

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: 55 (1.5-unit or 3-unit courses in 2018)
- Number of Graduate: 54
- Total Enrollment: 97
- Samples: 14~47 (about 60% of total enrollment)
- Assessment Course:

Learning Goal 1	L11	FE587 Estimation of Asset Pricing Models FE587
	L12	Estimation of Asset Pricing Models
Learning Goal 2	L21	FE587 Estimation of Asset Pricing Models FE587
	L22	Estimation of Asset Pricing Models
Learning Goal 3	L31	FE539 Computational Finance
	L32	FE539 Computational Finance
	L33	FE539 Computational Finance
Learning Goal 4	L41	FE617 Distinguished Lectures in Asset Management
	L42	FE617 Distinguished Lectures in Asset Management

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 2.31, 2.51, 2.67, and 2.28 that are higher than the criterion value 2, which means our 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 L42 related to 'our graduate will have command of business English or other language of global financial markets'. Moreover, some students have difficulty in using appropriate quantitative analytical techniques to identify problems in finance and develop a solution. This is confirmed by the low score of traits related to 'Identification of case problems/issues', and 'Solutions'.

Students of MFE program have the most strengths in effective communications (L3). Our students are evenly good at producing professional business documents and delivering effective presentation with proper media technology regardless of work alone or work with a team.

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	FE587 (N=14),	- (L11) Test evaluation by faculty
(L12) Graduate will use appropriate quantitative analytical techniques to identify problems in finance and develop a solution.	FE587 (N=14),	- (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 2.26 <li style="padding-left: 20px;">* 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). - 14.3% (2/14) of students have difficulty in constructing logic and organization (Trait 1 for L11). - 42.9% (6/14) of students have the most difficulties in reaching consistent conclusion (Trait 5 for L11). - 42.9% (6/14) of students have the most difficulties in forming identification of case problems/issues (Trait 4 for L12). - 35.7% (5/14) of students meet expectations for L12. (No points lower than 2 for all traits in 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.	FE587 (N=14)	- (L21) Test evaluation by faculty
(L22) Graduate will have basic theory, analytical research tools, and background about their research area.	FE587 (N=14)	- (L22) Test evaluation by faculty
<p>Findings</p> <ul style="list-style-type: none"> - The average score for L21 and L22 are 2.56 and 2.46. * 1 (Fails to Meet Expectations) 2 (Meets Expectations) 3 (Exceed Expectations) - L21 and L22 meet expectations successfully. - Three students 21.4% (3/14) cannot prepare a research (Trait 2 for L21). It means that those students have difficulty in 'problem/objective finding'. - Four students 28.6% (4/14) could not understand theory (Trait 1 for L22). It means that those students have difficulty in basic theory. - 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=26)	- (L31) Term paper evaluation by faculty
(L32) Graduate will deliver effective presentation accompanied with proper media technology.	FE539 (N=26)	- (L32) Presentation evaluation by faculty
(L33) Graduate will demonstrate effective interpersonal communication in a team setting.	FE539 (N=26)	- (L33) Presentation evaluation by faculty

Finding

- The average scores for L31, L32 and L33 are 2.70, 2.54, and 2.77, respectively
- * 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)
- All students meet the expectations for all traits in all learning goals (No one who gets 1 for all traits).
- Moreover, almost of the students (96.2% (25/26)) exceed expectations for ‘Stays on track’. (Trait 4 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>FE617 (N=47)</p> <p>FE617 (N=47)</p>	<ul style="list-style-type: none"> - (L41) Test evaluation by faculty - (L42) Class participation evaluation by faculty and OPI evaluation
<p>Finding</p> <ul style="list-style-type: none"> - The average scores for L41 and L42 are 2.28 and 2.27. * 1 (Fails to Meet Expectations) 2 (Meets Expectations) 3 (Exceed Expectations) - L41 and L42 meet expectations successfully. - 17.0% (8/47) of students have difficulty to understanding about L41-T1 'Knowledge' and there are 48.9% (23/47) students who get 3 score in 'Knowledge' section. This trait shows the widest variation among students. - 14.9%(7/47) of students could not meet the expectation of L42-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(FE587)					L12(FE587)						
	T1	T2	T3	T4	T5	T1	T2	T3	T4	T5	T6	T7
1	2	2	3	3	6	1	3	1	6	4	2	6
2	2	1	4	4	2	5	7	4	2	1	6	2
3	10	11	7	7	6	8	4	9	6	9	6	6
N	14	14	14	14	14	14	14	14	14	14	14	14
Avg	2.57	2.64	2.29	2.29	2.00	2.50	2.07	2.57	2.00	2.36	2.29	2.00
Avg_t	2.36					2.26						

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

* Unit: person (point)

Assessment Learning Goal L2									
	L21(FE587)					L22(FE587)			
	T1	T2	T3	T4	T5	T1	T2	T3	T4
1	3	3	1	1	0	4	2	0	0
2	3	0	4	2	6	6	3	3	6
3	8	11	9	11	8	4	9	11	8
N	14	14	14	14	14	14	14	14	14
Avg	2.36	2.57	2.57	2.71	2.57	2.00	2.50	2.79	2.57
Avg_t	2.56					2.46			

* 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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	10	17	9	5	5	5	9	2	10	9	13	16	11	13	12	5	6	1
3	16	9	17	21	21	21	17	24	16	17	13	10	15	13	14	21	20	25
N	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26
Avg	2.6	2.3	2.6	2.8	2.8	2.8	2.6	2.9	2.6	2.6	2.5	2.3	2.5	2.5	2.5	2.8	2.7	2.9

	2	5	5	1	1	1	5	2	2	5	0	8	8	0	4	1	7	6
Avg_t	2.70								2.54						2.77			

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

* Unit: person (point)

Assessment Learning Goal L4						
	L41(FE617)			L42(FE617)		
	T1	T2	T3	T1	T2	T3
1	8	6	8	6	7	7
2	16	19	22	17	22	24
3	23	22	17	24	18	16
N	47	47	47	47	47	47
Avg	2.32	2.34	2.19	2.38	2.23	2.19
Avg_t	2.28			2.27		

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

* Unit: person (point)