

AOL Report Master of Financial Engineering (MFE) Program Assessment

The role of the Master of Financial Engineering (MFE) program is specialization in finance engineering and quant. The MFE program provides human resource training focused on quantitative asset management, derivatives, risk management, on-site problem solving skills as well as understanding of global practice. The students in the MFE program are required to have analytical and research skill that can be applied in actual practices via thesis writing.

- Total Course: 46 (1.5-unit courses in 2017)
- Number of Graduate: 34
- Total Enrollment: 114
- Samples: 18~30 (about 21% of total enrollment)
- Assessment Course:

Learning Goal 1	L11	FE514 Term Structure of Interest Rates
	L12	FE514 Term Structure of Interest Rates
Learning Goal 2	L21	FE522 Advanced Econometric Analysis for Finance
	L22	FE522 Advanced Econometric Analysis for Finance
Learning Goal 3	L31	FE539 Computational Finance
	L32	FE539 Computational Finance
	L33	FE539 Computational Finance
Learning Goal 4	L41	FE557 Commodity Trading
	L42	FE557 Commodity Trading

Outline of assessment

Overall, the students of the Master of Financial Engineering (MFE) program meet expectations successfully. L1, L2, L3, and L4 have the average scores of 2.3, 2.45, 2.28 and 2.28 which are higher than the criterion value 2 which means students meet the expectations. All scores of traits exceed the criterion.

Students of MFE program achieve high levels in basic theory, analytical research tools, and background about their research areas. However, the relatively low scores in L32 related to graduate will deliver effective presentation accompanied with proper media technology. Moreover, some students have difficulty in finding research sources and identifying objectives. This tendency is confirmed by the low score of traits related to make clear introduction and background.

Students of MFE program have the strengths in making documents rather than delivering presentations. However, they have some troubles in making presentation and demonstrating effective interpersonal communication in a team setting. Therefore, courses related to effective presentation and communication skills should be provided to the students.

Overview of assessment

MFE Program Assessment: Learning Goal 1		
Our graduates will command analytical thinking in solving complex financial decision problems.		
Learning Objective	Sample	Methods
(L11) Graduate will have basic quantitative skills for research	FE514 (N=28),	- (L11) Test evaluation by faculty
(L12) Graduate will use appropriate quantitative analytical techniques to identify problems in finance and develop a solution.	FE514 (N=28),	- (L12) Test and assignment evaluation by faculty
<p>Finding</p> <ul style="list-style-type: none"> - The average scores for L11 and L12 are 2.36 and 2.24 * 1 (Fails to Meet Expectations) 2 (Meets Expectations) 3 (Exceed Expectations) - L11 and L12 meet expectations successfully. - The achievement in application and finding a solution (L11) is higher than that in basic skills (L12). - 7.1% (2/28) of students have difficulty in constructing logic and organization (Trait 1 for L11). - 10.7% (3/28) of students have the most difficulties in forming effective literature search skills (Trait 3 for L11). - 17.9% (5/28) of students have the most difficulties in forming identification of case problems/issues (Trait 4 for L12). - 32.1% (9/28) of students could not meet expectations for L12. (get points lower than 2 at least in one trait for L12.) 		

MFE Program Assessment: Learning Goal 2		
Our graduates will have skills (or ability) to conduct quality research.		
Learning Objective	Sample	Methods
(L21) Graduate will engage in management research and present the findings of such research effectively.	FE522 (N=18)	- (L21) Test evaluation by faculty
(L22) Graduate will have basic theory, analytical research tools, and background about their research area.	FE522 (N=18)	- (L22) Test evaluation by faculty
<p>Findings</p> <ul style="list-style-type: none"> - The average score for L21 and L22 are 2.4 and 2.5. * 1 (Fails to Meet Expectations) 2 (Meets Expectations) 3 (Exceed Expectations) - L21 and L22 meet expectations successfully. - Four students 16.7% (3/18) cannot prepare a research (Trait 5 for L21). It means that those students have difficulty in 'Acceptance finding (Idea is proven)'. - 'Understanding Theory' (Trait 1 for L22) received low mark relatively. - While, it turns out that our graduates do good job in 'Proper use of effective research tools' (Trait 3 for L22). 		

MFE Program Assessment: Learning Goal 3

Our graduates will be effective communicators.

Learning Objective	Sample	Methods
(L31) Graduate will produce professional business or academic documents.	FE539 (N=28)	- (L31) Term paper evaluation by faculty
(L32) Graduate will deliver effective presentation accompanied with proper media technology.	FE539 (N=28)	- (L32) Presentation evaluation by faculty
(L33) Graduate will demonstrate effective interpersonal communication in a team setting.	FE539 (N=28)	- (L33) Presentation evaluation by faculty
<p>Finding</p> <ul style="list-style-type: none"> - The average scores for L31, L32 and L33 are 2.23, 2.33, and 2.34, respectively <li style="padding-left: 20px;">* 1 (Fails to Meet Expectations) 2 (Meets Expectations) 3 (Exceed Expectations) - L31, L32 and L33 meet expectations successfully. - The result shows that students achieve successfully in all learning objectives. (L31, L32, L33) - However, some of our graduates (25% (7/28)) have difficulties in identifying discipline-related concepts and issues (Trait 2 for L31). - Moreover, some of our graduates (32.1% (9/28)) tend to focus exclusively on task to be accomplished without regard to team member or focuses exclusively on interpersonal relations without regard to task (Trait 2 for L33). 		

MFE Program Assessment: Learning Goal 4

Our graduates will have a global perspective.

Learning Objective	Sample	Methods
<p>(L41) Graduate will understand global business issues and relate current issues to emerging business opportunities.</p> <p>(L42) Graduate will take command of global financial markets in business English or other languages.</p>	<p>FE557 (N=30)</p> <p>FE557 (N=30)</p>	<ul style="list-style-type: none"> - (L41) Test evaluation by faculty - (L42) Class participation evaluation by faculty and OPI evaluation

Finding

- The average scores for L41 and L42 are 2.29 and 2.28.
- * 1 (Fails to Meet Expectations) 2 (Meets Expectations) 3 (Exceed Expectations)
- L41 and L42 meet expectations successfully.
- 16.7%(5/30) of students have difficulty to understanding about L41-T1, 'Knowledge' and there are only 15% students who get 3 score in 'Knowledge' section.
- 16.7%(5/30) of students could not meet the expectation of T42-T2, 'Comprehension'.
- 'Comprehension' (Trait 2 for L42) received low mark relatively.
- 'Analysis of global issues' (Trait 2 for L41) received high mark relatively.

Data Analysis and Results

Assessment Learning Goal L1												
	L11(FE539)					L12(FE539)						
	T1	T2	T3	T4	T5	T1	T2	T3	T4	T5	T6	T7
1	2	2	3	2	2	4	3	4	5	3	4	4
2	14	14	12	14	14	13	14	14	11	15	14	14
3	12	12	13	12	12	11	11	10	12	10	10	10
N	28	28	28	28	28	28	28	28	28	28	28	28
Avg	2.36	2.36	2.36	2.36	2.36	2.25	2.29	2.21	2.25	2.25	2.21	2.21
Avg_t	2.36					2.24						

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

* Unit: person (point)

Assessment Learning Goal L2									
	L21(FE502)					L22(FE502)			
	T1	T2	T3	T4	T5	T1	T2	T3	T4
1	1	2	1	1	3	2	1	0	1
2	8	7	10	8	5	8	7	5	8
3	9	9	7	9	10	8	10	13	9
N	18	18	18	18	18	18	18	18	18
Avg	2.44	2.39	2.33	2.44	2.39	2.33	2.50	2.72	2.44
Avg_t	2.40					2.50			

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

* Unit: person (point)

Assessment Learning Goal L3																		
	L31(FE539)								L32(FE539)						L33(FE539)			
	T1	T2	T3	T4	T5	T6	T7	T8	T1	T2	T3	T4	T5	T6	T1	T2	T3	T4
1	4	7	3	5	6	2	5	5	4	6	4	3	5	5	5	9	3	3
2	13	6	13	15	10	12	16	14	8	9	12	9	11	9	8	5	11	10
3	11	15	12	8	12	14	7	9	16	13	12	16	12	14	15	14	14	15
N	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28
Avg	2.25	2.29	2.32	2.11	2.21	2.43	2.07	2.14	2.43	2.25	2.29	2.46	2.25	2.32	2.36	2.18	2.39	2.43
Avg_t	2.23								2.33						2.34			

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

* Unit: person (point)

Assessment Learning Goal L4						
	L41(FE528)			L42(FE573)		
	T1	T2	T3	T1	T2	T3
1	5	3	5	2	5	2
2	12	11	15	18	15	14
3	13	16	10	10	10	14
N	30	30	30	30	30	30
Avg	2.27	2.43	2.17	2.27	2.17	2.4
Avg_t	2.29			2.28		

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

* Unit: person (point)