	15	18	26
# of 2 point	9	6	0	12	9	1
# of 1 point	0	0	0	0	0	0
Total Score	72	75	81	69	72	80
Average	2.667	2.778	3.000	2.556	2.667	2.963
Total Average	2.772					

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	27	27	27	27	27
1	3	3	3	3	3
2	3	3	3	3	3
3	2	3	3	3	3
4	3	3	3	3	3
5	3	3	3	3	3
6	3	3	3	3	3
7	2	3	3	3	2
8	3	3	3	3	3
9	3	3	3	3	3
10	3	3	3	3	3
11	3	3	3	3	3
12	2	3	3	3	3
13	3	3	3	3	3
14	2	3	3	3	3
15	2	3	3	3	3
16	3	3	3	3	3
17	2	3	3	3	3
18	3	3	3	3	3
19	3	3	3	3	3
20	3	3	3	3	3
21	3	3	3	3	3

22	3	3	3	3	3
23	3	3	3	3	3
24	2	3	3	3	3
25	3	3	2	3	3
26	3	3	3	3	3
27	2	3	3	3	3
# of 3 point	19	27	26	27	26
# of 2 point	8	0	1	0	1
# of 1 point	0	0	0	0	0
Total Score	73	81	80	81	80
Average	2.704	3.000	2.963	3.000	2.963
Total Average	2.926				

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	18	18	18	18	18
1	3	2	3	3	2
2	3	2	2	3	2
3	3	2	3	3	3
4	3	2	2	3	3
5	3	3	3	3	2
6	3	3	3	3	3
7	3	3	3	2	3
8	3	2	2	3	2
9	3	2	2	3	2
10	3	3	3	3	3
11	2	3	3	2	2
12	2	3	3	2	3
13	3	3	2	3	3
14	2	3	3	2	2
15	2	3	3	3	2
16	3	3	2	2	3
17	2	3	3	2	3
18	3	3	3	2	3
# of 3 point	13	12	12	11	10
# of 2 point	5	6	6	7	8
# of 1 point	0	0	0	0	0
Total Score	49	48	48	47	46
Average	2.722	2.667	2.667	2.611	2.556
Total Average	2.644				

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	18	18	18	18	18
1	3	3	2	3	3
2	3	3	2	2	3
3	3	3	2	2	3
4	3	3	2	2	3
5	3	3	3	2	3
6	3	3	3	3	3
7	3	2	3	3	3
8	2	2	3	3	3
9	3	2	3	3	2
10	2	2	3	3	3
11	2	2	2	3	3
12	3	2	2	3	3
13	2	2	3	3	2
14	2	2	2	2	3
15	2	3	3	3	2
16	3	3	3	3	3
17	2	2	3	2	1
18	3	3	2	3	3
# of 3 point	11	9	10	12	14
# of 2 point	7	9	8	6	3
# of 1 point	0	0	0	0	1
Total Score	47	45	46	48	49
Average	2.611	2.500	2.556	2.667	2.722
Total Average	2.611				

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	34	34	34	34	34
1	3	3	2	3	3
2	2	2	3	3	2
3	3	3	3	3	3
4	2	2	3	3	2
5	3	3	3	2	3
6	3	2	3	3	3
7	3	2	3	3	3
8	3	2	2	3	2
9	3	3	3	2	3
10	3	3	2	2	3
11	3	3	2	3	3
12	3	3	3	2	3
13	2	2	3	2	3
14	3	3	2	3	3
15	3	3	3	3	3
16	3	3	2	3	3
17	3	2	3	3	3
18	3	3	3	3	3
19	2	2	2	2	2
20	3	3	2	2	2
21	3	3	3	3	2
22	3	3	3	3	3
23	3	3	3	3	2
24	3	3	3	3	3
25	3	3	3	3	3
26	3	3	3	2	3
27	3	3	3	3	3

28	3	3	2	3	3
29	2	2	3	3	3
30	2	3	3	2	3
31	3	3	3	3	3
32	2	2	3	3	3
33	2	2	2	3	3
34	2	2	3	3	3
# of 3 point	25	22	24	25	27
# of 2 point	9	12	10	9	7
# of 1 point	0	0	0	0	0
Total Score	93	90	92	93	95
Average	2.735	2.647	2.706	2.735	2.794
Total Average	2.724				

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