

AOL Report Management Engineering Program Assessment (2018)

The Management Engineering (ME) Program pursues excellence in academic research based on great emphasis on scientific methodology and theoretical expertise.

The research areas include Accounting, Managerial Economics, Finance, Organization & Strategic Management, Marketing, IT Management, and Operations Strategy & Management Science. Students in this program intensively learn various theories and analytical skills to be highly achieved scholars.

- Total Number of Courses Offered: 37 (Spring, 2018: 22 / Fall, 2018: 15)
- Number of Graduates: 58 (Master: 29, Ph.D.: 29)
- Total Enrollment: Spring 183 / Fall 171 (Master: 75/74, Ph.D.: 108/97)
- Sample: 9~24 (15% of 58 = 8.7)
- Assessment Course:

| | |
|-----------------|---|
| Learning Goal 1 | Qualification Exam - Sample: 12 (20.6% of Graduate 58) |
| Learning Goal 2 | Defense of Dissertation |
| Learning Goal 3 | - Sample: 24 (41.4 % of Graduate 58) |
| Learning Goal 4 | BA812 Accounting Theory - Sample: 9 (15.5% of Graduate 58) |

Overview of Assessment

| Management Engineering Program Assessment: Learning Goal 1 | | |
|---|---|-------------------------------|
| Learning Goal1 (Research Qualification): Our graduates will have skills (or ability) to conduct quality research. | | |
| Learning Objective | Sample | Methods |
| (L11) Our students will have basic quantitative skills for research. (L12) Our students will have basic theory, analytical research tools, and background about their research area. | Qualification Exam in Fall Semester (N= 12) | Qualification Exam evaluation |
| - Professor in charge evaluates doctoral students who took qualification exam. * 1 (Fails to Meet Expectations) 2 (Meets Expectations) 3 (Exceed Expectation) | | |

| Management Engineering Program Assessment: Learning Goal 2 | | |
|---|--|-------------------------|
| Learning Goal2 (Professional Communication): Our graduates will be effective professional communicators. | | |
| Learning Objective | Sample | Methods |
| (L21) Our students will create well-written professional papers on a research topic. (L22) Our students will deliver an effective oral presentation on a research topic. | Defense of Dissertation in Fall Semester (N= 24) | Dissertation evaluation |
| - Use dissertation evaluation in defenses of dissertation. * 1 (Fails to Meet Expectations) 2 (Meets Expectations) 3 (Exceed Expectation) | | |

| Management Engineering Program Assessment: Learning Goal 3 | | |
|---|---|-------------------------|
| Learning Goal3 (Analytical and Creative Thinking): Our graduates will be capable researchers. | | |
| Learning Objective | Sample | Methods |
| (L31) Our students will identify and diagnose management/research problems. (L32) Our students will engage in management research and present the findings of such research effectively. | Defense of Dissertation in Fall Semester (N= 24) | Dissertation evaluation |
| - Use dissertation evaluation in defenses of dissertation * 1 (Fails to Meet Expectations) 2 (Meets Expectations) 3 (Exceed Expectation) | | |

| Management Engineering Program Assessment: Learning Goal 4 | | |
|--|------------------------------------|---|
| Learning Goal4 (Academic Teamwork): Our graduates will use team building successfully. | | |
| Learning Objective | Sample | Methods |
| (L41) Our students will know how to build an academic team successfully. | Student enrolled in BA812 (N=9) | Course-embedded survey (peer evaluation) |
| - Use course-embedded survey in BA812 for peer review among team * 1 (Fails to Meet Expectations) 2 (Meets Expectations) 3 (Exceed Expectation) | | |

Data Analysis and Results

| Assessment Learning Goal 1: Qualification Exam | | | | | | | | | |
|--|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Professor in charge evaluates the 1 st year doctoral students | | | | | | | | | |
| Student Number | L11 | | | | | L12 | | | |
| | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 |
| 1 | 3 | 2 | 3 | 3 | 2 | 3 | 2 | 3 | 2 |
| 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 2 |
| 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 4 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 5 | 3 | 2 | 2 | 3 | 2 | 3 | 2 | 2 | 2 |
| 6 | 2 | 2 | 2 | 3 | 2 | 2 | 2 | 2 | 2 |
| 7 | 3 | 2 | 2 | 3 | 2 | 3 | 2 | 2 | 2 |
| 8 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 9 | 3 | 2 | 3 | 3 | 3 | 3 | 2 | 3 | 3 |
| 10 | 3 | 3 | 2 | 3 | 3 | 2 | 3 | 3 | 2 |
| 11 | 2 | 2 | 3 | 3 | 2 | 2 | 2 | 3 | 2 |
| 12 | 3 | 2 | 3 | 3 | 2 | 3 | 3 | 3 | 3 |
| 3 point total | 7 | 2 | 5 | 9 | 3 | 6 | 3 | 6 | 3 |
| 2 point total | 5 | 10 | 7 | 3 | 9 | 6 | 8 | 6 | 9 |
| 1 point total | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| Average | 2.46 | 2.15 | 2.46 | 2.85 | 2.46 | 2.38 | 2.15 | 2.54 | 2.38 |
| | 2.48 | | | | | 2.37 | | | |

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

| Assessment Learning Goal 2: Defense of Dissertation | | | | | | | | | | | | | |
|--|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Committee members evaluate the master or doctoral students | | | | | | | | | | | | | |
| Student Number | L21 | | | | | | L22 | | | | | | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1 | 3 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 3 | 3 | 3 |
| 2 | 3 | 2 | 2 | 3 | 2 | 2 | 3 | 3 | 2 | 2 | 3 | 2 | 3 |
| 3 | 3 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 4 | 2 | 2 | 2 | 3 | 3 | 3 | 2 | 2 | 3 | 3 | 3 | 3 | 3 |
| 5 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 6 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 7 | 2 | 2 | 2 | 3 | 3 | 2 | 3 | 2 | 2 | 3 | 3 | 3 | 3 |
| 8 | 3 | 2 | 2 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 9 | 2 | 2 | 2 | 2 | 3 | 3 | 2 | 2 | 3 | 2 | 2 | 3 | 2 |
| 10 | 3 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 2 |
| 11 | 3 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 2 | 3 | 3 | 3 | 3 |
| 12 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 13 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 2 | 3 | 2 |
| 14 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 15 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 16 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 17 | 2 | 2 | 2 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 18 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 3 |
| 19 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 3 | 2 | 3 |
| 20 | 2 | 3 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 2 |
| 21 | 2 | 2 | 2 | 3 | 3 | 2 | 3 | 3 | 2 | 2 | 3 | 2 | 2 |
| 22 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 23 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 3 | 2 | 3 |
| 24 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 3 | 2 | 3 |
| 3 point total | 17 | 12 | 7 | 20 | 19 | 18 | 21 | 21 | 15 | 19 | 20 | 18 | 19 |
| 2 point total | 7 | 12 | 17 | 4 | 5 | 6 | 3 | 3 | 9 | 5 | 4 | 6 | 5 |
| 1 point total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Average | 2.71 | 2.50 | 2.29 | 2.83 | 2.79 | 2.75 | 2.88 | 2.88 | 2.63 | 2.79 | 2.83 | 2.75 | 2.79 |
| | 2.65 | | | | | | 2.79 | | | | | | |

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

| Assessment Learning Goal 3: Defense of Dissertation | | | | | | | | | | | | |
|--|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Committee members evaluate the master or doctoral students | | | | | | | | | | | | |
| Student Number | L31 | | | | | | | L32 | | | | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 1 | 2 | 3 | 4 | 5 |
| 1 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 3 | 3 | 3 |
| 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 4 | 2 | 2 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 2 |
| 5 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 6 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 2 | 2 |
| 7 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 8 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 9 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 2 | 2 | 2 | 2 | 2 |
| 10 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 11 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 12 | 3 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 13 | 2 | 2 | 2 | 3 | 2 | 2 | 3 | 3 | 2 | 2 | 2 | 3 |
| 14 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 15 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 3 |
| 16 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 3 |
| 17 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 18 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 3 |
| 19 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 3 |
| 20 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 21 | 2 | 2 | 3 | 2 | 2 | 2 | 3 | 2 | 2 | 3 | 2 | 2 |
| 22 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 23 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 24 | 3 | 3 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 2 |
| 3 point total | 18 | 16 | 19 | 18 | 18 | 17 | 22 | 19 | 19 | 17 | 15 | 17 |
| 2 point total | 6 | 8 | 5 | 6 | 6 | 7 | 2 | 5 | 5 | 7 | 9 | 7 |
| 1 point total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Average | 2.75 | 2.67 | 2.79 | 2.75 | 2.75 | 2.71 | 2.92 | 2.79 | 2.79 | 2.71 | 2.63 | 2.71 |
| | 2.76 | | | | | | | 2.73 | | | | |

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

| Assessment Learning Goal 4: BA812 | | | | |
|--|-------------|-------------|-------------|-------------|
| Using course-embedded survey (peer evaluation) | | | | |
| Student Number | L41 | | | |
| | 1 | 2 | 3 | 4 |
| 1 | 3 | 2 | 3 | 3 |
| 2 | 3 | 3 | 3 | 3 |
| 3 | 2 | 2 | 1 | 2 |
| 4 | 3 | 2 | 2 | 3 |
| 5 | 3 | 3 | 3 | 3 |
| 6 | 2 | 3 | 2 | 2 |
| 7 | 3 | 2 | 3 | 2 |
| 8 | 3 | 2 | 3 | 3 |
| 9 | 2 | 3 | 3 | 3 |
| 3 point total | 6 | 4 | 6 | 6 |
| 2 point total | 3 | 5 | 2 | 3 |
| 1 point total | 0 | 0 | 1 | 0 |
| Average | 2.67 | 2.44 | 2.56 | 2.67 |
| | 2.58 | | | |

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

Result Interpretation and Comments

- Learning Goal 1 – Objective 1 (L11)

An overall score for L11 is 2.48. The results imply that our graduates have enough quantitative skills for their research. In particular, the average score for ‘Application of quantitative tools’ is 2.85. It indicates that our graduates show strong understanding of application of quantitative techniques. In contrast, the average score for ‘Identification of research problems’ is 2.15, implying that more education on the identification of research problems is needed.

- Learning Goal 1 – Objective 2 (L12)

An overall score is 2.37 for L12. The results imply that our graduates have enough knowledge about their research areas, theories and research tools. In particular, the average score for “Proper use of effective research tools” is 2.54. It indicates that our graduates use methods and tools which are adequate to address their research arguments. On the other hand, the average score for ‘Application of Theory’ is 2.15, implying the college also needs to put more emphasis on how to apply theory to support their research arguments.

- Learning Goal 2 – Objective 1 (L21)

An overall score is 2.65 for L21. The results imply that the graduates are able to write well-written professional papers. In particular, average score for ‘Development of Ideas’ and ‘Purpose and Audience’ are 2.81. It shows our graduates can develop their ideas thoroughly, focus the purpose of their research, and consider the right audience. However, average score for ‘Spelling and Grammar’ is 2.29, suggesting that more education on English vocabulary and grammar skill is required.

- Learning Goal 2 – Objective 2 (L22)

An overall score is 2.79 for L22. The results imply that the graduates can deliver an effective oral presentation. In particular, all the average score is above 2.75 except for ‘Voice quality and pace’. It shows the graduates make their oral presentation with well-organized contents and high-quality slides, and deliver a speech professionally and confidently enough to attract audience’s interest. The average score for ‘Voice quality and pace’ is 2.63. Although it is still a high score, it is the lowest one among other criteria. Therefore, college needs to put more emphasis on conversational attitude for effective delivery.

- Learning Goal 3 – Objective 1 (L31)

An overall score is 2.76 for L31. The results imply that our students can diagnose research problems effectively. Every criterion scored higher than 2.67, which is quite impressive. Above

all, average score for 'Ethical and responsible solutions' is the highest 2.92. The results show that the college's effort to emphasize "Use of ethical and credible sources" was successful.

- Learning Goal 3 – Objective 2 (L32)

An overall score is 2.73 for L32. The results imply that our students can approach research problem in a proper way. All the criterion scored higher than 2.71 except for "Solution finding". It shows the graduates can identify their research problems and ideas of a diverse nature. The average score for 'Solution finding' is 2.63. Although it is still a high score, it is the lowest one among other criteria. It indicates college needs more education on finding solutions for research problems.

- Learning Goal 4 – Objective 1 (L41)

Overall score for L41 is 2.58. Evaluation on L4 was based on a peer review. The highest average score are 2.67 for 'Commitment' and 'Stays on track', while the lowest are 2.44 for 'Balance between task and interpersonal relations'. The result shows that our graduates engage fully in group meetings and try to keep the group on track, but more emphasis on balance between task and interpersonal relation is needed.

- Overall Comments

In general, all average scores related to each learning goal exceed 2, which means our graduates successfully meet expectations. Their understanding of theories, ethics, and presentation skills was distinctive. However, college needs to put more effort such as additional courses and feedback system to improve graduates' qualities. In particular, college needs to put more emphasis on how to identify research problems and how to apply the theory for their research ideas.