

## 2020 AOL Report

### Master of Financial Engineering (MFE) Program Assessment

Master of Financial Engineering (MFE) program is specialization in financial engineering and quant. The MFE program provides human resource training focused on quantitative asset management, derivatives, risk management, financial analytics, 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.

#### Overall Review

Learning Goals are divided into four parts. Respectively, L1 is to evaluate analytical thinking that whether our students can solve problems or not. L2 is about Research Qualification to measure research skills. L3 is communication which is simple but important when they work with others. L4 is Global perspective making students understand global trend.

The average scores of L1, L2, L3, L4 are 2.538, 2.519, 2.352 and 2.389 respectively. L1 has the highest score averagely. L1 is analytical thinking. It means they have basic quantitative skills and are good at solving problems. However, they have the lowest point at L3. More detailedly, Just 4 students have 3 point (exceed expectations) in logic and organization trait of 'Graduate will produce professional business documents.'(L31). L3 is a measurement of communication. Collectively, as a individual, They are good enough but as a team, they are not enough. It seems they should be trained more about communication skills.

- Total number of courses: 47 (Spring: 13, Summer: 3, Fall: 31 )
- Assessment courses

Learning Goal 1	L11	<a href="#">FE522 Advanced Financial Econometrics</a>
	L12	<a href="#">FE522 Advanced Financial Econometrics</a>
Learning Goal 2	L21	<a href="#">FE587 Estimation of Asset Pricing Models</a>
	L22	<a href="#">FE587 Estimation of Asset Pricing Models</a>
Learning Goal 3	L31	<a href="#">FE567 Financial Data Analysis with Big data</a>
	L32	<a href="#">FE567 Financial Data Analysis with Big data</a>
	L33	<a href="#">FE567 Financial Data Analysis with Big data</a>
Learning Goal 4	L41	<a href="#">FE617 Distinguished Lectures In Asset Management</a>
	L42	<a href="#">FE617 Distinguished Lectures In Asset Management</a>

## Overview of Assessment

Program Name: Assessment Learning Goal 1		
(Learning Goal 1 Analytical Thinking: 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.	Students enrolled in FE522. (N=15)*	Test evaluation by faculty
L12) Graduate will use appropriate quantitative analytical techniques to identify problems in finance and develop a solution.	Students enrolled in FE522. (N=15)*	Test and assignment evaluation by faculty
Findings		
<p><b>Finding</b></p> <ul style="list-style-type: none"> <li>- The average score for L11 and L12 are 2.547 and 2.619. *1 (Fails to Meet Expectations) 2 (Meets Expectations) 3 (Exceed Expectations)</li> <li>- All subjects meet expectations successfully.</li> <li>- 54.7% and 61.9% of students averagely achieved more than expectations in L11 and L12 respectively. Students have the most difficulties in effective literature search skills (L11-T3).</li> <li>- On L12, Students have relatively weak understanding with Identification of case problems or issues (T4).</li> </ul>		

## Data Analysis and Results

Assessment Learning Goal 1 (L1): MFE522 Advanced Financial Econometrics												
Learning Goal	L1: Analytical Thinking: Our graduates will command analytical thinking in solving complex financial decision problems.											
	L11: Graduate will have basic quantitative skills for research.					L12: Graduate will use appropriate quantitative analytical techniques to identify problems in finance and develop a solution.						
	Traits	T1	T2	T3	T4	T5	T1	T2	T3	T4	T5	T6
Students												
1	3	3	2	3	3	3	3	3	3	2	3	3
2	3	3	3	3	3	3	3	2	3	3	3	3
3	3	3	2	3	2	2	3	2	3	2	2	2
4	3	3	2	2	3	3	3	3	2	3	3	2
5	2	3	2	3	2	2	3	2	3	3	2	3
6	2	3	3	2	2	3	3	3	2	3	2	2
7	3	2	2	2	3	3	2	3	3	3	3	3
8	2	3	3	2	2	2	3	3	3	3	2	3
9	3	2	3	3	3	3	2	3	2	2	3	3
10	3	2	2	2	3	2	3	3	2	3	3	2
11	3	2	3	3	2	3	2	3	2	2	3	3
12	3	2	2	3	3	3	3	3	2	3	3	2
13	3	2	2	3	2	2	2	3	2	3	3	3
14	3	2	2	3	3	2	3	3	2	3	3	3
15	2	2	2	2	3	2	3	2	2	2	2	2
# of 3 point	11	7	5	9	9	8	11	11	6	10	10	9
# of 2 point	4	8	10	6	6	7	4	4	9	5	5	6
# of 1 point	0	0	0	0	0	0	0	0	0	0	0	0
Total Score	41	37	35	39	39	38	41	41	36	40	40	39
Average	2.733	2.467	2.333	2.600	2.600	2.533	2.733	2.733	2.400	2.667	2.667	2.600
Total Average	2.547					2.619						

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

## Overview of Assessment

Program Name: Assessment Learning Goal 2		
(Learning Goal 2 Research Qualification: 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.	Students enrolled in FE587. (N=12)*	Test evaluation by faculty
L22) Graduate will have basic theory, analytical research tools, and background about their research areas.	Students enrolled in FE587. (N=12)*	Test evaluation by faculty
Findings		
<p><b>Finding</b></p> <ul style="list-style-type: none"> <li>- The average score for L21 and L22 are 2.458 and 2.567. *1 (Fails to Meet Expectations) 2 (Meets Expectations) 3 (Exceed Expectations)</li> <li>- L21 and L22 both meet expectations.</li> <li>- None of Students exceeds expectations in Verification: “acceptance finding” (T5). On the other hand, all of students exceed expectations in preparation: “problem/objective finding”.</li> <li>- In all L2 traits, students showed up averagely more than 2 points.</li> <li>- 60.0% and 52.1% of students averagely achieved more than expectations in L21 and L22 respectively.</li> </ul>		

## Data Analysis and Results

Assessment Learning Goal 2 (L2): FE587 Estimation of Asset Pricing Models									
Learning Goal	L2: Research Qualification: Our graduates will have skills (or ability) to conduct quality research								
	L21: Graduate will engage in management research and present the findings of such research effectively.					L22: Graduate will have basic theory, analytical research tools, and background about their research areas.			
Traits	T1	T2	T3	T4	T5	T1	T2	T3	T4
Students									
1	1	3	1	2	2	2	1	3	3
2	2	3	3	2	2	2	2	1	3
3	2	3	3	2	2	2	2	3	3
4	3	3	3	3	2	3	3	3	3
5	3	3	3	3	2	3	3	2	3
6	3	3	3	3	2	2	2	3	3
7	3	3	3	3	2	3	2	3	3
8	2	3	2	3	2	2	2	2	3
9	3	3	3	3	2	2	3	1	2
10	3	3	3	3	2	3	2	3	3
11	3	3	2	2	2	2	2	2	2
12	3	3	3	2	2	3	2	3	3
# of 3 point	8	12	9	7	0	5	3	7	10
# of 2 point	3	0	2	5	12	7	8	3	2
# of 1 point	1	0	1	0	0	0	1	2	0
Total Score	31	36	32	31	24	29	26	29	34
Average	2.583	3.000	2.667	2.583	2.000	2.417	2.167	2.417	2.833
Total Average	2.567					2.458			

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

## Overview of Assessment

Program Name: Assessment Learning Goal 3		
(Learning Goal 3 Communication: our graduates will be effective communicators.)		
Learning Objective	Sample	Methods
L31) Graduate will produce professional business documents.	Students enrolled in FE567. (N=18)*	Term paper evaluation by faculty
L32) Graduate will deliver effective presentation accompanied with proper media technology.	Students enrolled in FE567. (N=18)*	Presentation evaluation by faculty
L33) Graduate will demonstrate effective interpersonal communication in a team setting.	Students enrolled in FE567. (N=18)*	Presentation evaluation by faculty
Findings		
<p><b>Finding</b></p> <ul style="list-style-type: none"> <li>- The average score for L31, L32 and L33 are 2.333 , 2.389 and 2.333 *1 (Fails to Meet Expectations) 2 (Meets Expectations) 3 (Exceed Expectations)</li> <li>- All subjects in L3 meet expectations.</li> <li>- 22.22% (4/18) of students have most difficulties in Clear introduction and background (T1) and consistent conclusions(T5) of L31.</li> <li>- 22.22% (4/18) of students failed meet expectations in professionalism(T5) of L32.</li> <li>- 22.22% (4/18) of students failed meet expectations in commitment(T1) of L33.</li> </ul>		

## Data Analysis and Results

Assessment Learning Goal 3 (L3): EE507 Financial Data Analysis with Big data																		
Learning Goal	L3: Communication: our graduates will be effective communicators.																	
	L3A: Graduate will produce professional business documents.								L3B: Graduate will deliver effective presentation accompanied with proper media technology.						L3C: Graduate will demonstrate effective interpersonal communication in a team setting.			
Trainee/Students	T1	T2	T3	T4	T5	T6	T7	T8	T1	T2	T3	T4	T5	T6	T1	T2	T3	T4
1	1	2	1	1	1	2	1	1	1	2	1	1	1	1	1	2	1	1
2	1	2	2	1	1	2	2	1	1	1	2	2	1	1	1	1	2	2
3	1	2	2	2	1	2	1	2	2	1	2	2	1	2	1	2	3	1
4	2	2	3	3	3	3	3	2	3	3	2	3	3	2	3	3	3	2
5	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1
6	3	3	3	2	3	3	2	3	3	3	3	3	2	3	3	3	3	3
7	3	2	2	2	3	3	3	2	3	3	3	2	2	2	3	3	2	2
8	3	2	2	3	2	2	3	3	3	2	3	3	3	2	2	3	3	2
9	2	2	3	3	3	2	3	3	3	3	2	3	2	3	3	3	2	2
10	2	3	2	2	3	3	2	2	3	3	2	2	3	3	2	2	3	3
11	2	2	3	3	3	2	2	2	3	3	3	2	3	3	2	2	3	3
12	3	3	3	2	3	3	3	3	3	2	2	3	3	3	3	3	3	2
13	3	3	3	2	3	3	3	2	3	3	3	3	2	3	3	3	2	3
14	3	3	3	2	3	2	3	3	3	2	3	3	3	2	3	3	3	2
15	3	3	3	2	3	3	3	2	3	3	3	2	3	3	3	3	2	3
16	2	3	2	2	3	3	3	2	3	3	2	2	3	3	2	3	2	2
17	3	2	3	2	3	3	3	2	3	2	2	3	2	3	3	3	2	2
18	3	2	3	2	3	2	3	3	3	2	3	2	3	3	2	2	3	3
# of 3 point	9	7	10	4	13	9	11	6	14	9	8	8	9	10	9	11	9	6
# of 2 point	5	10	6	11	1	8	4	9	1	6	8	9	5	5	5	5	7	9
# of 1 point	4	1	2	3	4	1	3	3	3	3	2	1	4	3	4	2	2	3
Total Score	41	42	44	37	45	44	44	39	47	42	42	43	41	43	41	45	43	39
Average	2.278	2.333	2.444	2.056	2.500	2.444	2.444	2.167	2.611	2.333	2.333	2.389	2.278	2.389	2.278	2.500	2.389	2.167
Total Average	2.333								2.300						2.333			

*Criteria: 1 (Basic to Meet Expectations), 2 (Meet Expectations), 3 (Exceed Expectations)*

## Overview of Assessment

Program Name: Assessment Learning Goal 4		
(Learning Goal 4 <b>Global Perspective: Our graduates will have a global perspective.</b> )		
Learning Objective	Sample	Methods
L41) Graduate will understand global business issues and relate current issues to emerging business opportunities.	Students enrolled in FE617. (N=57)*	Test evaluation by faculty
L42) Graduate will have command of business English or other language of global financial markets.	Students enrolled in FE617. (N=57)*	Class participation evaluation by faculty and OPI evaluation
Findings		
<p><b>Finding</b></p> <ul style="list-style-type: none"> <li>- The average score for L41 and L42 are 2.310 and 2.468 *1 (Fails to Meet Expectations) 2 (Meets Expectations) 3 (Exceed Expectations)</li> <li>- L41 and L42 both meets expectations successfully.</li> <li>- 22.81% (13/57) of students have most difficulties in application in analysis to global issues(T3) of L41.</li> <li>- 10.53% (6/57) of students failed meet expectations in communication(T3) of L42.</li> </ul>		



### Data Analysis and Results

Assessment Learning Goal 4 (L4): FE617 Distinguished Lectures In Asset Management						
L4: Global Perspective: Our graduates will have a global perspective.						
Learning Goal	L41: Graduate will understand global business issues and relate current issues to emerging business opportunities.			L42: Graduate will have command of business English or other language of global financial markets.		
Traits	T1	T2	T3	T1	T2	T3
Students						
1	2	2	2	3	2	2
2	3	2	2	2	2	2
3	3	3	3	3	3	3
4	3	3	2	2	3	2
5	1	1	1	2	2	3
6	3	3	3	3	3	3
7	2	1	1	2	1	1
8	2	2	2	3	2	2
9	2	2	2	3	3	3
10	2	2	1	2	2	2
11	2	2	2	2	3	2
12	1	1	1	2	1	1
13	2	2	1	1	1	1
14	3	3	3	3	2	2
15	2	2	1	2	3	2
16	3	3	3	3	3	3
17	3	3	3	3	3	2
18	3	2	3	3	2	2
19	1	2	2	3	3	3
20	3	3	3	3	3	3
21	3	3	3	3	3	3
22	2	1	1	2	2	1
23	1	1	1	2	1	1
24	3	3	3	3	2	3
25	3	3	3	3	3	3
26	2	2	3	3	3	3
27	3	3	3	2	3	2
28	3	3	3	3	3	2
29	3	3	3	3	3	3
30	3	3	3	3	2	3
31	3	3	3	3	3	3
32	2	2	2	3	2	3
33	2	2	2	3	3	3
34	2	2	1	2	2	2
35	2	2	2	2	3	3
36	3	3	2	2	3	3
37	3	3	3	3	3	3
38	2	2	2	2	3	2
39	2	2	3	3	3	3
40	2	2	2	2	3	3
41	1	1	1	3	2	3
42	3	3	3	2	3	2
43	2	2	1	2	3	3
44	3	3	3	3	3	2
45	3	3	3	3	3	3
46	3	3	2	2	3	3
47	3	3	3	2	2	3
48	3	3	2	2	3	2
49	1	1	1	1	1	1
50	3	3	3	3	3	2
51	3	3	3	2	3	2
52	1	1	1	2	2	2
53	3	3	2	2	2	2
54	2	2	2	3	3	3
55	2	2	2	2	3	3
56	2	2	2	3	2	3
57	3	3	3	3	2	2
# of 3 point	29	27	25	30	34	29
# of 2 point	21	22	19	25	18	22
# of 1 point	7	8	13	2	5	6
Total Score	136	133	126	142	143	137
Average	2.386	2.333	2.211	2.491	2.509	2.404
Total Average	2.310			2.468		

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