Undergraduate Curriculum Evaluation

(2017-2018 Batch)

Faculty of Agriculture

Rajarata University of Sri Lanka

Compiled by

Dr. Nalaka Geekiyanage

Executive Summary

A recent survey was conducted to assess student satisfaction with key aspects of the undergraduate curriculum at Faculty of Agriculture, RUSL, focusing on course allocation, practical components, workload distribution, and overall curriculum effectiveness. This was for the old curriculum of the faculty with 2017-2018 batch. Students shared valuable insights and offered suggestions for improvements.

Key Findings

1. **Course Allocation and Workload**

   Most students (88%) were satisfied with the course allocation, although some raised concerns about time management and uneven workload distribution, especially in later semesters. For some, excessive workload was a significant issue, with many students taking longer than four years to complete the degree. Suggestions included redistributing courses across semesters to better balance academic content.

2. **Practical Components**

   While 80% of respondents found practical components sufficient, there was a call for more hands-on experience, particularly in later semesters. Students suggested more fieldwork, research projects, and internships to enhance their real-world skills.

3. **Curriculum Content and Repetition**

   Students expressed concerns over perceived redundancies in the curriculum, noting instances of repetitive course content across semesters. Specific subjects, such as statistical analysis and extension-related courses, were highlighted as being duplicated unnecessarily, leading to suggestions for curriculum updates.

4. **New Course Suggestions**

   Students showed interest in adding contemporary courses, such as bee-keeping, mushroom cultivation, and drone technology, to the core programme to meet current industry standards and trends. Additionally, they advocated for courses in GIS, data analysis, and academic writing to strengthen relevant skills.

5. **Industrial Training**

   A majority (98%) valued industrial training but recommended extending its duration from three to six months to align with industry expectations and to better prepare them for employment. Some suggested concurrent research and internship opportunities to optimize program duration.

6. **English and Computer Literacy**

   Students expressed satisfaction with existing English courses but emphasized the need for enhanced spoken and presentation skills, recommending additional activities and making EG 3200 (Professional English) a core course. Computer literacy courses were generally seen as productive, though a minority suggested updates for alignment with professional standards.

Overall Satisfaction: Approximately 70% of respondents found the curriculum productive, though 30% expressed concerns about insufficient practical application and workload management, which they felt impacted timely completion.

The findings highlight the need for curriculum adjustments to enhance practical knowledge, balance workload, reduce content redundancy, and better align with industry requirements, ensuring a comprehensive and effective educational experience for students.

Methods

A questionnaire survey was conducted using a Google Form to all the students via WhatsApp group. Out of the 130, 67 students responded to the survey. Multiple reminders were sent to increase the number of responses. The responses were received for a period 2/15/2024 to 3/8/2024.

Findings

SATISFACTION WITH COURSE ALLOCATION

Respondents were asked whether they were satisfied with the way courses were allocated across academic semesters.

Results

Out of the 165 students, 88% of respondents indicated satisfaction with the course allocation, while 8% expressed dissatisfaction (Figure 1). Although a majority of students found the course distribution appropriate, the significant dissatisfaction suggests potential issues with how courses are allocated across semesters, which may require further attention (Figure 2).

Key Reasons for Dissatisfaction

The main reasons cited for dissatisfaction were time management and uneven distribution of workload, especially in later semesters (e.g., Semester 3100). The other key concerns raised by students revolve around time management, workload, and the need for more practical exposure. Many mentioned that the time allocation was poorly managed, with some feeling that the academic content was too bulky, leading to an extended period of study. Several students emphasized the need for greater practical engagement, suggesting that agriculture students should have more exposure to real-world farming problems and participate in hands-on solutions. Specific recommendations included incorporating a 3-month research component or 6-month industrial training. While some were satisfied with the teaching methods and the distribution of subjects, others found the heavy academic content challenging and suggested redistributing the workload across semesters.

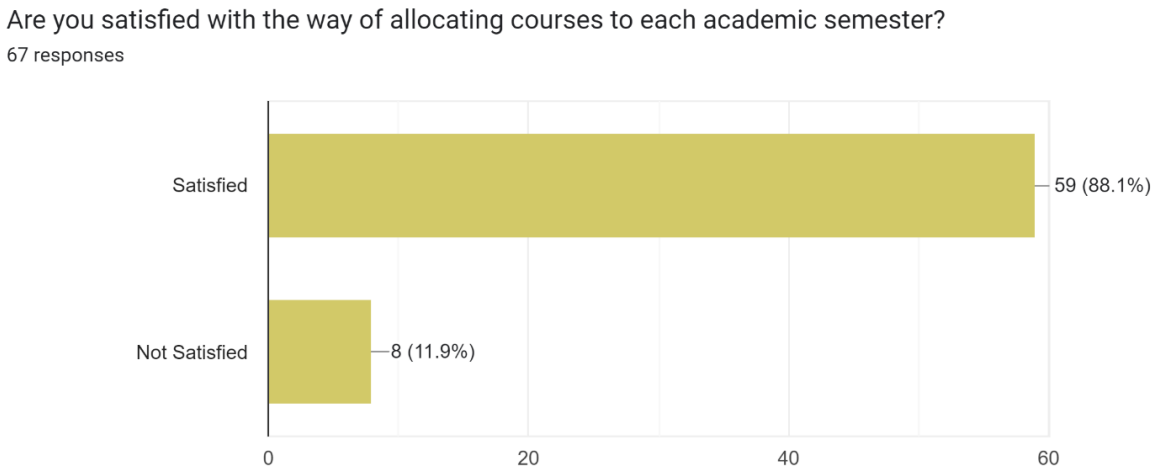

Figure 1. Overall satisfaction with the way of allocating courses to each academic semesters

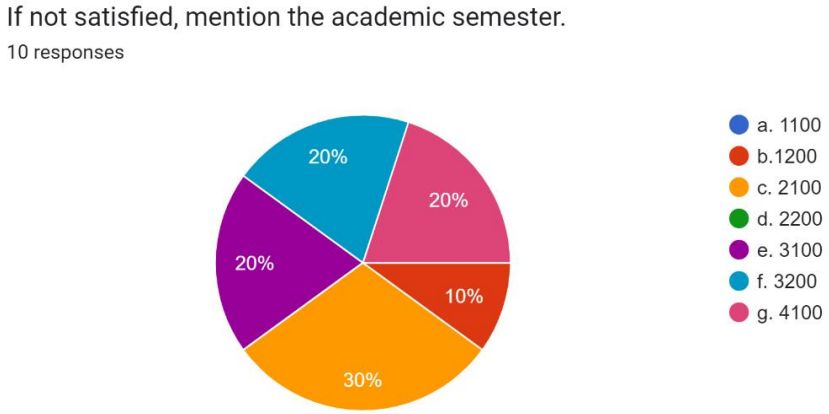

Figure 2. Academic semesters with unsatisfactory course allocation

ADEQUACY OF PRACTICAL COMPONENTS

Students were asked whether the practical components in each academic semester were adequate.

Results

80% of respondents felt that the practical components of the curriculum were sufficient, while 10% indicated that they were inadequate (Figure 3). Although the majority found the practical elements acceptable, a small portion expressed the need for greater practical exposure. In particular, the later stages of the program were highlighted as

lacking (Figure 4) in sufficient fieldwork, laboratory exercises, or hands-on training, suggesting a need for more practical opportunities during these semesters.

Suggestions for Improvement

Students requested more practical sessions, research-related activities, and field visits in these later semesters to complement theoretical learning.

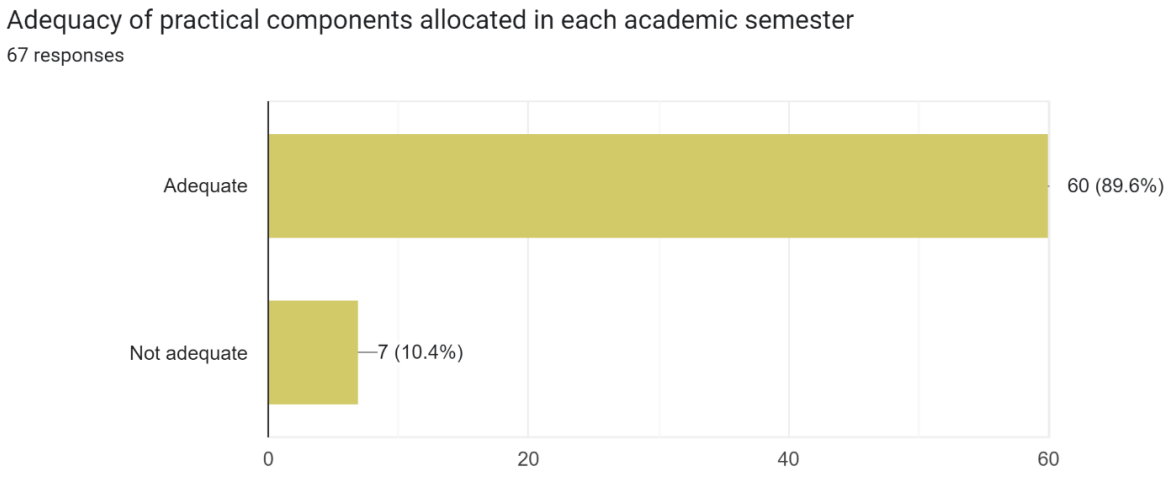

Figure 3. Adequacy of practical components

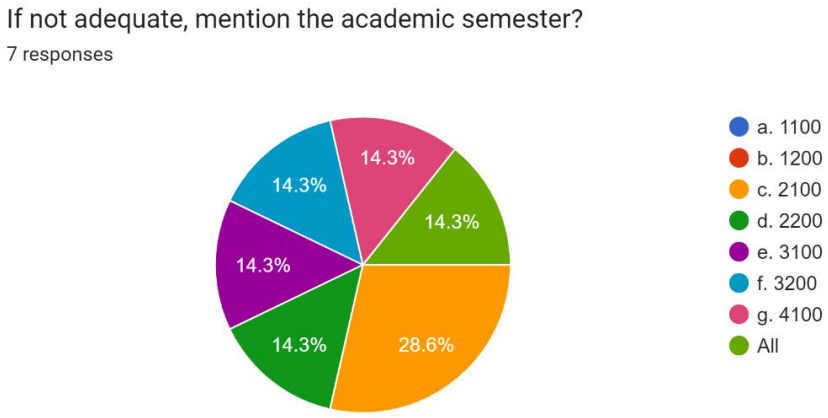

Figure 4. Semesters with inadequate practical components

STUDENTS' WORKLOAD

Students' feedback on the curriculum workload revealed significant concerns regarding the balance between academic content and practical components across semesters.

Results

Many students indicated that the workload was excessive, particularly in the later stages of the program, describing semesters as "too bulky." A number of respondents mentioned that they were undergraduates for five years in a four-year degree program due to this extensive workload (Figure 5). The responses highlight a clear issue with the distribution of the workload, especially in later semesters, where students felt overwhelmed by the volume of academic content. The combination of theoretical courses without sufficient practical components in these stages led to a sense of imbalance, further exacerbating the workload pressure.

Suggestions for Improvement

To address these concerns, students recommended separating some subjects into different semesters to make the workload more manageable and emphasized the need for better pacing to ensure that the degree can be completed within the standard four-year timeline.

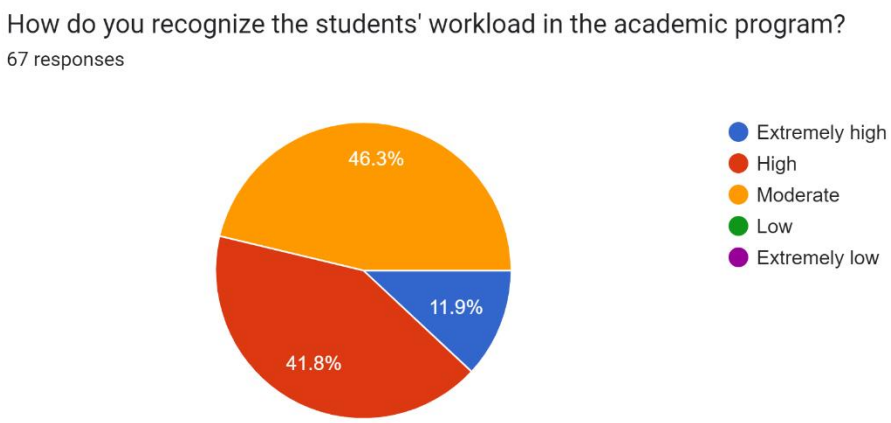

Figure 5. Overall consideration of the workload in the programme

REPETITIONS IN THE ACADEMIC PROGRAM

The feedback regarding course repetitions in the academic program revealed a mix of perceptions among students.

Results

A notable percentage indicated that there were instances of course repetition throughout the semesters, while others reported no such occurrences (Figure 6). This suggests that a segment of the student population perceives redundancy in the curriculum, which may

lead to feelings of stagnation in their learning experience. Repeated exposure to similar content could potentially hinder motivation and engagement, especially if students feel they are not acquiring new knowledge or skills. Specific courses were highlighted as being repeated across different semesters, indicating a need for curriculum revision to ensure that each course offers unique and complementary content. Addressing this issue could enhance the educational experience and improve the efficiency of course delivery. Two students suggested, 4.1, Statistical analysis , 2.1 Maths, Statistical software and data analysis to be removed from the curriculum. One of them suggested that “Statistical software and data analysis should be in 3rd year. Not only R studio but other software must be included. Very poor knowledge giving by that course. Its not a problem with the lecturer. He support lot to students”.

Suggestions for Improvement

Several respondents indicated that certain course content repeats over the years, specifically mentioning Plantation Crop Production**,** Irrigation and Water Management**,** and Plant Systematics (1100)**,** along with Farm Power and Mechanization (1100)**.** Additionally, students noted that two extension courses offered in both the 1.2 and 3.1 semesters were identical, despite being listed separately. Many students remarked that the core courses often had similar content, even when they had different names, suggesting a lack of diversity in course offerings. This repetition could contribute to a feeling of redundancy in the academic program, impacting students' learning experiences.

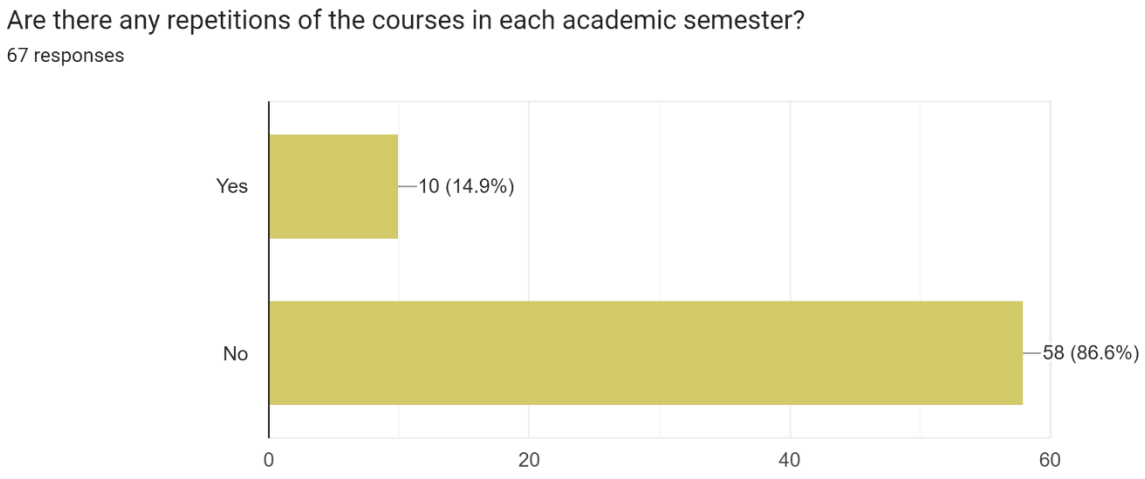

Figure 6. repetitions in the academic semesters

NEW COURSE SUGGESTIONS

The responses regarding potential new courses to be added to the academic program indicated a strong interest in expanding the curriculum to better meet students' educational needs.

Results

Many students were happy with the current content 60% agreed with the interdisciplinary courses they are given (Figure 7). The responses regarding potential new courses to be added to the academic program indicated a strong interest in expanding the curriculum to better meet students' educational needs. This reflects a desire for more contemporary topics relevant to current industry practices and challenges, indicating a clear opportunity to enhance the educational offerings within the program.

The text responses emphasized the need for the inclusion of specialized courses such as bee keeping and mushroom cultivation to core programme, highlighting student interest in these areas. Additionally, there were suggestions for courses in data analysis using different software in Semester 4.1 and the introduction of new topics related to drone technology and robotics to keep pace with advancements in agriculture. Respondents also called for improving speaking skills to meet international standards and suggested a course on academic writing in Year 1, Semester 1, along with Animal Molecular Studies and GIS training for all students in Semester 4.1. Some students pointed out that Social ethics, Research methods and scientific writing, and a course related to Eco tourism for crop science module to be added.

Overall, there is a clear desire for updated curricula that includes practical knowledge and modern agricultural technologies to enhance the learning experience.

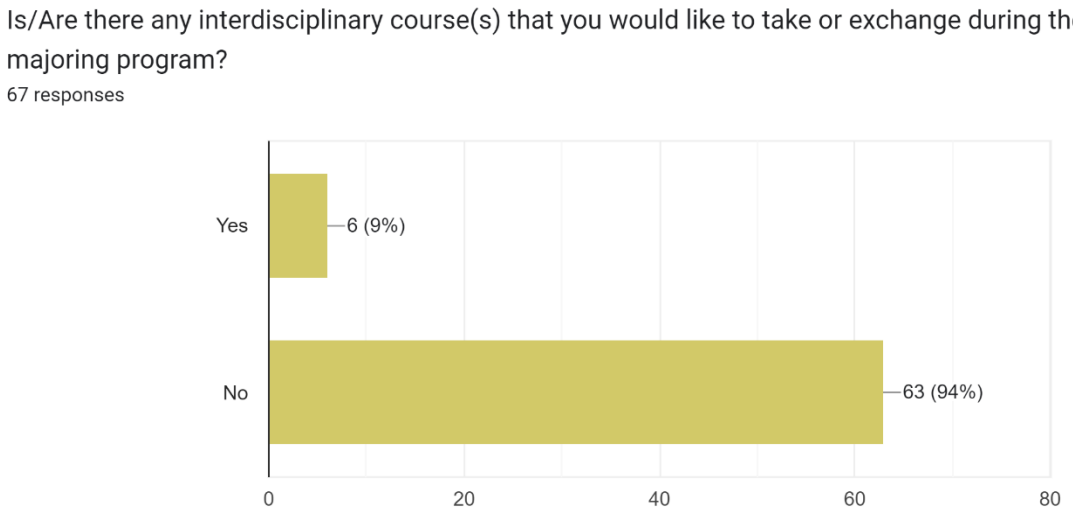

Figure 7. Need for interdisciplinary courses in the curriculum

INDUSTRIAL TRAINING

A number of questions were based on their industrial training focusing on overall perception and duration.

Results

Majority of the students believed that the training is good (98%), and when it comes to the duration there was a mixed opinion. Their views are summarized below (Figures 8, 9). A majority of the students were happy with the timing of the training to be at the current place (Figure 10).

Justification for Shortening Industrial Training Duration

Students emphasized the necessity of extending the industrial training duration to enhance their work experience and improve the value of their CVs. Many believed that the current three-month period is inadequate for gaining the standard level of experience required by employers, particularly since most organizations, both government and non-government, expect interns to have six months of training. This extended training is viewed as essential for skill development, time management, and preparing for future careers, helping students remain competitive with graduates from other universities. Furthermore, students suggested that research and internships should be conducted simultaneously to optimize the overall duration of the degree. Some advocated for a flexible approach, proposing that industrial training be either shortened to one month or extended to six months to align better with industry expectations. Concerns were raised

about the challenges in securing meaningful placements, as many institutions prefer candidates with longer training periods (Figure 11).

Justification for Extended Industrial Training Duration

Students presented several compelling reasons for the need to extend the duration of industrial training in the academic program. They emphasized that a longer training period would allow for more comprehensive work experience, which would add significant value to their CVs. Many students pointed out that the current three-month duration is insufficient for meeting industry standards, as employers often seek candidates with at least six months of relevant experience. They argued that this extended exposure is essential for developing practical skills, enhancing time management abilities, and improving overall career readiness. Additionally, students suggested that conducting simultaneous research and internships would optimize their learning experience. There was also a consensus that a six-month training period aligns better with the expectations of both government and non-government sectors, providing graduates with a competitive edge in the job market. Overall, students believe that extending the industrial training duration is crucial for ensuring that the academic program remains job-oriented and effectively prepares them for future employment opportunities.

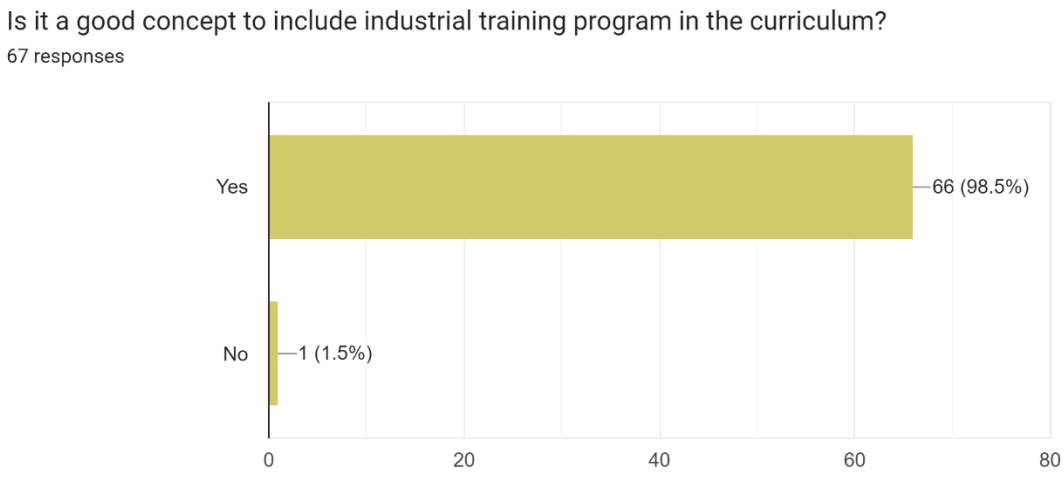

Figure 8. Perception on the industrial training

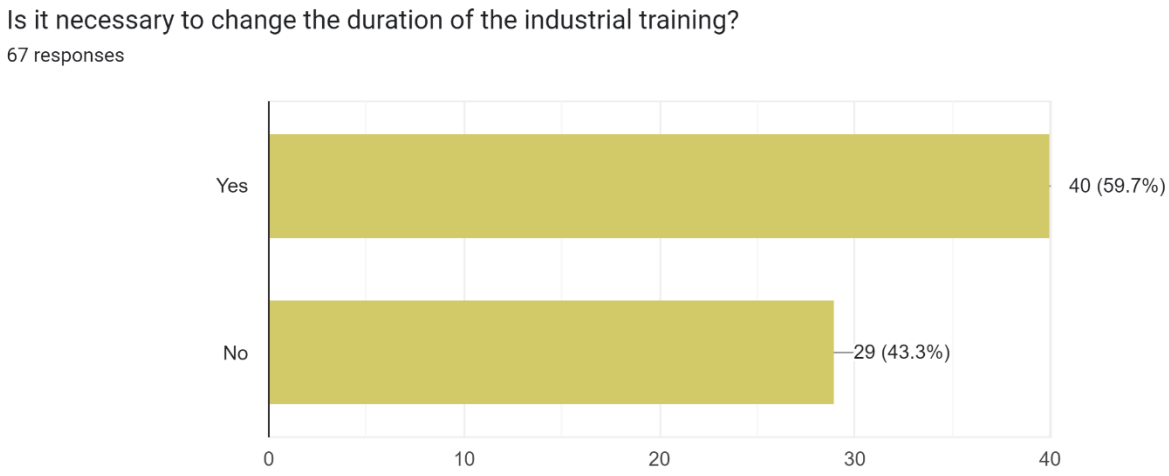

Figure 9. Duration of the programme

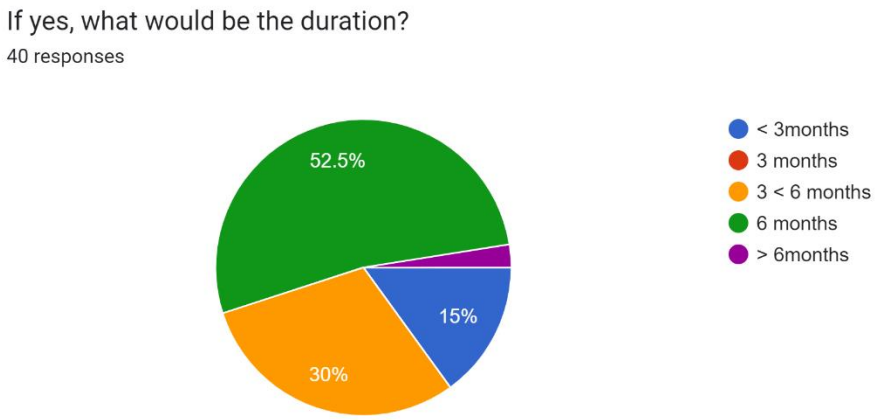

Figure 10. Duration of the programme to change

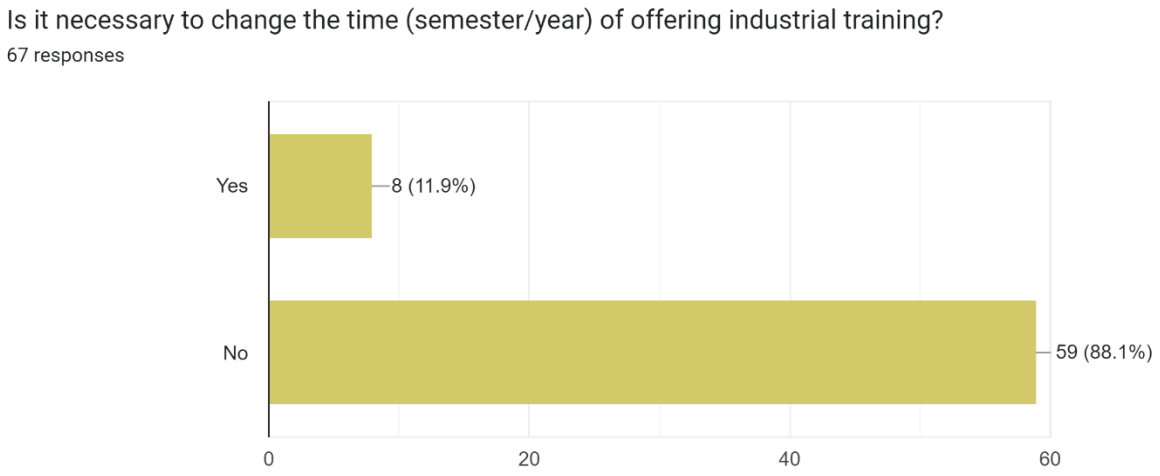

Figure 11. Time of offering the industrial training

UNDERGRADUATE RESEARCH PROJECT

A majority of the students believed that having the undergraduate project in the curriculum and arranging the symposium for them to present findings are good concepts (97%) to continue (Figures 12-15). In fact the students agreed that including external panel members to evaluate their proposals and final research presentations are good practices. Only a minority of students had different opinion.

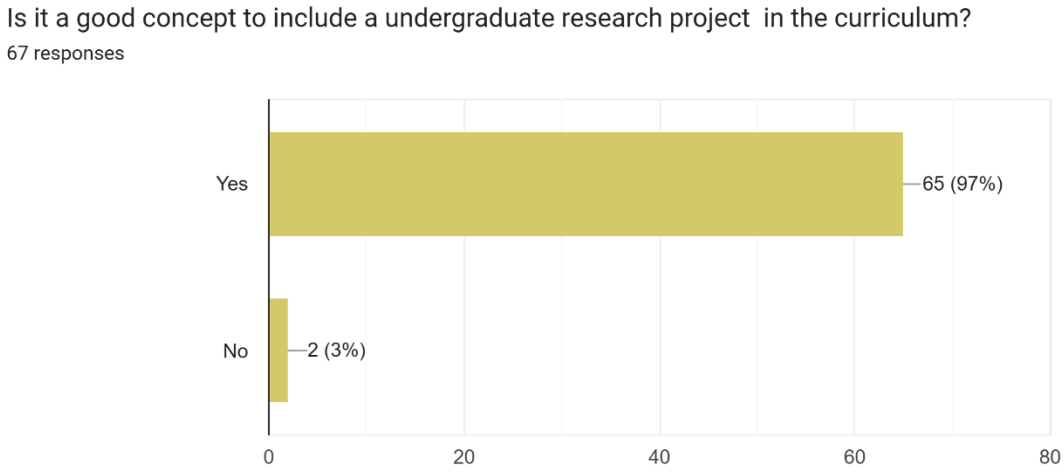

Figure 12. Perception on having undergraduate research projects in the curriculum

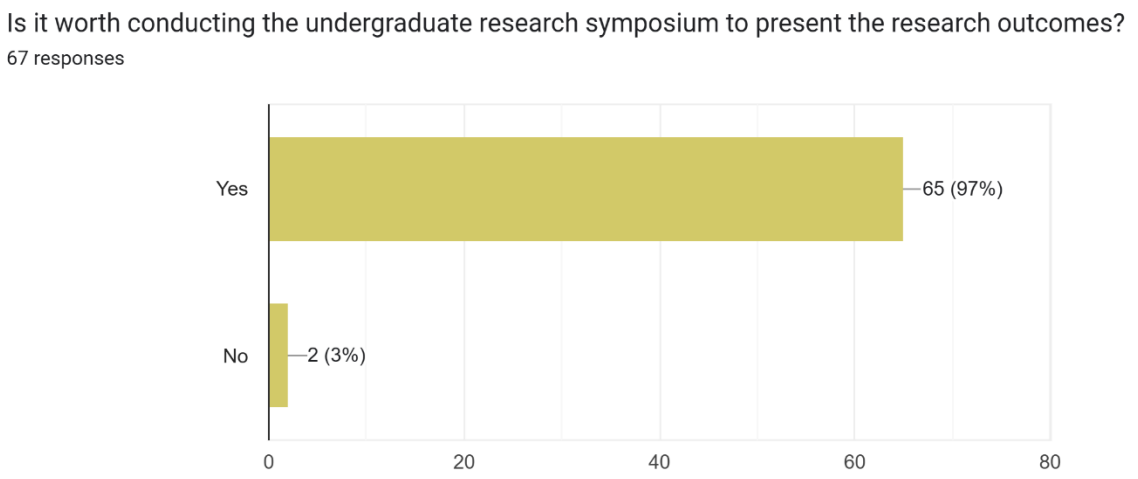

Figure 13. Perception on having undergraduate research symposium to present research findings

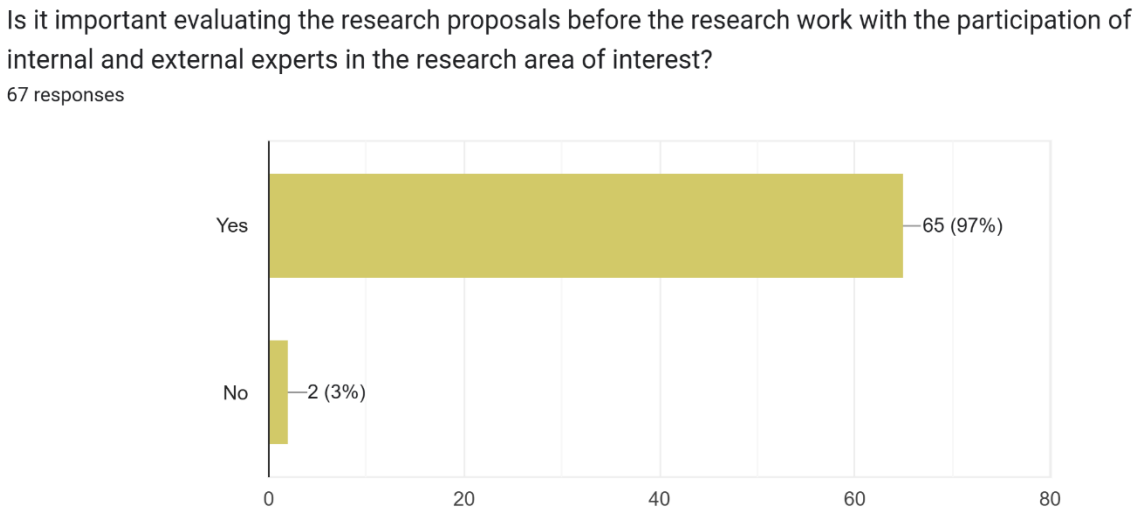

Figure 14. Inclusion of external panel members to evaluate their proposal presentations

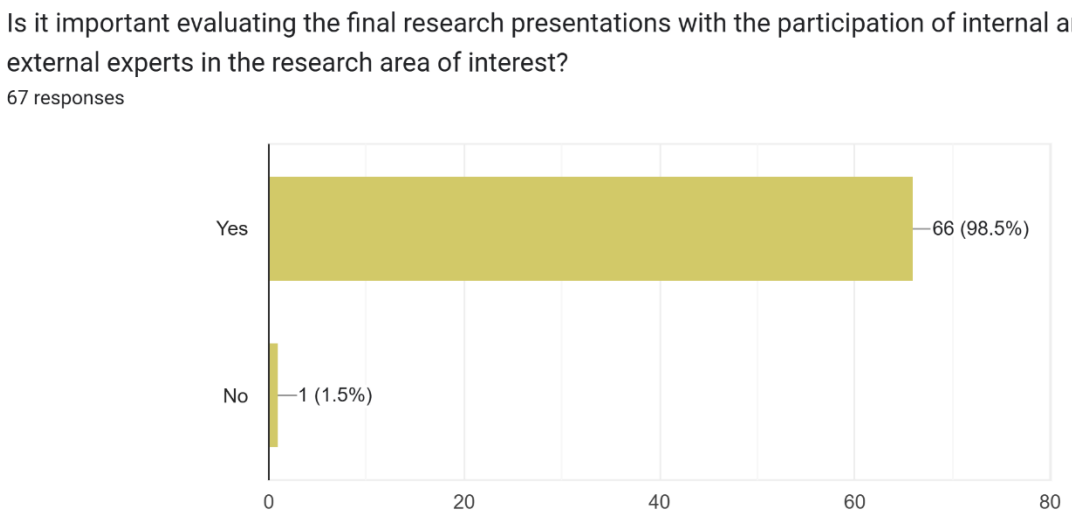

Figure 15. Inclusion of external panel members to evaluate their final presentations

ENGLISH LANGUAGE

A majority of the students 61% believed that English courses in the curriculum are productive while a fraction of it 35% believed that they are very productive (Figures 16-17). Just one student mentioned that 'Because I have not learned anything during English with this courses', answering an open-ended question. When they were questioned whether changes are necessary, 26% stated that changes are necessary while a majority 73% agreed that no changes are required.

Answering an open ended question, students highlighted the need for more emphasis on spoken English and presentation skills within their English literacy curriculum. They suggested including more spoken activities, practical sessions, and extending the time allocated for these exercises. Several students felt that improving speaking abilities should take precedence over grammar and writing skills. Additionally, they recommended making EG 3200 (Professional English) a core course to support these goals. Overall, the students desire a curriculum that focuses more on enhancing their spoken and presentation competencies.

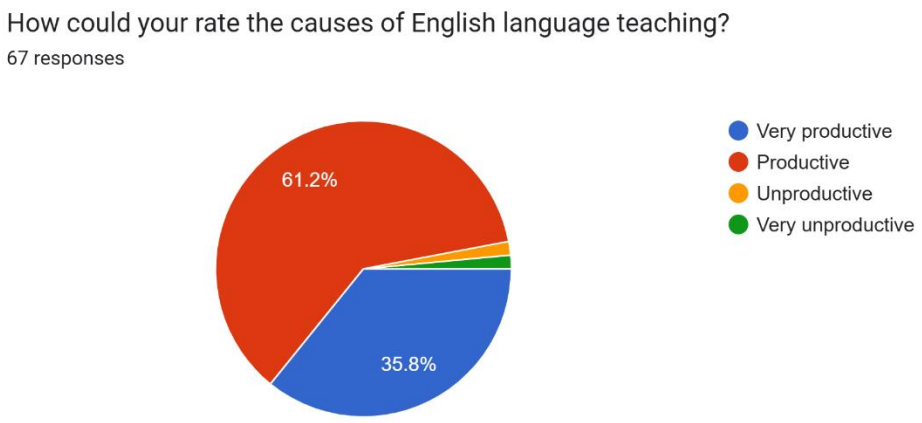

Figure 16. Productivity of English language courses in the curriculum

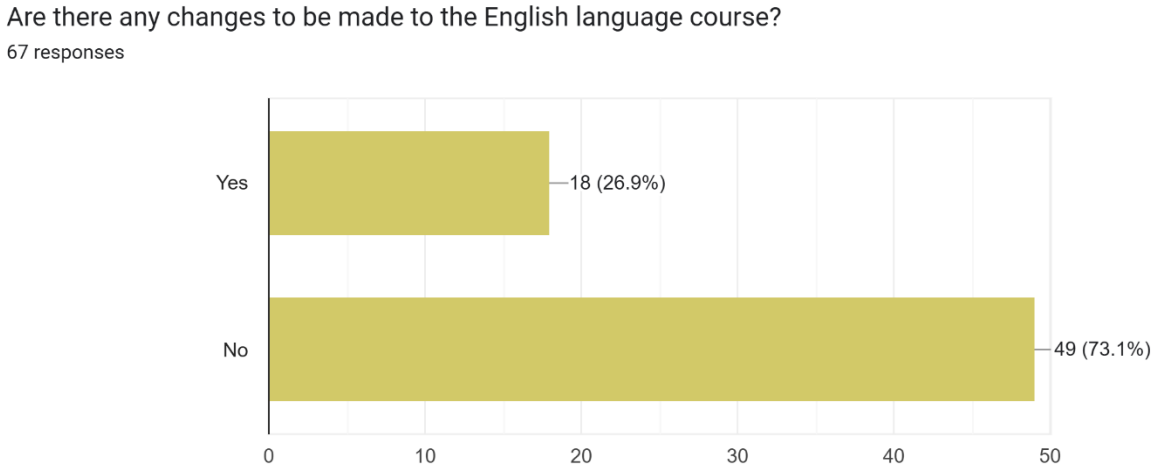

Figure 17. Perception whether changes are needed in the curriculum for English.

COMPUTER LITERACY

Only a fraction of students (28%) agreed that computer literacy courses are very productive, but a majority agreed that they are productive (67%, Figures 18-19). Answering an open ended question, a student mentioned that these courses needed to be updated while another student asked a professional level course. However, a majority 57% students mentioned that no changes are required for the curriculum.

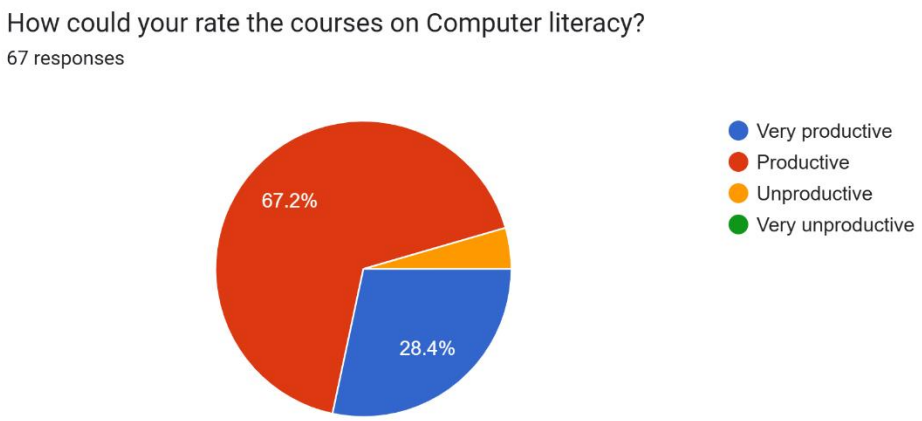

Figure 18. Productivity of computer literacy courses on the curriculum

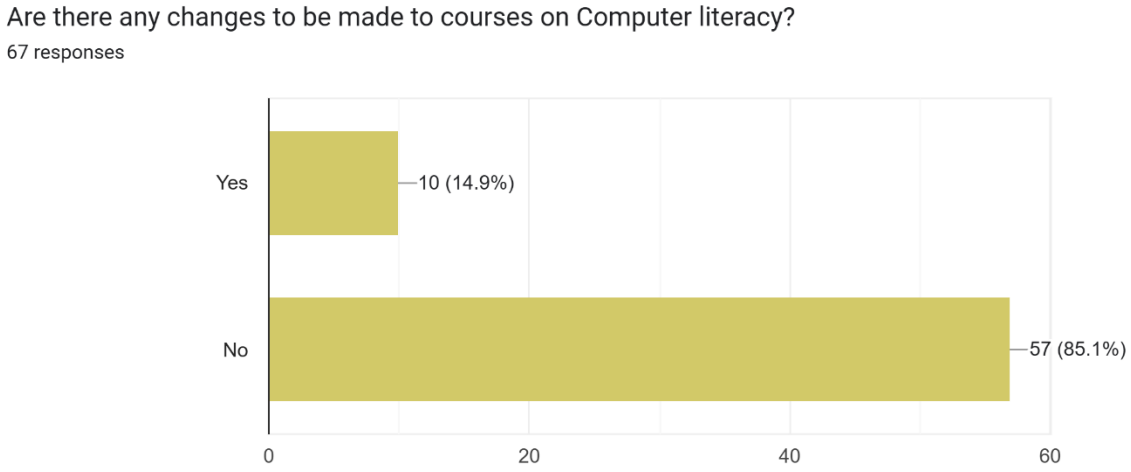

Figure 19. Perceptions whether the changes are needed for computer literacy in the curriculum

OVERALL SATISFACTION AND CURRICULUM EFFECTIVENESS

In terms of overall satisfaction, students were asked about their general view of the undergraduate curriculum (Figure 20-21).

- **Results**
  - **Very Productive/Productive**: 70% of respondents viewed the curriculum as either productive or very productive.
  - **Unproductive/Very Unproductive**: 30% felt the curriculum was unproductive.

- **Analysis**
    - Most students were generally satisfied with the curriculum. However, a third of the students expressed dissatisfaction, citing issues such as insufficient practical knowledge and delays in completing coursework on time.

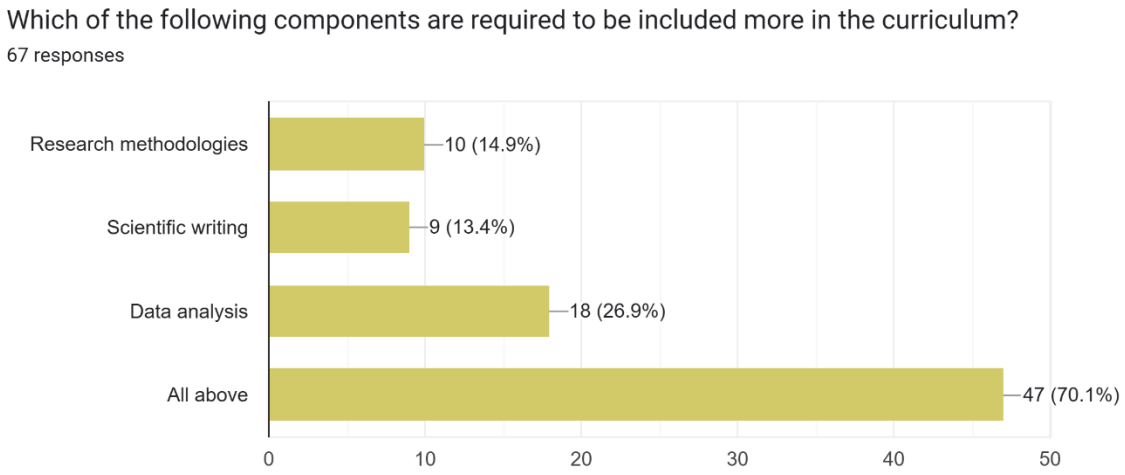

Figure 20. Ares to emphasize more in the curriculum

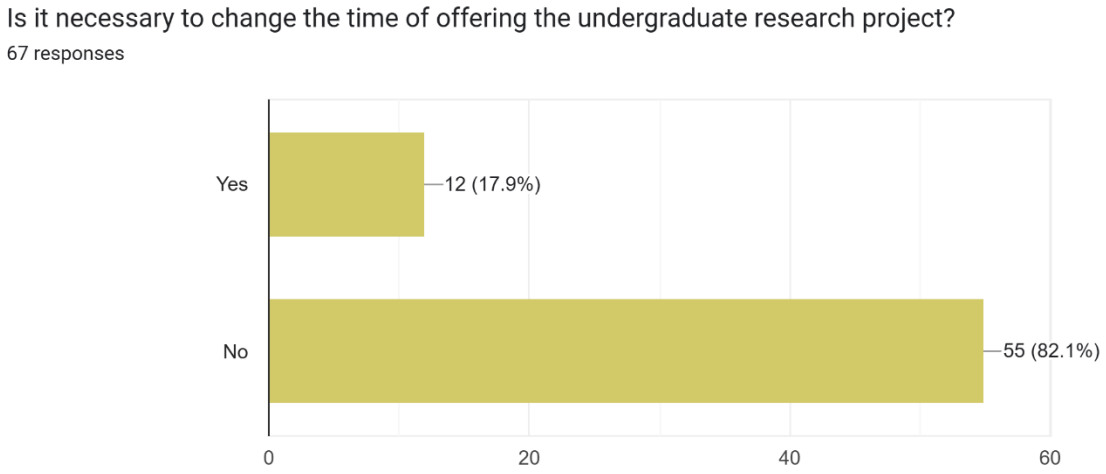

Figure 21. Timing of the research project

Suggestions for Curriculum Improvement

The survey also gathered open-ended responses from students on how to improve the curriculum. Key suggestions included:

- **Increase Practical Knowledge**: Many students requested a stronger focus on practical knowledge, particularly in fields like research, lab work, and field studies.
- **Time Management**: Students recommended better management of course timelines to ensure timely completion of coursework.
- **Field Visits and Research**: Several respondents suggested incorporating more field visits and research opportunities into the curriculum to improve learning outcomes.

Conclusion and Recommendations

The evaluation provides critical insights into how the undergraduate curriculum is perceived by students. While the majority of respondents were satisfied with the course allocation, practical components, and subject sequencing, a significant minority highlighted issues that need to be addressed to enhance the overall learning experience.

KEY RECOMMENDATIONS

1. **Redistribute Workload**: Course and practical components should be more evenly distributed across semesters to avoid an overload during the later stages of the program.
2. **Increase Practical Exposure**: Enhance the number of practical sessions, field visits, and research projects, particularly in the final semesters, to ensure students gain hands-on experience.
3. **Better Time Management**: Streamline coursework timelines to ensure that students can complete their requirements on time without undue pressure.
4. **Introduce Key Subjects Earlier**: Certain essential subjects should be moved to earlier semesters to allow students more time to absorb foundational knowledge before diving into complex topics.

By addressing these key areas, the curriculum can be improved to better meet the needs of students and ensure that they receive a balanced, practical, and academically rigorous education.

CONCLUSIONS

The survey findings underscore the importance of a well-balanced, practical, and industry-aligned curriculum that supports timely degree completion and equips students with essential skills. While overall satisfaction with the curriculum is positive, students identified specific areas for enhancement, such as workload management, practical exposure, and the inclusion of modern industry-relevant courses. Addressing these recommendations will help create a more effective and engaging learning experience, preparing students for successful careers.