



CONSTRUCTION MANAGEMENT

INDIRECT ASSESSMENTS SUMMARY

2023 - 2024

1. Graduate Exit Survey Results
2. Industry Advisory Board Feedback Survey Results
3. Employer Feedback Survey Results

The indirect assessment of the student learning outcomes and the students' perception of the degree's ability to prepare them for industry will be collected during different points of time. Data will be collected during the capstone course, through alumni surveys, and during the Industrial Advisory Board meetings.

In this document, you will find a summary of the results conducted for the school year 2023 – 2024.

1. Graduate Exit Survey

Students in their capstone course are required to write about their experiences during their capstone project. Many will work an internship in the field and see which aspect of the field they enjoy and dislike. At the end of the capstone, the students discuss what they learned in class that they found useful in their work and what they wish they would have known before working that job. Employers are also able to provide feedback to the department and to the student about the student's performance while on the job. They rate the student's work based on 17 factors and can provide written feedback.

2. Alumni Survey

The department will submit surveys to the alumni each year. Information that comes from these surveys will include how the coursework prepared them for their careers. Data will be collected and grouped based on years since graduation to show how respondents perceive the degree at different points in their careers.

3. Construction Industry Advisory Board

The department plans on holding at least one Industry Advisory Committee Meeting per year. One of the main goals of this meeting is to evaluate the course assessments and provide an external assessment of the overall program to ensure that it is meeting ACCE and industry needs.

4. Employer Review

The department conducts follow-up surveys with employers of students who undergo internship upon completion as well as graduates who are currently employed in the construction industry.

1. GRADUATE EXIT AND ALUMNI SURVEY FEEDBACK RESULT 2024

Graduate Exit Survey

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Alumni Survey

The department will submit surveys to the alumni each year. Information that comes from these surveys will include how the coursework prepared them for their careers. Data will be collected and grouped based on years since graduation to show how respondents perceive the degree at different points in their careers.

The graduate exit and alumni survey was conducted in May to July 2024. The survey questionnaire was distributed by the faculty members to graduates with their known email on file. There were only 3 graduates in May 2024 and alumni returned the survey. The following are the results and analysis.

DATA RESULT and ANALYSIS

The result of the survey is shown in Figure 1, Figure 2, Figure 3, and Figure 4.

1. The average salary of the alumni who responded in the survey is \$75,467 and median salary of \$75,000.
2. Graduates are employed in various entry level positions.
3. Sixty-seven percent (67%) of the alumni surveyed are working in the commercial construction sector.
4. The highest rating among the ACCE SLO is SLO# 2 -Create oral presentations appropriate to the construction discipline with an average of 5.0 in Likert Scale.
5. The lowest rating among the ACCE SLO is SLO #9 - Apply basic surveying techniques for construction layout and control, with an average of 3.67 in the Likert Scale.
6. The average rating of all ACCE SLOs is 4.4 in the Likert Scale.

Figure 1. ALUMNI SALARY

Figure 2. ALUMNI JOB POSITION

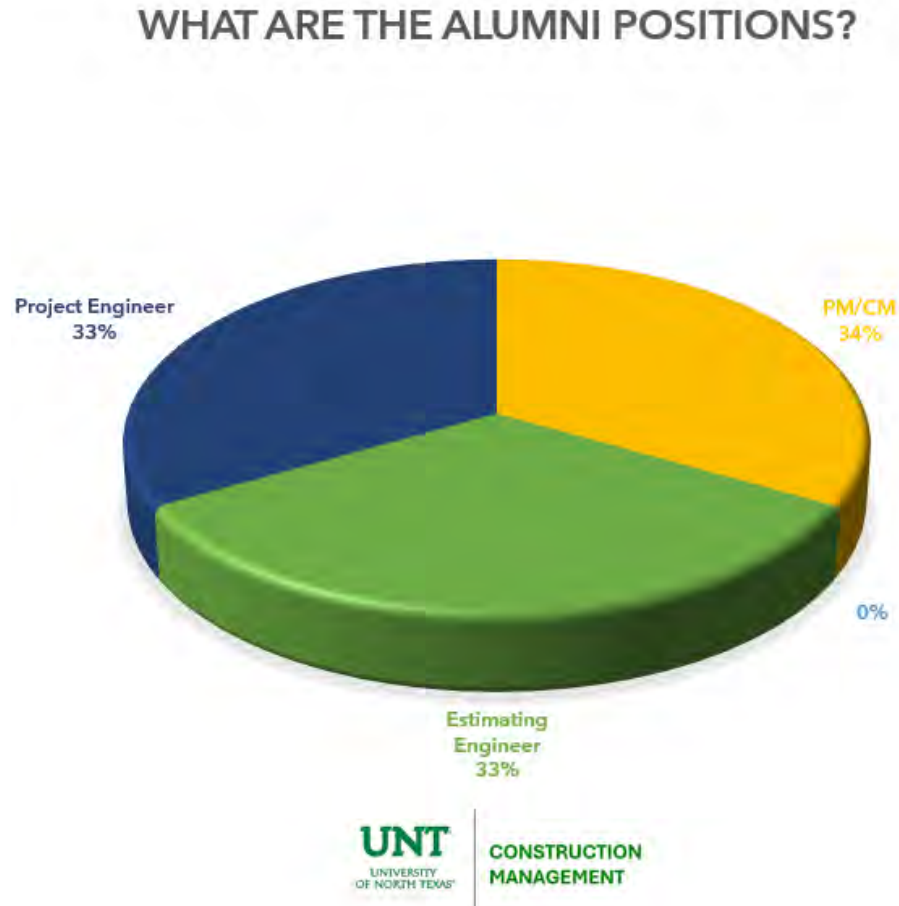
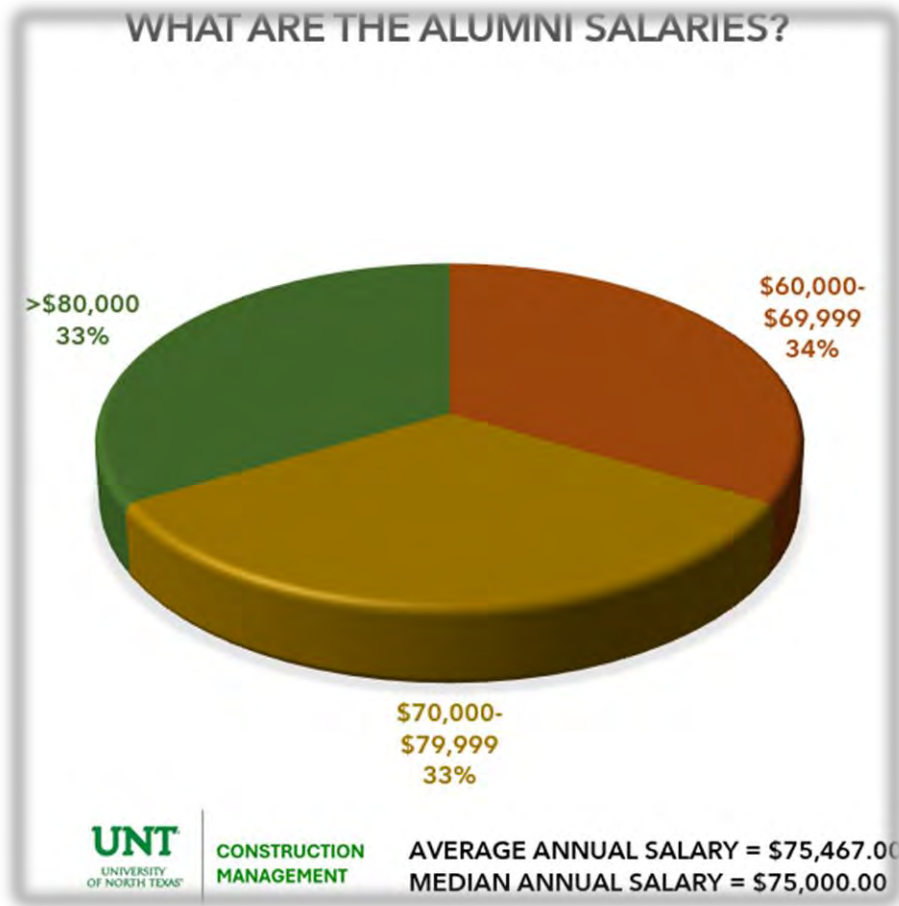


Figure 3. GRADUATE EXIT SURVEY FEEDBACK OF THE ACCE SLO

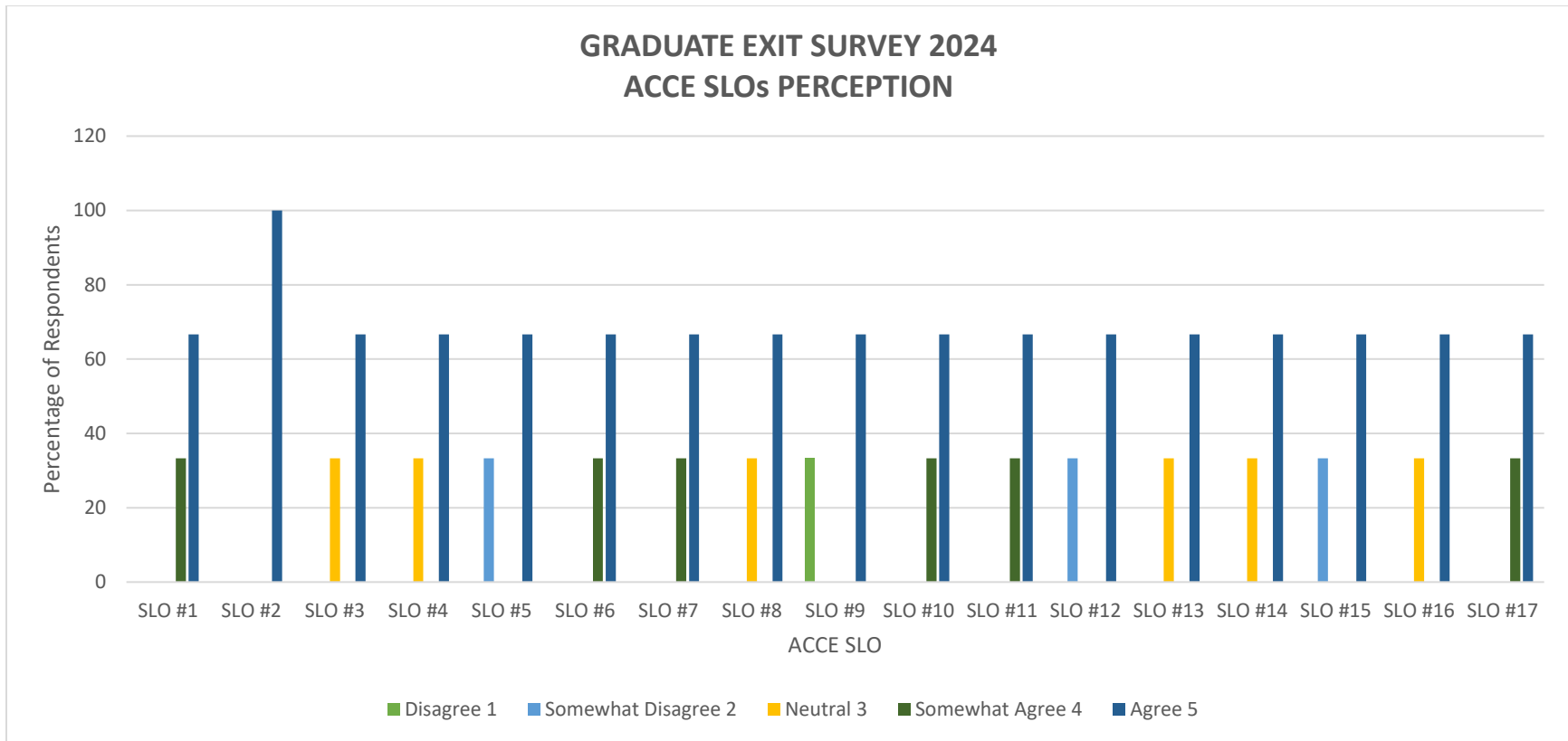
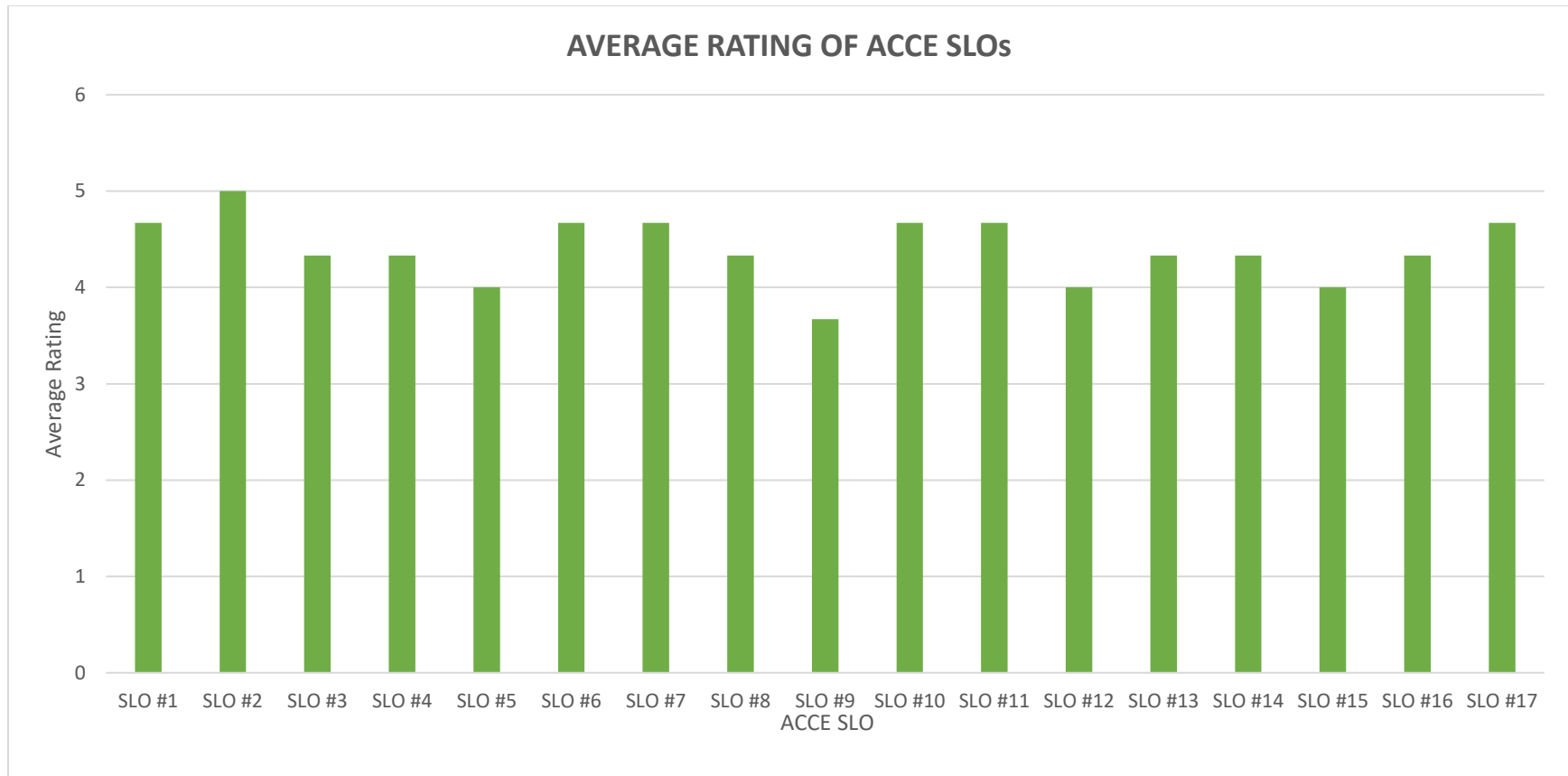


Figure 4. AVERAGE RATING OF GRADUATE PERCEPTION OF THE ACCE SLOs



2. EMPLOYER FEEDBACK RESULT 2024

Employer Review

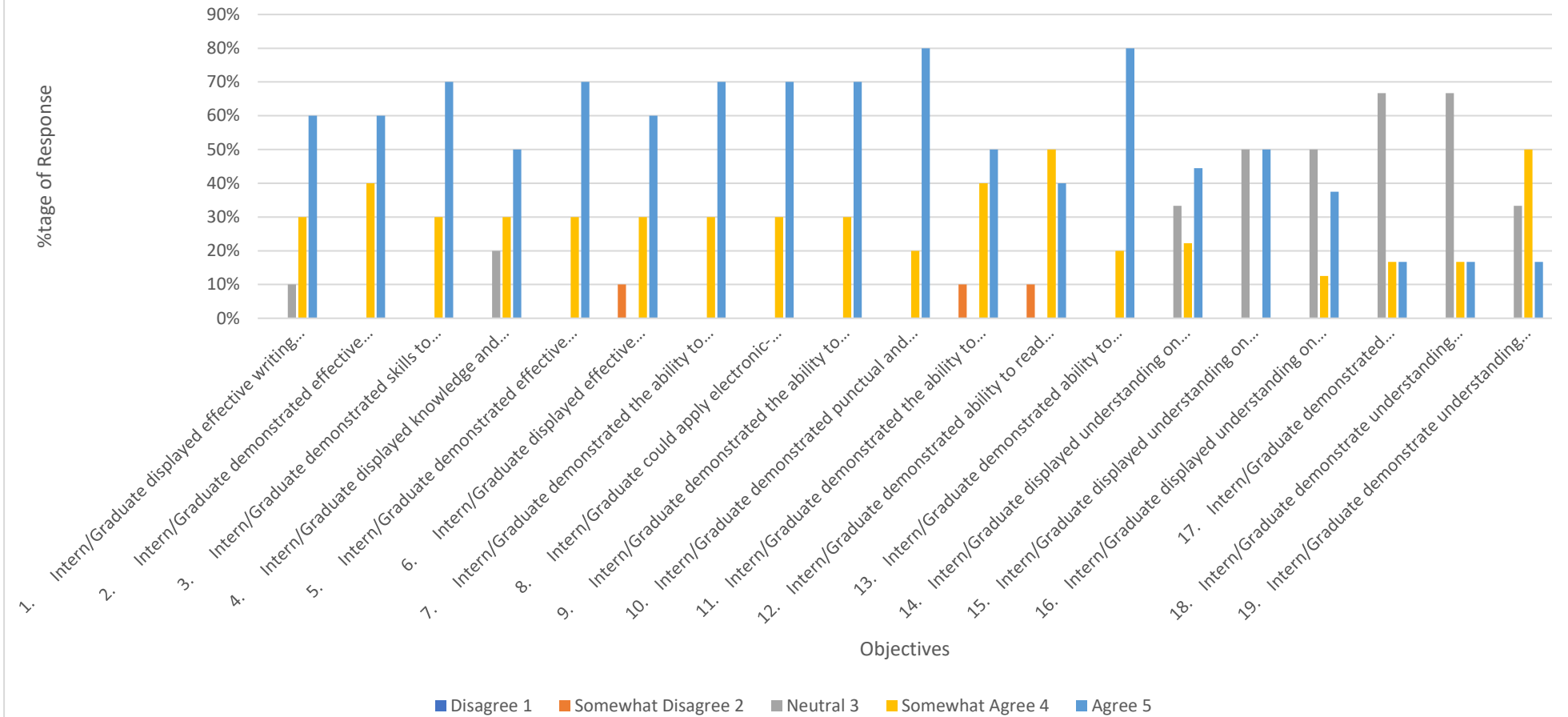
The department conducts follow-up surveys with employers of students who undergo internship upon completion as well as graduates who are currently employed in the construction industry.

The most vital measure of the CM program is the success of our students and Intern/Graduates. This survey assesses the preparation provided by the CM program through the following learning and program outcomes. The responses are to produce summary data that help develop the strategic and improvement plan for the CM program. Individual responses were treated as strictly confidential. There were 16 surveys sent out to employers of students who undertake 2024 summer internship and there were 10 employers responded.

	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	
Objective Description	1	2	3	4	5	Average
1. Intern/Graduate displayed effective writing skills appropriate to the construction discipline.	0%	0%	10%	30%	60%	4.5
2. Intern/Graduate demonstrated effective oral communication skills appropriate to the construction discipline.	0%	0%	0%	40%	60%	4.6
3. Intern/Graduate demonstrated skills to worked well within a multi-disciplinary team setting.	0%	0%	0%	30%	70%	4.7
4. Intern/Graduate displayed knowledge and ability to perform estimating and scheduling.	0%	0%	20%	30%	50%	4.3
5. Intern/Graduate demonstrated effective problem-solving skills.	0%	0%	0%	30%	70%	4.7
6. Intern/Graduate displayed effective understanding of construction terms and concepts including materials and methods.	0%	10%	0%	30%	60%	4.4
7. Intern/Graduate demonstrated the ability to complete tasks on time.	0%	0%	0%	30%	70%	4.7
8. Intern/Graduate could apply electronic-based technology to manage the construction process.	0%	0%	0%	30%	70%	4.7
9. Intern/Graduate demonstrated the ability to acquire and process new information.	0%	0%	0%	30%	70%	4.7
10. Intern/Graduate demonstrated punctual and professional behavior.	0%	0%	0%	20%	80%	4.8
11. Intern/Graduate demonstrated the ability to analyze construction documents (Contracts, RFI, ASI, submittals, etc).	0%	10%	0%	40%	50%	4.3
12. Intern/Graduate demonstrated ability to read and analyze construction drawings and specifications.	0%	10%	0%	40%	50%	4.2

13. Intern/Graduate demonstrated ability to understand and recognized the importance of safety in the workplace.	0%	0%	0%	20%	80%	4.8
14. Intern/Graduate displayed understanding on the legal implications of contract and other regulatory law in managing construction project.	0%	0%	33%	22%	44%	4.11
15. Intern/Graduate displayed understanding on various project delivery methods and the responsibilities of the parties involve.	0%	0%	50%	0%	50%	4.0
16. Intern/Graduate displayed understanding on project cash flow and budgeting.	0%	0%	50%	13%	38%	3.875
17. Intern/Graduate demonstrated understanding about sustainable approaches to construction.	0%	0%	67%	17%	17%	3.5
18. Intern/Graduate demonstrate understanding on the structural behavior of temporary structure to prevent failure during construction.	0%	0%	67%	17%	17%	3.5
19. Intern/Graduate demonstrate understanding on the importance of building systems for successful operation of the facility (i.e. MEP)	0%	0%	33%	50%	17%	3.833
					AVERAGE	4.33

EMPLOYER FEEDBACK



COMMENT

1. Lack knowledge on construction documents.
2. lack ability to read blueprints.
3. Provide students the ability to use software such as Blue Beam Review.
4. Will hire our intern back as full time.
5. He is prepared for the Project Engineer Role.
6. Keep up the good work.
7. Must give students the ability to lean Procore and Bluebeam.
8. Our intern conduct herself professionally.
9. Intern have difficulty reading plans.
10. Intern did a great job and will offer him a part time during the school year.
11. Must offer classes not only seasonally but year-round for student to catch up with pre-requisite.
12. Intern is very prepared.

ANALYSIS

1. The average rating for all program/student objectives is 4.33 in the Likert Scale.
2. The lowest rated objective attained was objective 17 (understanding about sustainable approaches to construction.) and 18 (understanding the structural behavior of temporary structure to prevent failure during construction.) with both ratings of 3.5.
3. The highest rated objective attained was Objective 10 (punctual and professional behavior.) and Objective 13 (ability to understand and recognize the importance of safety in the workplace).

The most sighted comments of the employer are ability to read blueprints and ability to use construction software particularly.

3. RESULT OF THE INDUSTRY ADVISORY MEMBERS FEEDBACK AND EVALUATION 2024

The IAB survey was conducted in May 2024 during the IAB Meeting. The survey questionnaire was distributed by the program coordinator at the end of the meeting. There were only 17 IAB members who attended returned the survey. The following are the results and analysis.

A. IAB Survey Instrument

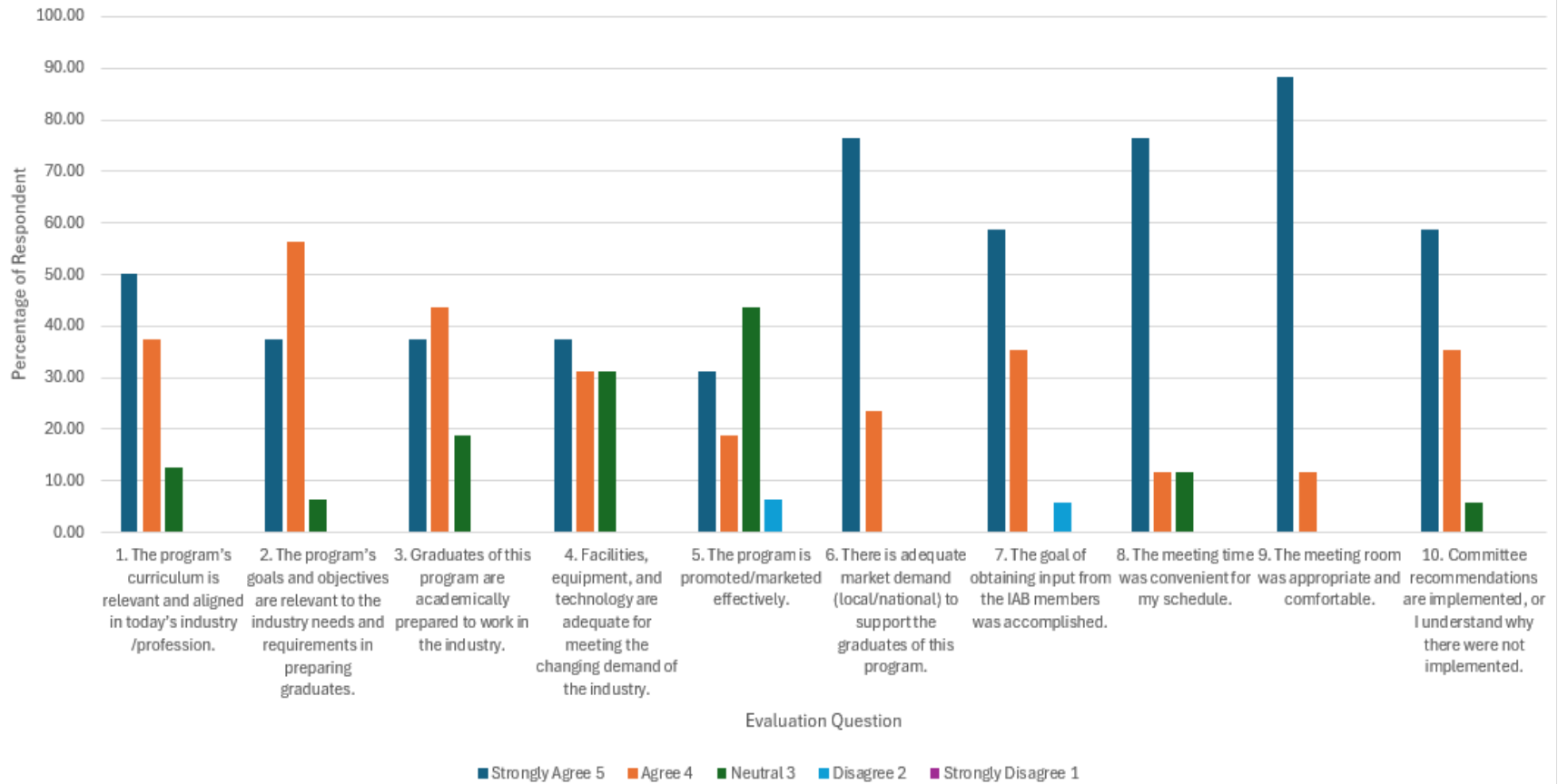
The following is the IAB survey questionnaire with the percentage of respondents. The questionnaire consists of 10 questions which are grouped into two: Program Contents (1 to 6) and IAB Meeting (7 to 10).

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Average
	5	4	3	2	1	
1. The program's curriculum is relevant and aligned in today's industry /profession.	50.00%	37.50%	12.50%	0.00	0.00	4.375
2. The program's goals and objectives are relevant to the industry needs and requirements in preparing graduates.	37.50%	56.25%	6.25%	0.00	0.00	4.3125
3. Graduates of this program are academically prepared to work in the industry.	37.50%	43.75%	18.75%	0.00	0.00	4.1875
4. Facilities, equipment, and technology are adequate for meeting the changing demand of the industry.	37.5%0	31.25%	31.25%	0.00	0.00	4.0625
5. The program is promoted/marketed effectively.	31.25%	18.75%	43.75%	6.25%	0.00	3.75
6. There is adequate market demand (local/national) to support the graduates of this program.	76.47%	23.53%	0.00	0.00	0.00	4.764706
7. The goal of obtaining input from the IAB members was accomplished.	58.82%	35.29%	0.00	5.88%	0.00	4.470588
8. The meeting time was convenient for my schedule.	76.47%	11.76%	11.76%	0.00	0.00	4.647059
9. The meeting room was appropriate and comfortable.	88.24%	11.76%	0.00	0.00	0.00	4.882353
10. Committee recommendations are implemented, or I understand why there were not implemented.	58.82%	35.29%	5.88%	0.00	0.00	4.529412
					Average	4.398162

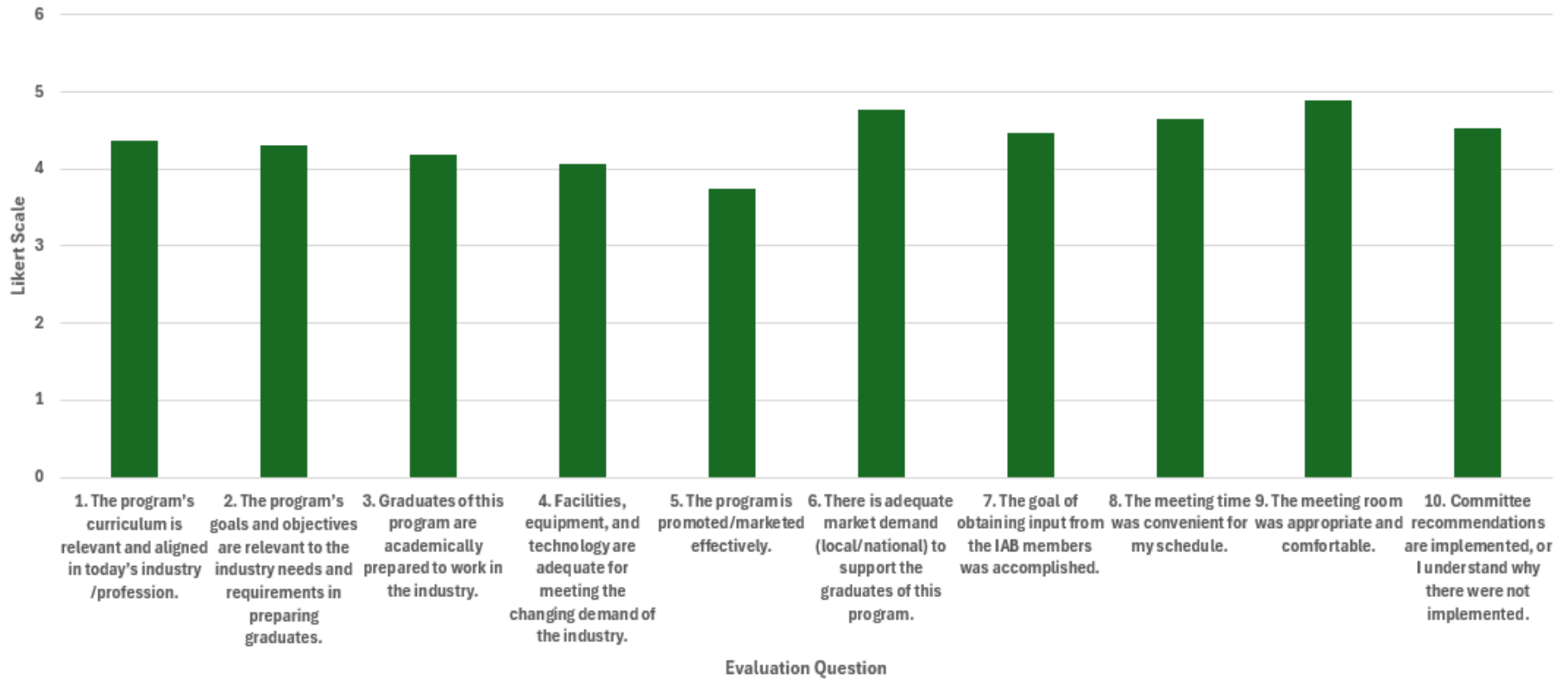
OBSERVATION

- 1 The average rating of the Industry Advisory Members' evaluation of the program is 4.4 in the Likert Scale.
- 2 There is adequate market demand to support the graduates of the CM program is rated highest at an average of 4.765 in the Likert Scale.
- 3 The program is promoted/marketed effectively is rated the lowest at 3.75 in the Likert Scale.

IAB RESPONSE ABOUT THE PROGRAM



AVERAGE RESPONSE (LIKERT SCALE 1 TO 5)



PLAN OF ACTION

Based on the feedback of the graduate, employer, and IAB members, the following action will be undertaken:

1. Enhanced curriculum focused on student marketability skills by integrating real world scenarios to problems and case studies in lectures and assessments.
2. Provide students with real world applications on the use of surveying equipment to stimulate students' learning and interest in this course.
3. Continue to provide lecture/seminar series from industry practitioners to provide awareness to students of the various opportunities in the construction industry once they finish the degree.
4. Continue to provide opportunity for faculty members to attend professional development through seminars, symposium, conference, and training to keep them abreast of the latest trends and innovation in the construction industry that will benefit the students.
5. Encourage alumni to become active members of professional associations and organizations to create camaraderie and networking among professionals in the field.
6. Encourage participation as volunteer in community service or service learning of alumni and faculty to give back to the college and the community.
7. Encourage alumni to be active with the program activities as speakers, member of industry advisory committee, liaison of their respective company in terms of student internship and employment, donors etc.
8. Continue to strengthen partnerships with industry companies in order to provide opportunities for internship of students and employment for graduates.
9. Continue to hold IAB meetings at least twice a year to solicit feedback on syllabus and curriculum changes to align offerings in the program to the needs of the construction industry.
10. Continue to update graduate tracking database to ensure connections and encourage graduates to get involve with the program.