Stevens Institute of Technology

School of Business

**AACSB
ASSURANCE OF LEARNING**

**Master of Science in**

**Financial Engineering (FE)**

**INDIRECT GOALS**

June 2024

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# INDIRECT MEASURES

# ADDITIONAL GOALS

Indirect measures are used to assess the overall success of the financial engineering program in meeting its educational goals and providing a meaningful and enjoyable student experience. These goals are assessed in an Exit Survey of FE graduates that is administered in May of each year. All students graduating in the prior academic year (summer, fall and spring) are asked to complete an online survey. The survey instrument is shown in APPENDIX A.

The objectives of the FE Graduate Exit survey are to:

* + 1. Collect data on the permanent contact information of each student to increase the effectiveness of our alumni outreach.
		2. Collect background information on students’ experiences in the program in terms of internships earned and events in which they participated.
		3. **To obtain feedback on the FE curriculum including the graduates’ assessment of individual courses.**
		4. **Assess student opinion on the efficacy of ancillary services provided by the program such as software bootcamps, professional webinars and placement services.**
		5. To collect information on how the curriculum and other aspects of the program can be improved.

Two quantitative measures provide a year-over-year comparison of the overall success of the program:

* FE-5 Quality of the FE Program
* FE-6 Professional Development

The measures for these two goals are embedded in a survey that allows students to respond on many aspects of the program and the student experience (see Appendix A below.) A number of other scaled and open-ended questions in the survey are used to gather student comments on specific courses and gather student suggestions for program improvements. Summaries of the quantitative and qualitative information provided by the graduates provide guidance to program faculty and ideas for continuous improvement are provided in section 4 below.

# 2. QUANTITATIVE MEASURES

**FE Additional Competencies (Indirect measures)**

|  |
| --- |
| **FE GOAL-5: QUALITY OF THE FE PROGRAM** |
| **5-point Likert Scale:** 1. Poor 2. Fair 3. Good 4. Very good 5. Excellent |
| 1. Overall quality of FE program |
| 2. Quality of faculty who taught courses you took in program |
| 3. Accessibility of faculty when you needed advice or help with assignments |
| 4. Extent to which the FE program has kept up with latest developments in analytics, data science & AI |
| 5. Academic standard of FE degree |
| 6. Relevance of program for your chosen career |
| 7. Practical signiﬁcance of what you learned in program |

**This goal is assessed using questions 24-30 of the FE Exit Survey in APPENDIX A below.**

**An overall average greater than 4.0 on each of these measures is considered satisfactory.**

|  |
| --- |
| **FE GOAL-6: PROFESSIONAL DEVELOPMENT** |
| **5-point Likert Scale:** (Not Satisﬁed) 1 2 3 4 5 (Very Satisﬁed) |
| 1. How satisﬁed are you with the experiences provided by the Finance student club? |
| 2. How satisﬁed are you with the career services provided by the School of Business (i.e., COPA)? |
| 3. How satisﬁed are you with the career services provided by the university? |
| 4. How satisfied are you with the advising services you received while at Stevens? |

**This goal is assessed in questions 33-36 of the FE Exit Survey in APPENDIX A below.**

**An overall average greater than 4.0 across all measures is considered satisfactory.**

# RESULTS – GRADUATE EXIT SURVEY

# Survey conducted in May 2024

**Additional Goal 5: Quality of Program**

The summary results for the Graduate Exit Survey administered in May 2024 are provided in Table 3. A total of 43 students graduated in AY 2023-24; 7 graduates completed the survey.

**Table 3: Goal 5 – Quality of Program**

Please rate your overall experience in the FE program in each of the following areas:

|  |  |  |  |
| --- | --- | --- | --- |
| **Summary Statistics: May 2024** | **Mean** | **Median** | **Std. Dev.** |
| 1. Overall quality of FE program | 4.29 | 4 | .488 |
| 2. Quality of faculty who taught courses you took in program | 4.29 | 4 | .488 |
| 3. Accessibility of faculty when you needed advice or help with assignments | 4.57 | 5 | .535 |
| 4. Extent to which FE program has kept up with latest developments in analytics, data science & AI | 4.29 | 4 | .488 |
| 5. Academic standard of FE degree | 4.57 | 5 | .535 |
| 6. Relevance of program for your chosen career | 4 | 4 | 1.155 |
| 7. Practical signiﬁcance of what you learned in program | 4.57 | 5 | .535 |
| **Overall Average** | **4.37** |  |  |

**Summary**

These results are above the 4.0 so nothing at this time.

**Additional Goal 6: Professional Development**

The summary results for the Graduate Exit Survey administered in May 2024 are provided in Table 3. A total of 43 students graduated in AY 2023-24; 7 graduates completed the survey.

**Table 4: Goal 6 – Professional Development**

Please rate your overall experience in the FE program in each of the following areas:

|  |  |  |  |
| --- | --- | --- | --- |
| **Summary Statistics: May 2024** | **Mean** | **Median** | **Std. Dev.** |
| 1. How satisﬁed are you with the experiences provided by the Finance student club?
 | 3.29 | 3 | 1.496 |
| 2. How satisﬁed are you with the career services provided by the School of Business (i.e., COPA)? | 3.29 | 3 | 1.799 |
| 3. How satisﬁed are you with the career services provided by the university? | 3 | 3 | 1.732 |
| 4. How satisfied are you with the advising services you received while at Stevens? | 3.43 | 3 | 1.272 |
| **Overall Average** | **3.25** |  |  |

**Summary**

Based on these results, student satisfaction should be looked at closer.

**4. CONTINUOUS IMPROVEMENT RECORD**

**Program:** Master of Science in Financial Engineering (FE)

**Goal FE 5:** Quality of Program

**Goal Owner:** Thomas Lonon/Emmanuel Hatzakis

**Where Measured:** Graduate exit survey administered in May each year (just prior to Commencement.)

**How Measured:** Survey Monkey online survey.

Sampling: All FE students who graduated in the previous academic year.

The following table shows the average scores on this goal for this semester. Note that this is the first year of implementation of this survey so no previous results are available.

|  |
| --- |
| **Goal FE 5: Quality of Program** |
| May 2024 | **4.37** |

**Goal FE 6:** Professional development

**Goal Owner:** Thomas Lonon/Emmanuel Hatzakis

**Where Measured:** Graduate exit survey administered in May each year (just prior to Commencement.)

**How Measured:** Survey Monkey online survey.

Sampling: All FE students who graduated in the previous academic year.

The following table shows the average scores on this goal for this semester. Note that this is the first year of implementation of this survey so no previous results are available.

|  |
| --- |
| **Goal FE 6: Professional Development** |
| May 2024 | **3.25** |

**5. Appendix A – Full Survey Questionnaire**

1. CWID
2. Full name (First and Last) \*
3. Stevens Email
4. Permanent email address (e.g., Gmail): Please note that your Stevens email will be deactivated by IT 6 months after graduation. Please provide us with a personal email so we may stay in touch
5. Phone number
6. LinkedIn Address:
7. What concentration did you choose in the FE program?

Algorithmic Trading Strategies

Financial Analytics

Financial Risk Engineering

Financial Statistics

Financial Computing

No Concentration

1. How many semesters did it take to complete your FE degree? (e.g. 2,3,4)
2. Were you part of a dual degree or a 4+1 agreement?
3. Were you a full-time or part-time student?
4. Year of graduation
5. Would you be interested in attending a class reunion? \*
6. Did you have an internship or a full-time job in industry while you were enrolled in the FE program? (For international students this means that you were enrolled in the FE 703 course for one or more semesters.)
7. Are you:

Currently Employed

Still looking for a job?

Continuing Education

Not Seeking Employment

Returning to Home country

1. Company
2. Position
3. Salary (please note we do not publicly share salary data, we average all of the numbers together from what students send us):
4. Signing Bonus (if applicable):
5. Other Comp (if applicable):
6. What companies & job titles have you been applying to?
7. What was your undergraduate degree major?

Statistics, Mathematics

Computer Science, Computer Engineering

Science (e.g., Physics, Chemistry)

Engineering (e.g., Civil Engineering, Mechanical, Industrial)

Management Information Systems

Social Science (e.g., Economics, Psychology, Political Science...)

Business Administration

Other

1. Were you employed in industry prior to joining the FE program?
2. In each case, specify if you were a full-time employee and the approximate number of months of employment

Please rate your overall experience in the FE program in each of the following

areas:

1.Poor 2.Fair 3.Good 4.Very Good 5.Excellent

1. The overall quality of the FE program
2. The quality of the faculty who taught the courses you took in the program
3. The accessibility of the faculty when you needed advice or help with assignments
4. The extent to which the FE program has kept up with the latest developments in financial services industry
5. The academic standard of the FE degree
6. The relevance of the FE program for the chosen career
7. The practical significance of what you learned in the program
8. Did you attend any of the alumni mingle events of the Finance Programs (FE, FTA, FIN)?

Yes

No

1. How useful was the event?

1.Not useful 2.Somewhat useful 3.Useful 4.Very useful 5.Extremely useful

1. How satisfied are you with the experiences provided by the Finance Student Club?

1.Not Satisfied 3.Satisfied 5.Very Satisfied

1. How satisfied are you with the career services provided by the School of Business (i.e., COPA)?

1.Not Satisfied 3.Satisfied 5.Very Satisfied

1. How satisfied are you with the career services provided by the university?

1.Not Satisfied 3.Satisfied 5.Very Satisfied

1. How satisfied are you with the advising services you received while at Stevens?

1.Not Satisfied 3.Satisfied 5.Very Satisfied

1. Did you find the FE program academically challenging?

1.Not challenging 3.Challenging 5.Very challenging

1. Is the amount of work required to be successful in the program reasonable?

1.Unreasonably High 3.Very Reasonable 5. Reasonably High

1. Which specific courses in the program were most valuable?
2. Which specific courses in the program could be improved or eliminated?
3. List any topic areas you think should be added to the program:
4. Overall, how satisfied were you with the FE program?\

1.Not Satisfied 3.Satisfied 5.Very Satisfied

1. Did the FE program improve your career prospects?\

1.Not much at all 3. Somewhat 5.Very Much

1. I enjoyed my time in the FE program

1.Not much at all 3. Somewhat 5.Very Much

1. How likely is it that you would recommend the FE Program to others?

1.Not likely 3.Likely 5.I will definitely recommend

1. Any concluding thoughts?