

## CV3930 ENHANCED PROFESSIONAL INTERNSHIP

|                |  |          |       |
|----------------|--|----------|-------|
| Academic Year  | AY2024-25  | Semester | 1 & 2 |
| Course Type    | Foundational Core  |          |       |
| Pre-requisites | Year 3 standing and completed at least 4 semesters of study<br>(2 semesters for Direct Entry students) |          |       |
| AU             | 15AU   |          |       |
| Grading        | Letter Grading   |          |       |
| Proposal Date  | 1 Jun 2023   |          |       |

### Course Aims

Internship is an integral part of the College of Engineering's undergraduate curriculum and provides students with the opportunity to gain relevant industry exposure and experience before they formally enter the workforce. Students will be able to apply the knowledge and skills learnt in the university in an authentic work environment and develop professional competencies that will enhance their readiness and employability to support their career aspirations.

### Intended Learning Outcomes (ILO)

In the course of the internship, students should be able to progressively develop the following graduate attributes based on NTU's 3Cs:

#### A. Competence

1. Apply knowledge and skills relevantly and appropriately throughout the project and/or work requirements.
2. Understand and recognise internship company's nature and context of business, and to articulate outcome expectation (for workplace internship) and/or understand business problem and intent leading to determining work objectives, scope and expected outcome (for project internship).
3. Identify and develop feasible solutions to address problems effectively (involves using critical thinking and creative thinking, demonstrating curiosity, planning resources and applying knowhow).
4. Use acquired knowledge, skills and appropriate tools to resolve project and/or work-related issues and deriving a favourable outcome.
5. Deduce additional skills required and personal skills competencies gap.
6. Evaluate and develop personal learning and development pathways that would help to bridge the skills competency gaps.
7. Execute project management skills in the realm of personal specialisation.
8. Exhibit effective writing and oral communication skills in a professional setting when interacting with other stakeholders during project and/or work.

#### B. Character

9. Assimilate into the project and/or work team environment and to be able to function as an effective contributor.
10. Effectively manage project and/or work ambiguity and situational changes.
11. Demonstrate responsibility, integrity and professionalism in the fulfilment of all project requirements and/or work demands.
12. Demonstrate personal resilience and grit to learn, overcome and improve.

### C. Cognitive Agility

13. Organise personal time and develop task management strategies.
14. Evaluate resources required to deliver the task and develop insights to make informed judgements and recommendations.
15. Reflect on the dynamics of working with the company supervisor(s) and other team members to identify strengths as well as areas for improvement.
16. Appraise significance and impact of the project and/or work undertaken and provided by the internship company.
17. Describe the career pathways in the broader industry after gaining exposure on the project and/or work and reflect on personal career goals to advance along a potential career path.

## **Course Content**

This internship programme is a work-integrated education course with its educational content embedded within the industry work environment and the workplace goals and tasks that students will undertake during the internship stint. For this reason, the internship will be evaluated by the Faculty Supervisor using the following criteria:

1. It enables opportunities for students to apply knowledge and skills that are acquired from their current area of studies whether directly or indirectly.
2. It is a realistic industry related work task that contributes / addresses real-world business/industry needs/issues.
3. It can be accommodated within NTU's stipulated internship periods.
4. It provides sufficient structure and rigour that will enable students to achieve the intended learning outcomes within the specified period.
5. It provides the appropriate workload during the stipulated internship period.
6. Able to enhance the learning experiences of the students and through this internship enhances their understanding and knowledge.
7. The work environment is safe and conducive for student learning and development.
8. The internship company is willing to provide the necessary tools and resources that students will need to complete the internship work tasks/ project tasks.
9. The internship company has appropriate standing policies to safeguard the welfare of students.
10. The internship company supervisor has the right level of competencies, experience and commitment to provide guidance to the student.
11. The internship company is willing to adopt operational and assessment requirements and meet all responsibilities required for the students.

## Assessment

This is an individually-graded course. You will be assessed by both the Faculty Supervisor and the Company Supervisor based on the Intended Learning Outcomes (ILO) stated above.

| Component  | ILO Assessed            | EAB Graduate Attributes            | Weightage          |                    | Rubrics    |
|--|-------------------------|------------------------------------|--------------------|--------------------|------------|
|  |                         |                                    | Company supervisor | Faculty Supervisor |            |
| <b>Professional Attachment (PA)</b>  |                         |                                    |                    |                    |            |
| 1) Assessment of Work in the Organisation (AWO)                                  | 1, 3-13, 15             | a, b, c, d, e, g, h, i, j, k, l    | 30                 | --                 | Appendix 1 |
| 2) Journal   | 1,3,8,11,13, 14,16      | a, b, c, d, e, f, g, h, i, j, k, l | --                 | 20                 | Appendix 2 |
| 3) Final Report  | 1-4, 6-8, 12-14,16,17   | a, b, c, d, e, f, g, j, k, l       | 10                 | 20                 | Appendix 3 |
| 4) Presentation  | 4,5,6,8, 10,11,14 16,17 | a, b, c, d, e, f, g, h, i, j, k, l | 20                 |                    | Appendix 4 |
| <b>Total</b>   |                         |                                    | <b>100%</b>        |                    |            |
| <b>Professional Internship (PI) &amp; Enhanced Professional Internship (EPI)</b> |                         |                                    |                    |                    |            |
| 1) Assessment of Work in the Organisation (AWO)<br>• AWO 1<br>• AWO 2            | 1, 3-13, 15             | a, b, c, d, e, g, h, i, j, k, l    | 15<br>15           | --                 | Appendix 1 |
| 2) Journal<br>• Journal 1<br>• Journal 2   | 1,3,8,11,13, 14,16      | a, b, c, d, e, f, g, h, i, j, k, l | --                 | 10<br>10           | Appendix 2 |
| 3) Final Report  | 1-4, 6-8, 12-14,16,17   | a, b, c, d, e, f, g, j, k, l       | 10                 | 20                 | Appendix 3 |
| 4) Presentation<br>• Presentation 1<br>• Presentation 2                          | 4,5,6,8, 10,11,14 16,17 | a, b, c, d, e, f, g, h, i, j, k, l | 10<br>10           |                    | Appendix 4 |
| <b>Total</b>   |                         |                                    | <b>100%</b>        |                    |            |

## **Description of Assessment Components**

### Assessment of Work in the Organisation (AWO)

Students will be evaluated based on their ability to apply knowledge and skills effectively to the assigned work tasks. The quality of their work will be assessed, focusing on their understanding of objectives and their ability to produce the desired deliverables according to expectations. Adherence to work standards, including organisational rules, regulations, and shared values, will also be evaluated. Students' work ethics, active participation, and effective communication in the work environment will be assessed. Discipline and accountability, emphasising consistency in following safety guidelines, standard operating procedures, and codes of conduct, are important evaluation criteria. Additionally, students will be evaluated on their initiative, motivation, and willingness to learn, as well as their ability to communicate information efficiently and effectively. Lastly, their ability to work in teams, demonstrating interdependence, tactfulness, and openness to diverse views, will also be assessed.

The Company Supervisor will assess individual student's performance throughout the internship based on the rubrics in Appendix 1.

### Journal

Students are advised to maintain a personal logbook throughout their internship where they can record their tasks, assignments, acquired or utilised skills, faced challenges, gained knowledge, encountered individuals, and other important notes. It is recommended to make an entry in the logbook every two weeks, with each entry being around 200-500 words. These logbooks will serve as valuable resources when writing their journals for submission to the Faculty Supervisor. Students should get their logbooks checked and signed by both the Company Supervisor and Faculty Supervisor.

The primary purpose of these logbooks and journals is to assess students' progress during the internship. Students are expected to document and reflect on the main areas of learning from their internship experience, demonstrating their achievements. It is important for students to provide evidence that supports their learning experiences, including information, knowledge, and skills gained. They should also describe the specific tasks or observations they were involved in, the actions they took, and the results they achieved. They should showcase the ability to apply systematic and logical thinking or relate specific academic concepts to the job scope. Additionally, students should evaluate their skills and identify areas for further development. Students may also include additional evidence and reflections on the Intended Learning Outcomes (ILOs) to showcase their growth and development.

The Faculty Supervisor will assess student's performance based on the rubrics in Appendix 2.

### Final Report

Students are expected to cumulatively consolidate all the project experiences and reflection of key challenges and learning points in the final report. They will be evaluated on their ability to structure and present their report in a professional manner, paying attention to aspects such as layout, formatting, and the quality of written English. They should accurately describe the company's business, organisational structure and work culture. The assessment also includes the evaluation of students' planning and goal-setting skills. This involves setting clear and meaningful work plans and learning objectives that align with their assigned tasks, and

subsequently executing and achieving them successfully. Students should demonstrate their ability to use systematic and logical thinking or relate academic concepts to their job responsibilities. Furthermore, students will be assessed on their ability to interpret results in the context of their assigned work and provide valuable discussions and recommendations that contribute to the company's business. Lastly, students are expected to reflect on their industrial experience, engaging in self-assessment and critically examining their performance. They should also demonstrate the ability to apply lessons learned to achieve self-improvement and foster continuous learning.

Both the Company Supervisor and Faculty Supervisor will assess individual student's performance based on the rubrics in Appendix 3.

### Presentation

Presentation(s) by students is compulsory over the course of the internship. Students will undergo assessment based on their professionalism and confidence, as well as their clear and effective communication skills, particularly in technical or procedural contexts. They should demonstrate the capability to summarise information from previous weeks of the internship, extracting relevant key points in a balanced manner. The evaluation will also consider their competence in accurately describing and representing the assigned work and tasks performed during the internship. Students will be assessed on their reflection and self-evaluation abilities, particularly in identifying areas for improvement and recognising valuable learning experiences. The time for an oral presentation will be 25 minutes, consisting of 15 minutes of presentation and 10 minutes for the question/answer session. Questions will be asked to assess the student's understanding and knowledge of the project. Students who have valid reasons or official leave during the oral presentation period must contact their supervisors well before the oral presentation.

Both the Company Supervisor and Faculty Supervisor will attend and jointly assess the presentation based on the rubrics in Appendix 4.

### Assessment Timeline

| Assessment Timeline | EPI  |
|---------------------|--|
| Week 3              | <ul style="list-style-type: none"> <li>DTP</li> </ul>  |
| Week 8              | <ul style="list-style-type: none"> <li>AWO 1</li> <li>Journal 1</li> <li>Presentation 1</li> </ul>                       |
| Week 16             |  |
| Week 26             | <ul style="list-style-type: none"> <li>AWO 2</li> <li>Journal 2</li> <li>Final Report</li> <li>Presentation 2</li> </ul> |

### Mapping of Course ILOs to EAB Graduate Attributes

| Course | Internship        | EAB Graduate Attributes |     |     |     |     |     |     |     |     |     |     |     |
|--------|-------------------|-------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|        |                   | (a)                     | (b) | (c) | (d) | (e) | (f) | (g) | (h) | (i) | (j) | (k) | (l) |
| Type   | Foundational Core | ●                       | ●   | ●   | ●   | ◐   | ○   | ○   | ◐   | ●   | ●   | ○   | ●   |

| <b>Intended Learning Outcomes</b>  | <b>EAB Graduate Attributes</b> |
|--|--------------------------------|
| 1. Apply knowledge and skills relevantly and appropriately throughout the project and/or work requirements.  | a, b, c, d, e                  |
| 2. Understand and recognise internship company's nature and context of business, and to articulate outcome expectation (for workplace internship) and/or understand business problem and intent leading to determining work objectives, scope and expected outcome (for project internship). | a, b, c, d, e                  |
| 3. Identify and develop feasible solutions to address problems effectively (involves using critical thinking and creative thinking, demonstrating curiosity, planning resources and applying knowhow).   | a, b, c, d, e                  |
| 4. Use acquired knowledge, skills and use of appropriate tools to resolve project and/or work-related issues and deriving a favourable outcome.  | a, b, c, d, e                  |
| 5. Deduce additional skills required and personal skills competencies gap.   | a, b, c, d, e                  |
| 6. Evaluate and develop personal learning and development pathways that would help to bridge the skills competency gaps.   | l                              |
| 7. Execute project management skills in the realm of personal specialisation.  | k                              |
| 8. Exhibit effective writing and oral communication skills in a professional setting when interacting with other stakeholders during project and/or work.  | i, j,                          |
| 9. Assimilate into the project and/or work team environment and to be able to function as an effective contributor.  | i, j                           |
| 10. Effectively manage project and/or work ambiguity and effectively manage situational changes.   | h, i, k, l                     |
| 11. Demonstrate responsibility, integrity and professionalism in the fulfilment of all project requirements and/or work demands.   | h                              |
| 12. Demonstrate personal resilience and grit to learn, overcome and improve.   | h, i, l                        |
| 13. Organise personal time and develop task management strategies.   | i, k                           |
| 14. Evaluate resources required to deliver the task and develop insights to make informed judgements and recommendations.  | a, b, c, d, e, g               |
| 15. Reflect on the dynamics of working with the company supervisor(s) and other team members to identify strengths as well as areas for improvement.   | i                              |
| 16. Appraise significance and impact of the project and/or work undertaken and provided by the internship company.   | a, b, d, f, g                  |
| 17. Describe the career pathways in the broader industry after gaining exposure on the project and/or work and reflect on personal career goals to advance along a potential career path.  | g, l                           |

- Legend: ● Fully consistent (contributes to more than 75% of Student Learning Outcomes)  
 ◐ Partially consistent (contributes to about 50% of Student Learning Outcomes)  
 ○ Weakly consistent (contributes to about 25% of Student Learning Outcomes)  
 Blank Not related to Student Learning Outcomes

| <b>EAB Graduate Attributes<sup>1</sup></b> |                              |
|--|------------------------------|
| a)   | <b>Engineering Knowledge</b> |

<sup>1</sup> Reference: [EAB Accreditation Manual](#)

|    |   |
|----|---|
|    | Apply the knowledge of mathematics, natural science, engineering fundamentals, and an engineering specialisation as specified in WK1 to WK4 respectively to the solution of complex engineering problems.   |
| b) | <b>Problem Analysis</b><br>Identify, formulate, research literature, and analyse complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.   |
| c) | <b>Design/Development of Solutions</b><br>Design solutions for complex engineering problems and design systems, components or processes that meet the specified needs with appropriate consideration for public health and safety, cultural, societal, and environmental considerations.                  |
| d) | <b>Investigation</b><br>Conduct investigations of complex problems using research-based knowledge (WK8) and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.   |
| e) | <b>Modern Tool Usage</b><br>Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex engineering problems, with an understanding of the limitations.  |
| f) | <b>The Engineer and Society</b><br>Apply reasoning informed by contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to professional engineering practice and solutions to complex engineering problems.                        |
| g) | <b>Environment and Sustainability</b><br>Understand and evaluate the sustainability and impact of professional engineering work in the solution of complex engineering problems in societal and environmental contexts.   |
| h) | <b>Ethics</b><br>Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.   |
| i) | <b>Individual and Team Work</b><br>Function effectively as an individual, and as a member or leader in diverse teams and in multidisciplinary settings.   |
| j) | <b>Communication</b><br>Communicate effectively on complex engineering activities with the engineering community and with society at large, such as being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions. |
| k) | <b>Project Management and Finance</b><br>Demonstrate knowledge and understanding of engineering management principles and economic decision-making, and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.                        |
| l) | <b>Life-long Learning</b><br>Recognise the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.  |

## **Formative Feedback**

Continuous feedback on progress and performance can be expected from student's Company Supervisor.

Student's Faculty Supervisor will also provide feedback through the student's journal submissions, site visits and mutual interaction with student.

## **Learning & Teaching Approach**

Internship is an experiential learning programme carried out with close guidance and mentoring by the sponsoring company supervisor in a professional workplace setting over the internship period. During the internship, students will undertake work assignments and/or projects in the organisation. Through these workplace tasks, students learn and develop the competencies and experiences relevant to the intended learning outcomes of the programme.

Each student will be supervised by:

### Company Supervisor

The Company Supervisor is assigned by the sponsoring internship company and will be the key person working and interacting with the student on work performance, progress and outcomes on a regular basis.

### Faculty Supervisor

The Faculty Supervisor is assigned by the student's school and serves to facilitate student's learning and developmental progress by reviewing student's journal submissions and through interactions such as email, phone, and/or visits. For PI and EPI, the Faculty Supervisor is required to conduct 3 visits, 2 of which should be physical\* visits. The first visit (physical) is conducted at the beginning of the internship to discuss job scope and detailed training programme (DTP). The second visit (physical or online) is conducted during Presentation 1. The third visit (physical) is conducted during Presentation 2. For PA, the Faculty Supervisor is required to conduct 2 physical visits (i.e. at the beginning of the internship and during presentation). For overseas internship, all visits can be conducted online.

The Faculty Supervisor will be student's first point of contact for any matters arising during the internship. Alternatively, student may also contact the respective NTU Internship Programme Manager at NTU's Career and Attachment Office or the respective school's internship co-ordinator(s) for help or guidance.

*\* Unless there are exceptional circumstances in which case the Faculty Supervisor should inform the Associate Chair (Academic) or Internship Coordinator of the School.*

## **Readings & References**

NTU Internship Blog: <https://blogs.ntu.edu.sg/ntuinternship/>

How to Successfully Manage your Assignments: <http://bit.ly/2LNfrlX>



## **Course Policy & Student Responsibility**

Please refer to NTU Internship Blogsite at [www.blogs.ntu.edu.sg/ntuinternship](http://www.blogs.ntu.edu.sg/ntuinternship) for detailed Internship Policy and Procedures.

Further information can be obtained from NTU's Career and Attachment Office (CAO) via [cao\\_internship@ntu.edu.sg](mailto:cao_internship@ntu.edu.sg).

## **Professional and Academic Integrity**

Internship concerns work in a professional setting. As with good academic work, good professional work depends on honesty and ethical behaviour. The quality of your work as a student relies on adhering to the principles of professional and academic integrity and to the NTU Code of Conduct, a set of values shared by the whole university community. Truth, Trust and Justice are at the core of NTU's shared values.

As a student, it is important that you recognise your responsibilities in understanding and applying the principles of academic integrity in your work. Not knowing what is involved in maintaining academic integrity does not excuse academic dishonesty. You need to actively equip yourself with strategies to avoid all forms of academic dishonesty, including plagiarism, academic fraud, collusion and cheating. If you are uncertain about the definitions of any of these terms, you should refer to the [Academic Integrity Handbook](#) for more information. Use of Generative Artificial Intelligence (GAI) such as ChatGPT is allowed, but students need to adhere to NTU's prevailing guideline. i.e. Give proper citations if you use any AI tool. Extending the practice of correctly citing references in your work under NTU's policies on citation and plagiarism, the University requires students to (i) identify any generative AI tools used and (ii) declare how the tools are used in submitted work. Please note that even with acknowledgement, copying of output generated by AI tools (in part or whole) may still be regarded as plagiarism. Consult your Faculty Supervisor if you need any clarification about the requirements of academic integrity during your internship.

## **Course Instructors**

A Faculty Supervisor will be assigned by the School within 2 weeks of the commencement of the internship.

This internship programme is managed and administered by your school's internship coordinator as well as NTU's Career & Attachment Office.

## **Planned Weekly Schedule**

Your internship work schedule will be provided by the internship company. Any deviation from the communicated work schedule must be consulted and concurred by your Company supervisor.

**APPENDIX 1: RUBRICS FOR ASSESSMENT OF WORK IN THE ORGANISATION (AWO) 1 & 2**

| CRITERIA (FOR ORGANISATION SUPERVISOR) |  | UNSATISFACTORY  | BELOW AVERAGE  | AVERAGE  | GOOD   | OUTSTANDING  |
|--|--|---|--|--|--|--|
| 1                                      | <b>Performance</b><br>Ability to apply knowledge and skills to the work required.  | Fails to apply knowledge and/or skills as necessary most of the time. Consistently exhibits difficulties in performing work tasks/assignments. Lacks basic job knowledge and/or skills. | Attempts to apply knowledge and/or skills. Demonstrates some ability to apply knowledge and skills into work tasks, with room for improvement to show more confidence and competency in application of knowledge to complete the work tasks. | Work reflects adequate application of knowledge and/or skills. Possesses sufficient knowledge of the work to get it done.        | Thorough application of knowledge and/or skills for work assignments as necessary and appropriate. Uses opportunities to expand knowledge and/or skills. Shares knowledge and/or skills with colleagues. | Exceptional application and augmentation of knowledge and/or skills. Introduces new knowledge and/or skills into the work contexts. Willingly guides/teaches colleagues and shares knowledge. Seeks/applies innovative and relevant techniques.  |
| 2                                      | <b>Quality of Work</b><br>Ability to understand the work objective and produce the intended deliverables according to expectations.  | Fails to understand the work objective and is unable to produce the work deliverables according to expectations.  | Understands the work objective and requires support to produce the intended deliverables according to expectations.  | Understands the work objective and able to independently produce the intended deliverables satisfactorily.                       | Understands the work objective and consistently able to produce the intended deliverables at high quality level.   | Understands the work objective and consistently able to produce the intended deliverables at high quality level. In addition, able to evaluate and recommend process improvement measures.   |
| 3                                      | <b>Work Standard and Ethics</b><br>Ability to work in accordance to the organisation's rules and regulations; expected shared work values and behaviours.  | Ignorant and unable to adhere to organisation's rules and regulations and work standards do not conform to shared work values and behaviours.   | Makes attempts to conform to shared work values and behaviours but often fail to meet work standards according to organisation's rules and regulations.  | Able to conform to shared work values and behaviours and meets work standards according to organisation's rules and regulations. | Able to conform and articulate the importance of shared work values and behaviours, organisations rules and regulations, in relation to area of work.  | Able to advocate shared organisation's work values and behaviours with others so that they can adhere to organisation's rules and regulations in their area of work.   |
| 4                                      | <b>Discipline &amp; Accountability</b><br>Ability to maintain personal discipline; Emphasis on consistency in following safety guidelines / SOP, timeliness and punctuality, as well as adherence to code of conduct, rules and regulations. | Takes no responsibility in maintaining personal discipline and adhering to the company regulations, SOP, safety guidelines and code of conduct.   | Requires constant reminders in adherence to company's regulations and code of conduct.   | Able to exercise personal discipline and demonstrate basic work conduct in accordance with company's regulations.                | Demonstrates situational awareness and exercises consistent personal discipline in conducting oneself at work in accordance with company's regulations.  | Demonstrates situational awareness and exercises consistent personal discipline in conducting oneself at work in accordance with company's regulations. In addition, able to influence others/peers to conduct themselves well at the workplace. |
| 5                                      | <b>Initiative</b><br>Ability to proactively learn and understand workplace expectations to take positive actions in coping with work tasks/environment.  | Not prepared for uncertainty. Remained inflexible where need for change is clear. Demonstrates resistance to change.  | Accepts changes reluctantly and makes minimal adjustments.   | Accepts changes and makes adjustments but often only under instructions.   | Accepts changes readily and intelligently, and adapts to surrounding circumstances. Adjusts work/routine to meet the needs of change (or caters to ambiguity) when required without need to be told.     | Demonstrates ability to cope effectively with change and/or ambiguity. Implements clear coping/adaptation strategies. Provides support to others and improve team/work dynamics to cope with change.   |

|   |  |  |  |   |  |  |
|---|--|--|--|---|--|--|
| 6   | <b>Motivation and Learning</b><br>Exercise curiosity to examine issues at root-cause level in all situations to deepen one's knowledge.                          | Not interested in pursuing workplace issue at the slightest obstacles.   | Demonstrates some efforts to overcome challenges at the workplace with constant encouragement.   | Diligent and sustains interest enough to investigate and learn about the issue at work in order to solve them with regular check-ins.   | Independently investigates and shows deep interest to investigate and learn about the issue at work in order to solve them consistently.   | Independently investigates and learns about the issue at work and proactively searches for solutions to solve them.  |
| 7   | <b>Communication</b><br>Ability to convey information efficiently and effectively to spur task actions in the workplace.   | Poor verbal and/or written communication and listening skills accompanied by a lack of self-awareness of impact on others.   | Struggles to comprehend and communicate ideas in a clear and concise manner.   | Regularly communicates ideas and relates clearly to others. Able to listen to ideas of others and regularly responds to them in appropriate manner.   | Communicates and explains ideas clearly and concisely, getting the message across effectively and in a structured, sensitive manner. Actively listens to others and responds appropriately, reflecting a personal and clear understanding of the viewpoint expressed.                    | Communicates in a highly convincing and/or persuasive manner. Presents messages using excellent structure, organisation and flow. Balances listening and responding. Synthesizes what has been heard, and responds and evaluates or elaborates on ideas, offering alternative perspectives.  |
| 8   | <b>Working in Teams</b><br>Ability to work interdependently and exercise tactfulness in a team environment; Being open and embrace diverse views in discussions. | Unable to function properly with others to achieve work objectives. A lack of respect and regard frequently noted.   | Works well with some colleagues and have conflicts or unable to cooperate with others on multiple occurrences  | Works well with colleagues most of the time with only limited occurrences of communication breakdown or failure to collaborate.   | Contributes to the organisation/assignments in valuable ways through active and sustained collaboration with colleagues. Deals with conflict, frustration appropriately.   | Contributes in valuable ways to the work objectives not just through and with colleagues, but also helps to enhance the team dynamics. Demonstrates high degree of trust, respect, and collaboration. Promotes and maintains a harmonious/ productive work environment.  |
| <b>ADDITIONAL ATTRIBUTES FOR TESTIMONIAL (UNGRADED)</b> |  | <b>UNSATISFACTORY</b>  | <b>BELOW AVERAGE</b>   | <b>AVERAGE</b>  | <b>GOOD</b>  | <b>OUTSTANDING</b>   |
| 9   | <b>Innovation</b><br>Ability to think of creative or new solutions to solve problems.  | Demonstrates a lack of understanding and proficiency in innovation-related tasks. Struggle to generate creative ideas, fail to contribute to team discussions effectively, and exhibit minimal initiative or problem-solving skills. | Able to contribute ideas occasionally although it may lack depth or practicality. Require guidance and supervision and struggling to think critically and independently. | Possesses a reasonable understanding of the principles and practices associated with the field. Can generate ideas but may require guidance and support to refine and implement them effectively. | Displays a solid understanding of innovation principles and practices. Consistently generates creative and practical ideas, contributes meaningfully to team discussions, and takes the initiative in projects. Demonstrates an ability to think critically and adapt to new challenges. | Exhibits exceptional competency in innovation. Consistently generates highly original and impactful ideas, demonstrates exceptional problem-solving skills, and contributes significantly to team discussions. Takes the initiative, shows remarkable adaptability, and are self-directed in their work. Possesses strong leadership qualities and inspire others with innovative mindset. |

|    |   |   |  |  |  |   |
|----|---|---|--|--|--|---|
| 10 | <p><b>Global Perspectives</b><br/>Ability to demonstrate cross-cultural awareness and appreciation for diversity.</p>   | <p>Lacks fundamental understanding of the importance of cultural diversity and the global context. Struggles to acknowledge and appreciate different perspectives, resulting in limited awareness of cross-cultural issues. The ability to work effectively in multicultural teams is limited and may exhibit bias or insensitivity towards individuals from diverse backgrounds.</p> | <p>Demonstrates some awareness of global perspectives and diversity but struggles to apply this knowledge effectively. May have difficulty adapting to unfamiliar cultural environments and may exhibit occasional insensitivity or bias. Requires significant guidance and support to work collaboratively in diverse teams and may have limited exposure to international experiences.</p> | <p>Possesses a basic understanding of the importance of diversity and global issues. Can navigate cultural differences with some degree of effectiveness, showing an ability to adapt to diverse environments. Can work well in multicultural teams and demonstrate openness to learning from diverse experiences.</p> | <p>Exhibits a strong understanding of global perspective and diversity. Actively seeks opportunities to broaden knowledge of different cultures and global issues, showing a genuine appreciation for diversity. Effectively collaborates in multicultural teams, fostering an inclusive and respectful work environment.</p>                      | <p>Possesses exceptional competence in global perspective and diversity. Exhibits an extensive knowledge and understanding of various cultures, global issues, and their interconnections. Consistently displays a high degree of cultural sensitivity, empathy, and respect towards individuals from diverse backgrounds. Actively contributes to creating an inclusive work environment, leveraging his/her understanding of cultural differences to foster collaboration and innovation.</p> |
| 11 | <p><b>Responsibility to the Community, Nation and the World</b><br/>Ability to keep up with current affairs and exercise responsibility as a member of the society they live in and the global community.</p> | <p>Demonstrates a lack of understanding or commitment to the responsibility to the community, nation and the world. May display apathy or disregard for the impact of his/her actions on the wider society. Fails to recognise the importance of social responsibility and may neglect opportunities to contribute positively.</p>  | <p>Limited understanding of responsibility to the community, nation and the world. May show sporadic interest or engage in occasional activities related to social causes but lacks consistency and depth in his/her efforts. May not actively seek out opportunities to make a meaningful impact beyond his/her immediate environment.</p>  | <p>Acknowledges his/her responsibility to the community, nation and the world. May participate in community service or volunteer activities occasionally, showing some level of commitment. May need guidance to develop a stronger sense of purpose and create a more significant impact.</p>                         | <p>Demonstrates a genuine commitment to his/her responsibility to the community, nation and the world. Actively engages in community service or volunteer work, striving to make a positive impact. Seeks out opportunities to contribute to social causes and may show an understanding of the interconnectedness of local and global issues.</p> | <p>Excels in his/her responsibility to the community, nation and the world. Displays an exceptional commitment to making a positive difference and exhibits leadership qualities in his/her efforts. Actively seeks out and initiates projects or initiatives that address significant societal challenges. Demonstrates a deep understanding of complex issues and develops innovative solutions.</p>  |
| 12 | <p><b>Multidisciplinary/Interdisciplinary Knowledge and Skills</b><br/>Ability to integrate and apply knowledge from different disciplines to solve problems.</p>   | <p>Unable to explore perspectives from diverse sources of information and has difficulties working in collaboration with different disciplines to meet shared goals.</p>  | <p>Able to connect and make sense of diverse sources of information but needs guidance to identify and integrate knowledge from other disciplines to meet shared goals.</p>  | <p>Able to connect and make sense of diverse sources of information to identify and integrate knowledge from other disciplines to meet shared goals independently.</p>   | <p>Able to connect and integrate with other disciplines to meet shared goals and analyses areas to identify collaboration opportunities to leverage new sources of information in new ways.</p>  | <p>Able to synthesise information extracted from different disciplines to develop new insights and establish collaboration opportunities to facilitate effective knowledge transfer across multi-disciplines to meet organisational goals.</p>  |

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| 13 | <p><b>Digital Literacy</b><br/>Ability to work safely and effectively with a broad range of digital technologies and information sources.</p> | <p>Exhibits a poor understanding of basic digital skills and safety measures. Struggles to navigate common digital tools and lacks knowledge regarding online privacy and security. May not be familiar with common terms and practices in the digital world.</p> | <p>Possesses limited knowledge and skills in digital literacy and safety. May be able to perform basic tasks with digital tools but often requires guidance and supervision. Has a basic understanding of online safety measures but may not consistently apply them. May lack awareness of emerging digital trends and technologies.</p> | <p>Can comfortably use common digital tools and applications. Has a good understanding of online safety practices and can navigate the digital landscape with a moderate level of security. May still require occasional assistance with more advanced tasks and may not be fully up to date with the latest developments.</p> | <p>Possesses advanced skills in using digital tools and applications and can adapt to new technologies quickly. Has a strong knowledge of online safety practices and actively employs them to protect themselves and others. Can independently troubleshoot common digital issues and stay updated with the latest trends in digital literacy.</p> | <p>Possesses expert-level skills in using various digital tools and technologies and can navigate complex systems with ease. Has an in-depth understanding of online safety measures, including advanced security protocols. Actively contributes to creating a safe digital environment and can guide others in practicing digital literacy and safety. Stays ahead of emerging trends and technologies in the digital realm.</p> |
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**APPENDIX 2: ASSESSMENT RUBRICS FOR JOURNAL 1 & 2**

| CRITERIA (FOR FACULTY SUPERVISOR) |   | UNSATISFACTORY  | BELOW AVERAGE  | AVERAGE  | GOOD  | OUTSTANDING  |
|-----------------------------------|---|---|--|--|---|--|
| 1                                 | <b>Effective Reporting</b><br>Ability to maintain clear, concise and relevant entries in the journal and/or logbook.                                | Unclear illogical entries with poor content.  | Average reporting with no clear depth in content.                                  | Average reporting with logical flow and average content and results.     | Well-presented reporting, logical flow with average content and results.        | Well-presented reporting, logical flow with good material and content.                               |
| 2                                 | <b>Consistency</b><br>Ability to document the internship activities consistently and regularly (e.g. entry in logbook).                             | Inconsistent update of internship activities. Updates are more than 4 weeks apart.    | Inconsistent update of internship activities. Updates are more than 3 weeks apart. | Consistent update of internship activities. Updates about every 3 weeks. | Consistent update of internship activities. Updates about every 2 weeks.        | Consistent update of internship activities. Updates about every 2 weeks if not weekly.               |
| 3                                 | <b>Competence</b><br>Ability to analyse, synthesise and interpret information in the workplace.   | Unable to analyse, synthesise and interpret information in the workplace.             | Able to interpret information, but not able to analyse or synthesise.              | Basic level of analysis, synthesis and interpretation of information.    | Good analysis, synthesis and interpretation of information.                     | Critical analysis, synthesis and interpretation of information, introduces new and valuable insight. |
| 4                                 | <b>Application of academic knowledge</b><br>Ability to apply systematic and logical thinking or relate specific academic concepts to the job scope. | No application of systematic or logical thinking, unable to relate academic concepts. | Inconsistent application of systematic or logical thinking.                        | Application of systematic or logical thinking observed for some tasks.   | Consistent application of systematic or logical thinking throughout most tasks. | All recorded tasks demonstrate application of systematic and logical thinking.                       |

Note: Only 1 journal is required for PA.

**APPENDIX 3: ASSESSMENT RUBRICS FOR FINAL REPORT**

| CRITERIA (FOR ORGANISATION SUPERVISOR) |  | UNSATISFACTORY   | BELOW AVERAGE   | AVERAGE  | GOOD   | OUTSTANDING   |
|--|--|--|---|--|--|---|
| 1                                      | <b>Structure and presentation</b><br>Ability to produce a professional report, with consideration for structure / layout / formatting, as well as quality and propriety of written English.                                | Unclear illogical structure with poor written English.   | Average structure/formatting with poor written English.   | Average structure/formatting with minor grammatical errors.  | Well-presented, logical structure, professional formatting with minor grammatical errors.  | Well-presented, logical structure, professional formatting with excellent written English.  |
| 2                                      | <b>Introduction</b><br>Ability to accurately describe the Company's business, organisational structure and work culture.   | Unfamiliar with company's business and organisation, as well as own role.                      | Unfamiliar with company's business and organisation, but can describe own role.                                     | Familiar with company's business and organisation, as well as own role.  | Familiar with company's business and organisation, furthermore able to describe significance of own role in context of this structure. | Clearly understands company's business and structure, as well as own role, from a wider industrial perspective.                                 |
| 3                                      | <b>Planning and goal-setting</b><br>Ability to set clear and meaningful work plans and learning objectives in context of the work assigned, further to successfully executing/achieving these plans / learning objectives. | Does not demonstrate any planning ability or recognition of learning objectives.               | Demonstrates limited planning ability and goal-setting for learning objectives without specific execution of plans. | Demonstrates consistent planning ability and goal-setting for learning objectives with some level of execution.        | Demonstrates consistent planning ability and goal-setting for learning objectives, as well as execution and achievement of goals.      | Clear structured process of planning/goal setting, execution, and goal-achievement incorporated throughout project.                             |
| 4                                      | <b>Results and discussion</b><br>Ability to interpret the results obtained in context of the work assigned, as well as to provide discussions and recommendations that add value to the Company's business.                | No analysis of results or further discussion, or provision of recommendations for the company. | Brief analysis of results with insignificant discussion and recommendations for the company.                        | Standard analysis of results and reasonable discussion, with basic recommendations for the company.                    | Standard analysis of results and insightful discussion, with value-added recommendations for the company.                              | Professional analysis of results and insightful discussion, with critical recommendations for the company.                                      |
| 5                                      | <b>Reflections of industrial experience</b><br>Ability to self-assess and critically examine one's performance, as well as to apply lessons learnt to achieve self-improvement / continuous learning                       | No demonstration of self-assessment or awareness of own performance.                           | Basic self-assessment and review of own performance.  | Basic self-assessment and review of own performance, with attempt at self-criticism and application of lessons learnt. | Insightful self-assessment and review of own performance, with reasonable self-criticism and application of lessons learnt.            | Critical self-assessment and review of own performance with detailed and insightful application of lessons learnt at each stage of the project. |

| CRITERIA (FOR FACULTY SUPERVISOR) |   | UNSATISFACTORY  | BELOW AVERAGE   | AVERAGE   | GOOD   | OUTSTANDING   |
|-----------------------------------|---|---|---|---|--|---|
| 1                                 | <b>Structure and presentation</b><br>Ability to produce a professional report, with consideration for structure / layout / formatting, as well as quality and propriety of written English. | Unclear illogical structure with poor written English.                    | Average structure/formatting with poor written English.                         | Average structure/formatting with minor grammatical errors.             | Well-presented, logical structure, professional formatting with minor grammatical errors.  | Well-presented, logical structure, professional formatting with excellent written English.                      |
| 2                                 | <b>Introduction</b><br>Ability to accurately describe the Company's business, organisational structure and work culture.  | Unfamiliar with company's business and organisation, as well as own role. | Unfamiliar with company's business and organisation, but can describe own role. | Familiar with company's business and organisation, as well as own role. | Familiar with company's business and organisation, furthermore able to describe significance of own role in context of this structure. | Clearly understands company's business and structure, as well as own role, from a wider industrial perspective. |

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| 3 | <b>Planning and goal-setting</b><br>Ability to set clear and meaningful work plans and learning objectives in context of the work assigned, further to successfully executing/achieving these plans / learning objectives. | Does not demonstrate any planning ability or recognition of learning objectives.               | Demonstrates limited planning ability and goal-setting for learning objectives without specific execution of plans. | Demonstrates consistent planning ability and goal-setting for learning objectives with some level of execution.        | Demonstrates consistent planning ability and goal-setting for learning objectives, as well as execution and achievement of goals. | Clear structured process of planning/goal setting, execution, and goal-achievement incorporated throughout project.                             |
| 4 | <b>Application of academic knowledge</b><br>Ability to use and apply systematic and logical thinking or relate specific academic concepts to the job scope.  | No application of systematic or logical thinking, unable to relate academic concepts.          | Inconsistent application of systematic or logical thinking.   | Application of systematic or logical thinking observed for some tasks.   | Consistent application of systematic or logical thinking throughout most tasks.   | All recorded tasks demonstrate application of systematic and logical thinking.  |
| 5 | <b>Results and discussion</b><br>Ability to interpret the results obtained in context of the work assigned, as well as to provide discussions and recommendations that add value to the Company's business.                | No analysis of results or further discussion, or provision of recommendations for the company. | Brief analysis of results with insignificant discussion and recommendations for the company.                        | Standard analysis of results and reasonable discussion, with basic recommendations for the company.                    | Standard analysis of results and insightful discussion, with value-added recommendations for the company.                         | Professional analysis of results and insightful discussion, with critical recommendations for the company.                                      |
| 6 | <b>Reflections of industrial experience</b><br>Ability to self-assess and critically examine one's performance, as well as to apply lessons learnt to achieve self-improvement / continuous learning                       | No demonstration of self-assessment or awareness of own performance.                           | Basic self-assessment and review of own performance.  | Basic self-assessment and review of own performance, with attempt at self-criticism and application of lessons learnt. | Insightful self-assessment and review of own performance, with reasonable self-criticism and application of lessons learnt.       | Critical self-assessment and review of own performance with detailed and insightful application of lessons learnt at each stage of the project. |



**APPENDIX 4: ASSESSMENT RUBRICS FOR PRESENTATION 1 & 2**

| CRITERIA (JOINT ASSESSMENT BY BOTH SUPERVISORS) |   | UNSATISFACTORY  | BELOW AVERAGE   | AVERAGE   | GOOD  | OUTSTANDING   |
|---|---|---|---|---|---|---|
| 1   | <b>Professionalism</b><br>Ability to conduct oneself in a professional and confident manner.  | Inappropriate dresscode, unenthusiastic. Appears to be constantly reading from written materials. | Inappropriate dresscode. Seems expressionless and not engaging at all; Delivery incomplete at the end of the time allocated. Frequent reading from written materials. | Appropriate dresscode. Exhibits some expression with occasionally engaging body language. Able to deliver within the time allocated. Occasional reading from written materials. | Appropriate dresscode. Appears enthusiastic and engaging with natural body posture. Smooth delivery within the time allocated. Occasional reading from written materials. | Appropriate dresscode. Captivating and convincing presentation. Appears enthusiastic and engaging with natural body posture. Smooth delivery within the time allocated. Minimal reference from written materials. |
| 2   | <b>Communication</b><br>Ability to speak clearly and effectively convey information, especially that of a technical or procedural nature.   | Failure to deliver the presentation or to prepare materials of basic quality.                     | Confused, unclear and unattractive presentation, with materials of basic quality.   | Partly clear and concise presentation, with materials of reasonable effort and quality.   | Mostly clear, concise and well structured presentations, with materials of reasonable effort and quality.   | Clear, concise and well structured presentation, with highly professional presentation materials.   |
| 3   | <b>Effective reporting</b><br>Ability to evenly summarise information over the preceding weeks of the internship by extracting appropriate key points and takeaways.  | Failure to summarise information or provide any key points and takeaways.                         | Basic summary of information, without highlighting key points or takeaways.   | Reasonable summary of information, some basic key points and takeaways described.   | Mostly well-structured summary of information, some insightful key points and takeaways described.  | Well-structured summary of information, with highly insightful key points and takeaways described.  |
| 4   | <b>Competence</b><br>Ability to accurately describe and represent the work assigned and tasks carried out over the preceding weeks of the internship.   | Failure to accurately describe tasks carried out or demonstrate understanding of work undertaken. | Basic description of tasks and work undertaken.   | Reasonable description of tasks and work undertaken with some useful details provided.  | Clear and accurate description of tasks and work undertaken with sufficient technical detail.   | Clear, insightful and accurate description of tasks and work undertaken with precise and appropriate technical detail.  |
| 5   | <b>Reflections of industrial experience [for PI and EPI: Presentation 2 only]</b><br>Ability to reflect and self-evaluate, especially pertaining to areas of improvement or specific incidents which provided learning opportunities. | No demonstration of self-assessment or awareness of own performance.                              | Basic self-assessment and review of own performance.  | Basic self-assessment and review of own performance, with attempt at self-criticism and application of lessons learnt.  | Insightful self-assessment and review of own performance, with reasonable self-criticism and application of lessons learnt.   | Critical self-assessment and review of own performance with detailed and insightful application of lessons learnt at each stage of the project.   |

Note: Only 1 presentation is required for PA.