

## COURSE OUTLINE: MH4907

Course Title	<b>Professional Attachment</b>
Course Code	<b>MH4907</b>
Offered	Study Year 3., Sem T1   Study Year 3., Sem TII
Course Coordinator	Anders Gustavsson (Dr)   erik@ntu.edu.sg   6513 7450
Pre-requisites	Approval by Division of Mathematical Sciences
Mutually exclusive	MH2900, MH3900, MH4901, MH4903, MH4906
AU	6
Contact hours	Internship: 480
Approved for delivery from	AY 2020/21 semester 1
Last revised	13 May 2020, 14:31

### Course Aims

This 12-week Professional Attachment programme is offered as an Unrestricted Elective course for all BSc in Mathematical Sciences undergraduate students who matriculated in AY16/17 or later. Students who take this may not take MH4903/MH4912 (Professional Internship). This course is offered as a Pass/Fail basis only.

The purpose of this Professional Attachment is to enable the application of knowledge and skills you have learned in the university in an authentic work environment. This is such that you can gain relevant exposures and develop practical industry experiences and skills that will facilitate your career decision and future transition into your selected vocation. It aims for you to develop professional competencies that will enhance your employability and lifelong learning capabilities to support your career and life endeavours and your readiness for the future of work.

### Intended Learning Outcomes

Upon successfully completing this course, you should be able to:

#### Cognitive

1. Apply knowledge and skills relevantly and appropriately in the workplace.
2. Identify your own competency gaps at the internship workplace.
3. Evaluate and develop personal learning and development pathways towards bridging competency gaps identified in point (2) above.
4. Develop and apply strategies to solve problems effectively (involves critical thinking and creativity, generating questions, resourcing, application, and reiteration).
5. Evaluate resources and develop insights to make informed judgements and recommendations.

#### Context

6. Discuss the internship organisation's nature and context of business.
7. Reflect on the organisational culture at the internship organisation.
8. Appraise the significance and impact of the project/work/assignment undertaken at the internship organisation.
9. Describe the career pathways within the internship organisation as well as the broader industry.
10. Reflect on personal and professional development needs within the internship organisation as well as the broader industry and set strategic goals for advancing along an intended career path.
11. Apply time and task management strategies effectively.

#### Relationship

12. Apply effective written and oral communication skills in professional settings when communicating and connecting with relevant stakeholders.
13. Assimilate into the work environment (people, team, hierarchy) and function effectively.

#### Affective/Moral

14. Tolerate ambiguity and handle anxiety.
15. Contribute proactively to the internship organisation.
16. Demonstrate responsibility, integrity and professionalism in the fulfilment of all workplace and internship requirements.
17. Demonstrate the persistence to learn, overcome and improve.

#### Technical

18. Use tools that enable and facilitate effective project/work/assignment undertaken at the internship organisation. (This includes mathematical/software/computing tools for analysing and solving problems.)

## Course Content

This internship programme, being a work-integrated education course, has its educational content embedded within the work environment and assignments that students will undertake at each internship organisation. For this reason, the internship job scope will be evaluated by the course instructor/coordinator using the following criteria:

1. It is relevant to the student's discipline of study.
2. It provides the required internship duration.
3. It accommodates NTU's internship periods.
4. It provides sufficient structure and rigour that will enable students to achieve the intended learning outcomes listed above.
5. It provides the appropriate workload for the stipulated internship period.
6. It enhanced the career prospects of the student.
7. The internship workplace is safe and conducive for student learning and development.
8. The internship workplace is equipped with the necessary tools and resources for the internship work.
9. The internship organisation has standing policies to safeguard the welfare of interns.
10. The internship organisation supervisor possesses the competencies, experience, and commitment to provide guidance to the students.
11. The internship organisation will use NTU's internship assessment scheme for students.

## Assessment

Component	Course ILOs tested	SPMS-MAS Graduate Attributes tested	Weighting	Team / Individual	Assessment Rubrics
<b>Continuous Assessment</b>					
<b>Internship</b>					
Assessment of Work in the Organisation (AWO)	1, 4, 5, 11, 12, 13, 14, 15, 16, 17, 18	1. a, b, c, d 2. a, b, c, d 3. a, b 4. a 5. a	50	individual	See Appendix for rubric
E-Journal 1	1, 6, 7	1. a, b, c, d 2. a, b, c, d 3. a 4. a	10	individual	See Appendix for rubric
E-Journal 2	2, 4, 5	1. a, b, c, d 2. a, b, c, d 3. a 4. a	10	individual	See Appendix for rubric
E-Journal 3	3, 8, 9, 10	1. a, b, c, d 2. a, b, c, d 3. a 4. a	30	individual	See Appendix for rubric
<b>Total</b>			<b>100%</b>		

These are the relevant SPMS-MAS Graduate Attributes.

### 1. Competence

- a. Independently process and interpret mathematical theories and methodologies, and apply them to solve problems
- b. Formulate mathematical statements precisely using rigorous mathematical language
- c. Discover patterns by abstraction from examples
- d. Use computer technology to solve problems, and to communicate mathematical ideas

### 2. Creativity

- a. Critically assess the applicability of mathematical tools in the workplace
- b. Build on the connection between subfields of mathematics to tackle new problems
- c. Develop new applications of existing techniques
- d. Critically analyse data from a multitude of sources

### 3. Communication

- a. Present mathematics ideas logically and coherently at the appropriate level for the intended audience
- b. Work in teams on complicated projects that require applications of mathematics, and communicate the results verbally and in written form

### 4. Civic-mindedness

- a. Develop and communicate mathematical ideas and concepts relevant in everyday life for the benefits of society

## 5. Character

- a. Act in socially responsible and ethical ways in line with the societal expectations of a mathematics professional, particularly in relation to analysis of data, computer security, numerical computations and algorithms

## Formative Feedback

Continuous feedback on progress and performance can be expected from student's internship organisation supervisor.

Student's faculty supervisor will also provide feedback through the student's internship e-journal submissions and/or site visits.

## Learning and Teaching Approach

<b>Internship</b> (480 hours)	<p>An internship is an experiential learning programme done in a professional setting. Students will be placed in an organisation for the entire internship period and will undertake work assignments and/or projects in the organisation. It is through such work in the real-world environment where students learn and develop the competencies and experiences relevant to the intended learning outcomes of this course.</p> <p>Each student will be supervised by (1) an Organisation Supervisor at the internship organisation, and (2) a Faculty Supervisor in NTU.</p> <p>The Organisation Supervisor will be the key person working with and interacting with the student on a day-to-day basis. The Organisation Supervisor will be one providing guidance and feedback to the student on a regular basis.</p> <p>The Faculty Supervisor from NTU will serve to facilitate student's learning and progress through interactions via e-journal submissions, email, phone, and/or visits. The Faculty Supervisor will also be each student's first point of contact for any matters arising from the internship. Student can also contact the respective Internship Programme Manager at NTU's Career and Attachment Office as an alternative.</p>
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## Reading and References

NTU Student Internship Handbook  
Please refer to the respective Professional Internship/Attachment Teamsites via NTU Studentlink for the Internship Handbook.

NTU Work-Integrated Education Blog – WIE ARISE  
<https://blogs.ntu.edu.sg/wie-arise/>

Harvard Business Review: 6 Ways to Make the Most of Your Internship  
<http://bit.ly/2J81BU2>

Huffington Post: 21 Ways to Make the Most of Your Internship  
<http://bit.ly/2kK6Fz5>

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

## Course Policies and Student Responsibilities

Please refer to the respective Professional Internship/Attachment Teamsites via NTU Studentlink 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).

## Academic Integrity

Good academic work depends on honesty and ethical behaviour. The quality of your work as a student relies on adhering to the principles of academic integrity and to the NTU Honour Code, 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 recognize your responsibilities in understanding and applying the principles of academic integrity in all the work you do at NTU. 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 of the definitions of any of these terms, you should go to the [Academic Integrity website](#) for more information. Consult your instructor(s) if you need any clarification about the requirements of academic integrity in the course.

## Course Instructors

Instructor	Office Location	Phone	Email
Anders Gustavsson (Dr)	SPMS-MAS-04-10	6513 7450	<a href="mailto:erik@ntu.edu.sg">erik@ntu.edu.sg</a>

## Planned Weekly Schedule

Week	Topic	Course ILO	Readings/ Activities
1	Week 1-2: Determine the scope of project and familiarise with the organization structure and culture	1, 6, 7	Weekly updating of E-Journals , and reflections on experience, learning and achievements.
2	Week 3: Submission of E-Journal 1 (Assessed by NTU Supervisor)	1, 6, 7	Weekly updating of E-Journals , and reflections on experience, learning and achievements.
3	Week 4-5: Undertaking assignments at internship organization.	2, 4, 5	Weekly updating of E-Journals , and reflections on experience, learning and achievements.
4	Week 6: Submission of E-Journal 2 (Assessed by NTU Supervisor)	2, 4, 5	Weekly updating of E-Journals , and reflections on experience, learning and achievements.
5	Week 7-11: Undertaking assignments at internship organization.	1, 3, 4, 5, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18	Weekly updating of E-Journals , and reflections on experience, learning and achievements.
6	Week 12: Submission of E-Journal 3 & Overall Internship Reflection (Assessed by NTU Supervisor)  Assessment of Work in the Organization (AWO) (Assessed by Organization Supervisor)	1, 3, 4, 5, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18	Meeting with supervisors and presentation

## Appendix 1: Assessment Rubrics

### Rubric for Internship: Assessment of Work in the Organisation (AWO) (50%)

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

Criteria for the assessment of student performance in the internship organisation by the organisation supervisor:

ILOs	Focus	Criteria
1	Knowledge and Skills	Able to apply knowledge and skills (whether prior or newly learned) appropriately in the workplace and/or projects/tasks.
4	Problem-solving	Able to solve problems systematically and effectively.
5	Resourcefulness	Able to source for relevant information to make informed judgement, decisions and/or recommendations.
11	Time and Task Management	Able to plan, organise, manage and complete assignments effectively and in a timely manner.
12	Written and Oral Communication	Able to communicate effectively and appropriately in writing and verbally.
13	Team Work	Able to function effectively with other colleagues/stakeholders in the work environment.
14	Adaptability	Able to function effectively under ambiguity and/or change.
15	Initiative	Able to remain consistently pro-active towards contributing to the work and/or organisation.
16	Responsibility	Consistently demonstrates commitment, responsibility, integrity, professionalism and ethical behaviour at the workplace.
17	Persistence to Learn and Improve	Consistently demonstrates persistence and grit to overcome challenges, to learn and improve continuously at the workplace.
18	Fluency with Tools	Able to use tools, whether software or hardware tools, (and learn new ones where necessary) proficiently to accomplish tasks and assignments.

#### Detailed Assessment Rubrics.

Assessment of Work by Organisation (AWO)								
Done one time by Organisation Supervisor (for 10-week internships)								
Done two times by Organisation Supervisor (for 20-week internships)								
Done three times by Organisation Supervisor (for 30-week internships)		Performance Assessment						
			Unsatisfactory	Functional	Proficient	Advanced	Score	Remarks
No.	Criteria	Description	1	2	3	4	Max 4	
1	Knowledge and Skills	Able to apply knowledge and skills (whether prior or newly learned) appropriately in the workplace and/or projects/tasks.	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.	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	Problem-solving	Able to solve problems systematically and effectively.	Fails to demonstrate ability to solve problems effectively. Requires more than routine supervision to address problems/issues.	Solves mostly routine problems (or at least able to contribute towards their resolution) systematically and effectively.	Identifies and addresses existing and potential complex problems (and/or contribute significantly to their resolution) systematically and effectively. Demonstrates consideration towards scalability and/or sustainability of solutions as a matter of addressing potential problems.	Demonstrates ability to analyse complex problem issues (especially team ones) systematically, able to apply creative/alternative ways (e.g. from other fields, etc.) to resolve issues effectively. Demonstrates consideration towards scalability and/or sustainability of solutions to address potential problems. Promotes improvements.		
3	Resourcefulness	Able to source for relevant information to make informed judgement, decisions and/or recommendations.	Fails to identify and obtain reliable resources for the purpose of work. Generally dependent on others for resources.	Identifies and acquires resources necessary for a given purpose, some times independently.	Identifies, qualifies and acquires resources necessary for a given purpose, often times independently.	Creative in approach to identify, qualify, and acquire all necessary resources (or their alternatives) for a given purpose, often times independently.		
4	Time and Task Management	Able to plan, organise, manage and complete assignments effectively and in a timely manner.	Poor time and task management abilities resulting in time lines mostly not met. Requires frequent reminders.	Completes assignments and able to meet time lines under routine supervision. May miss some non-crucial deadlines.	Completes assignments and able to meet time lines under moderate supervision. Able to plan and organise ahead and clarify and manage expectations of supervisor and/or colleagues.	Completes assignments effectively under minimal supervision and within time lines. Sees the overall picture (and goals) and plans and organises effort, resources and time highly effectively, often times in close collaboration with supervisor, colleagues and/or stakeholders.		
5	Written and Oral Communication	Able to communicate effectively and appropriately in writing and verbally (including listening).	Poor verbal and/or written communication and listening skills accompanied by a lack of self-awareness of impact on others.	Regularly communicates ideas and relates clearly to others. Able to listen to ideas of others and regularly respond to them in appropriate manners.	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.		
6	Teamwork	Able to function effectively with other colleagues/stakeholders in the work environment.	Unable to function properly with others to achieve work objectives. A lack of respect and regard frequently noted.	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.		
7	Adaptability	Able to function effectively under ambiguity and/or change.	Not prepared for uncertainty. Remained inflexible where need for change is clear. Demonstrates resistance to change.	Accepts changes and makes adjustments but often only under instructions.	Accepts changes readily but intelligently and adapts to surrounding circumstances. Adjusts work/routine to meet the needs of change (or cater 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 improves team/work dynamics to cope with change.		
8	Initiative	Able to remain consistently pro-active towards contributing to the work and/or organisation.	Always needing to be instructed and/or motivated. Does not exhibit keenness towards contributing or excellence. Rarely suggests improvements. Requires frequent reminders and supervision.	Suggests or assists in developing solutions to issues and/or improvements.	Suggests innovations to improve operations or streamline procedures. Develops them with moderate supervision.	Consistently proactive in proposing solutions/innovations to problems, and/or highlighting and discussing potential issues. Conduct analysis beyond expectation to identify ways to improve current practice and carries them through with minimal supervision.		
9	Responsibility	Consistently demonstrates commitment, responsibility, integrity, professionalism and ethical behaviour at the workplace.	Demonstrates irresponsible, unprofessional, or unethical behaviours.	Demonstrates acceptable levels of commitment, responsibility, integrity, professionalism, and ethical behaviour.	Demonstrates high levels of commitment, responsibility, integrity, professionalism, and ethical behaviour. Exhibits humility, learns from mistakes and course-corrects promptly.	Consistently demonstrates high levels of commitment, responsibility, integrity, professionalism, and ethical behaviour. Actively reflects such values and principles and encourages others to do likewise. Exhibits humility, learns from mistakes and course-corrects promptly. Role model.		
10	Persistence to Learn and Improve	Consistently demonstrates persistence and grit to overcome challenges, to learn and improve continuously at the workplace.	Gives up easily and/or frequently. Stops the pursuit of an objective at the slightest obstacles.	Diligent and sustains interest enough to get job done (satisficing).	Demonstrates effort in overcoming challenges and/or setbacks to achieve a goal. Focused and not easily discouraged.	Demonstrates exceptional effort in overcoming challenges. Encourages others to remain focused and to overcome. Consistently making effort in learning and improving.		
11	Fluency with Tools	Able to use tools, whether software or hardware tools, (and learn new ones where necessary) proficiently to accomplish tasks and assignments.	Unable to function properly with the tools even under basic expectations.	Perfunctory skills with the required tools. Not familiar with advanced features or functions.	Demonstrates flair with the tools required for work and fluent with the advanced functions and/or features.	Demonstrates exceptional skills with the required tools which contributes significantly to the work assignment. Helps colleagues with these tools or actively guides/coaches them.		
						Total Score		
						Maximum Possible	44	
	Biggs, J. B. (2003) Teaching for Quality Learning at University, 2nd Ed, Buckingham: Society for Research into Higher Education and Open University							

Press					
Perry, W. Jr (1999) Forms of Ethical and Intellectual Development in the College Years: A Scheme, San Francisco, CA: John Wiley & Sons.					

**Rubric for Internship: E-Journal 1 (10%)**

**Assessment Rubrics for E-Journal 1 and E-Journal 2**

You are required to submit a total of three (3) e-journals documenting and reflecting on your internship experience in relation to the relevant intended learning outcomes of this course.

The first two (2) e-journals (E-Journal 1 and E-Journal 2) will be assessed in week 3 and week 6 respectively during the internship. These are purposed to be formative assessments where you will receive feedback on your progress.

For each of these e-journal submissions, you are to present evidences and reflections on each one of the specified three (3) ILOS listed in the assessment table. The e-journal template and guide will be provided to you at the start of your internship.

- Evidences can be provided in the form of text descriptions, photographs, or drawings (ensure you seek clearance from your internship organisation should sensitive information be involved).
- Reflect critically on the evidences and the experience producing them, relating them to how they demonstrated your achievement of the specific ILO (or how they helped you to do so): Particularly but should not be limited to - what were the tasks (or observations) and their contexts, actions taken (or lessons drawn) by you and their reasons, and results achieved? What did you learn (e.g. information, knowledge, skills)? Evaluate your own capabilities and attitude where appropriate.
- If you wish to provide further evidences and reflections on ILOs which you have covered in an earlier e-journal submission, you are encouraged to do so. Such new evidence(s) and reflection(s) should demonstrate your development and growth.

**Criteria for E-Journal 1 and E-Journal 2.**

Focus	Criteria
Evidence for each ILO	Evidence provided is relevant to and supports the ILO.
Reflection on each ILO	Critical and thoughtful reflection on the experience of achieving the ILO. Clear and concise articulation of thoughts.
Achievement of ILO	Conclusive achievement of ILO.

**Detailed Assessment Rubrics for E-Journal 1.**

Assessment of e-Journal or Logbook Submission								
Student to reflect on specified 3 ILOs.								
Assessed by Faculty Supervisor			Assessment					
				Unsatisfactory	Satisfactory	Good	Score	Remarks
No.	ILO Covered	Criteria	Description	1	2	4	Max 4	
1	1. Apply knowledge and skills relevantly and appropriately in the workplace.	Evidence	Journal/logbook entry provides evidence(s) which is relevant to and supports the ILO.	Most evidences provided are not relevant to and does not support the ILO.	Most evidences provided are relevant to and support the ILO.	All evidences provided are relevant to and support the ILO.		
		Reflection	Critical and thoughtful reflection on the experience of achieving the ILO. Clear and concise articulation of thoughts.	Unclear how the ILO is achieved.	Clear and concise elaboration of the evidences provided as well as the experiences that relate to and lead to the achievement of the ILO. Mainly descriptions of the "Whats" and "Hows".	Critical reflection of the experiences. Apart from the "whats" and "hows", provides the "whys", elaborates lessons learned, evaluates self and proposes action plans and resources.		
		Achievement of ILO	Conclusive achievement of the ILO selected.	Did not achieve ILO at all.	Some aspects of the ILO achieved.	Clearly and conclusively achieved the ILO specified.		
2	6. Discuss the internship organisation's nature and context of business.	Evidence	Journal/logbook entry provides evidence(s) which is relevant to and supports the ILO.	Most evidences provided are not relevant to and does not support the ILO.	Most evidences provided are relevant to and support the ILO.	All evidences provided are relevant to and support the ILO.		
		Reflection	Critical and thoughtful reflection on the experience of achieving the ILO. Clear and concise articulation of thoughts.	Unclear how the ILO is achieved.	Clear and concise elaboration of the evidences provided as well as the experiences that relate to and lead to the achievement of the ILO. Mainly descriptions of the "Whats" and "Hows".	Critical reflection of the experiences. Apart from the "whats" and "hows", provides the "whys", elaborates lessons learned, evaluates self and proposes action plans and resources.		
		Achievement of ILO	Conclusive achievement of the ILO selected.	Did not achieve ILO at all.	Some aspects of the ILO achieved.	Clearly and conclusively achieved the ILO specified.		
3	7. Reflect on the organisational culture at the internship organisation.	Evidence	Journal/logbook entry provides evidence(s) which is relevant to and supports the ILO.	Most evidences provided are not relevant to and does not support the ILO.	Most evidences provided are relevant to and support the ILO.	All evidences provided are relevant to and support the ILO.		
		Reflection	Critical and thoughtful reflection on the experience of achieving the ILO. Clear and concise	Unclear how the ILO is achieved.	Clear and concise elaboration of the evidences provided as well as the experiences	Critical reflection of the experiences. Apart from the "whats" and "hows", provides the		



			articulation of thoughts.		that relate to and lead to the achievement of the ILO. Mainly descriptions of the "Whats" and "Hows".	"whys", elaborates lessons learned, evaluates self and proposes action plans and resources.		
		Achievement of ILO	Conclusive achievement of the ILO selected.	Did not achieve ILO at all.	Some aspects of the ILO achieved.	Clearly and conclusively achieved the ILO specified.		
						Total Score		
						Maximum Possible	36	

### Rubric for Internship: E-Journal 2 (10%)

#### Assessment Rubrics for E-Journal 1 and E-Journal 2

You are required to submit a total of three (3) e-journals documenting and reflecting on your internship experience in relation to the relevant intended learning outcomes of this course.

The first two (2) e-journals (E-Journal 1 and E-Journal 2) will be assessed in week 3 and week 6

respectively during the internship. These are purposed to be formative assessments where you will receive feedback on your progress.

For each of these e-journal submissions, you are to present evidences and reflections on each one of the specified three (3) ILOS listed in the assessment table. The e-journal template and guide will be provided to you at the start of your internship.

- Evidences can be provided in the form of text descriptions, photographs, or drawings (ensure you seek clearance from your internship organisation should sensitive information be involved).
- Reflect critically on the evidences and the experience producing them, relating them to how they demonstrated your achievement of the specific ILO (or how they helped you to do so): Particularly but should not be limited to - what were the tasks (or observations) and their contexts, actions taken (or lessons drawn) by you and their reasons, and results achieved? What did you learn (e.g. information, knowledge, skills)? Evaluate your own capabilities and attitude where appropriate.
- If you wish to provide further evidences and reflections on ILOs which you have covered in an earlier e-journal submission, you are encouraged to do so. Such new evidence(s) and reflection(s) should demonstrate your development and growth.

#### Criteria for E-Journal 1 and E-Journal 2.

Focus	Criteria
Evidence for each ILO	Evidence provided is relevant to and supports the ILO.
Reflection on each ILO	Critical and thoughtful reflection on the experience of achieving the ILO. Clear and concise articulation of thoughts.
Achievement of ILO	Conclusive achievement of ILO.

#### Detailed Assessment Rubrics for E-Journal 2.

Assessment of e-Journal or Logbook Submission								
Student to reflect on specified 3 ILOs.								
Assessed by Faculty Supervisor				Assessment				
				Unsatisfactory	Satisfactory	Good	Score	Remarks
No.	ILO Covered	Criteria	Description	1	2	4	Max 4	
1	2. Identify your own competency gaps at the internship workplace.	Evidence	Journal/logbook entry provides evidence(s) which is relevant to and supports the ILO.	Most evidences provided are not relevant to and does not support the ILO.	Most evidences provided are relevant to and support the ILO.	All evidences provided are relevant to and support the ILO.		
		Reflection	Critical and thoughtful reflection on the experience of achieving the ILO. Clear and concise articulation of thoughts.	Unclear how the ILO is achieved.	Clear and concise elaboration of the evidences provided as well as the experiences that relate and led to the achievement of the ILO. Mainly descriptions of the "Whats" and "Hows".	Critical reflection of the experiences. Apart from the "whats" and "hows", provides the "whys", elaborates lessons learned, evaluates self and proposes action plans and resources.		
		Achievement of ILO	Conclusive achievement of the ILO selected.	Did not achieve ILO.	Some aspects of the ILO achieved.	Clearly and conclusively achieved the ILO specified.		
2	4. Develop and apply strategies to solve problems effectively that involves critical thinking and creativity, generating questions, resourcing, application, and reiteration.	Evidence	Journal/logbook entry provides evidence(s) which is relevant to and supports the ILO.	Most evidences provided are not relevant to and does not support the ILO.	Most evidences provided are relevant to and support the ILO.	All evidences provided are relevant to and support the ILO.		
		Reflection	Critical and thoughtful reflection on the experience of achieving the ILO. Clear and concise articulation of thoughts.	Unclear how the ILO is achieved.	Clear and concise elaboration of the evidences provided as well as the experiences that relate and led to the achievement of the ILO. Mainly descriptions of the "Whats" and "Hows".	Critical reflection of the experiences. Apart from the "whats" and "hows", provides the "whys", elaborates lessons learned, evaluates self and proposes action plans and resources.		
		Achievement of ILO	Conclusive achievement of the ILO selected.	Did not achieve ILO.	Some aspects of the ILO achieved.	Clearly and conclusively achieved the ILO specified.		
3	5. Evaluate resources and develop insights to make informed judgements and recommendations.	Evidence	Journal/logbook entry provides evidence(s) which is relevant to and supports the ILO.	Most evidences provided are not relevant to and does not support the ILO.	Most evidences provided are relevant to and support the ILO.	All evidences provided are relevant to and support the ILO.		
		Reflection	Critical and thoughtful reflection on the experience of achieving the ILO. Clear and concise articulation of thoughts.	Unclear how the ILO is achieved.	Clear and concise elaboration of the evidences provided as well as the experiences that relate and led to	Critical reflection of the experiences. Apart from the "whats" and "hows", provides the "whys", elaborates		

				the achievement of the ILO. Mainly descriptions of the "Whats" and "Hows".	lessons learned, evaluates self and proposes action plans and resources.		
		Achievement of ILO	Conclusive achievement of the ILO selected.	Did not achieve ILO.	Some aspects of the ILO achieved.	Clearly and conclusively achieved the ILO specified.	
						Total Score	
						Maximum Possible	36

### Rubric for Internship: E-Journal 3 (30%)

#### Assessment Rubrics for e-Journal 3

Your Final e-Journal Report submission will be assessed at the end of your internship.

For this final submission, your focus is to **cover the remaining 4 ILOs** and present evidences and reflections on them. In addition, an overall reflection on your internship experience as a whole is expected:

· Evidences can be in the form of text descriptions, photographs, or drawings (ensure you seek clearance from your internship organisation should sensitive information be involved).

Reflect critically on the evidences and the experience producing them, relating them to how they demonstrated your achievement of each ILO (or how they helped you to do so): Particularly but should not be limited to - what were the tasks (or observations) and their contexts, actions taken (or lessons drawn) by you and their reasons, and results achieved? How are the achievements validated (by supervisor, colleagues, stakeholders, etc.)? What did you learn (e.g. knowledge, skills)? How will you do things differently and better?

· Your overall internship reflection will include but not limited to: Your overall experience in the internship, what are your strengths and weaknesses? Did the experience affirm or revealed them? How will you build up your strengths and reduce your weaknesses? How do you now view this industry and this sort of work? What alternatives will you consider? Knowing what you now know, what are your tentative career plans after graduation? What will you do from this point onwards to put those plans in act?

#### Criteria for E-Journal 3 submission (30%):

Focus	Criteria
Evidence for each ILO	Evidence provided is relevant to and supports the ILO.
Reflection on each ILO	Critical and thoughtful reflection on the experience of achieving the ILO. Clear and concise articulation of thoughts.
Achievement of ILO	Conclusive achievement of ILO.
Overall Internship Reflection	Clear and critical reflection on the internship experience as a whole.

#### Detailed Assessment Rubrics for E-Journal 3.

Assessment of e-Journal or Logbook Submission								
Student to reflect on remaining 4 ILOs.								
Assessed by Faculty Supervisor				Assessment				
				Unsatisfactory	Satisfactory	Good	Score	Remarks
No.	ILO Covered	Criteria	Description	1	2	4	Max 4	
1	3. Evaluate and develop personal learning and development pathways towards bridging competency gaps identified in the previous log.	Evidence	Journal/logbook entry provides evidence(s) which is relevant to and supports the ILO.	Most evidences provided are not relevant to and does not support the ILO.	Most evidences provided are relevant to and support the ILO.	All evidences provided are relevant to and support the ILO.		
		Reflection	Critical and thoughtful reflection on the experience of achieving the ILO. Clear and concise articulation of thoughts.	Unclear how the ILO is achieved.	Clear and concise elaboration of the evidences provided as well as the experiences that relate and led to the achievement of the ILO. Mainly descriptions of the "Whats" and "Hows".	Critical reflection of the experiences. Apart from the "whats" and "hows", provides the "whys", elaborates lessons learned, evaluates self and proposes action plans and resources.		
		Achievement of ILO	Conclusive achievement of the ILO selected.	Did not achieve ILO.	Some aspects of the ILO achieved.	Clearly and conclusively achieved the ILO specified.		
2	8. Appraise the significance and impact of the project/work/assignment undertaken at the internship organisation.	Evidence	Journal/logbook entry provides evidence(s) which is relevant to and supports the ILO.	Most evidences provided are not relevant to and does not support the ILO.	Most evidences provided are relevant to and support the ILO.	All evidences provided are relevant to and support the ILO.		
		Reflection	Critical and thoughtful reflection on the experience of achieving the ILO. Clear and concise articulation of thoughts.	Unclear how the ILO is achieved.	Clear and concise elaboration of the evidences provided as well as the experiences that relate and led to the achievement of the ILO. Mainly descriptions of the "Whats" and "Hows".	Critical reflection of the experiences. Apart from the "whats" and "hows", provides the "whys", elaborates lessons learned, evaluates self and proposes action plans and resources.		
		Achievement of ILO	Conclusive achievement of the ILO selected.	Did not achieve ILO.	Some aspects of the ILO achieved.	Clearly and conclusively achieved the ILO specified.		
3	9. Describe the career pathways within the internship organisation as well as the broader industry.	Evidence	Journal/logbook entry provides evidence(s) which is relevant to and supports the ILO.	Most evidences provided are not relevant to and does not support the ILO.	Most evidences provided are relevant to and support the ILO.	All evidences provided are relevant to and support the ILO.		
		Reflection	Critical and thoughtful reflection on the experience of achieving the ILO. Clear and concise articulation of thoughts.	Unclear how the ILO is achieved.	Clear and concise elaboration of the evidences provided as well as the experiences that relate and led to the achievement of the ILO.	Critical reflection of the experiences. Apart from the "whats" and "hows", provides the "whys", elaborates lessons learned, evaluates self		

					Mainly descriptions of the "Whats" and "Hows".	and proposes action plans and resources.		
		Achievement of ILO	Conclusive achievement of the ILO selected.	Did not achieve ILO.	Some aspects of the ILO achieved.	Clearly and conclusively achieved the ILO specified.		
4	10. Reflect on personal and professional development needs within the internship organisation as well as the broader industry and set strategic goals for advancing along an intended career path.	Evidence	Journal/logbook entry provides evidence(s) which is relevant to and supports the ILO.	Most evidences provided are not relevant to and does not support the ILO.	Most evidences provided are relevant to and support the ILO.	All evidences provided are relevant to and support the ILO.		
		Reflection	Critical and thoughtful reflection on the experience of achieving the ILO. Clear and concise articulation of thoughts.	Unclear how the ILO is achieved.	Clear and concise elaboration of the evidences provided as well as the experiences that relate and led to the achievement of the ILO. Mainly descriptions of the "Whats" and "Hows".	Critical reflection of the experiences. Apart from the "whats" and "hows", provides the "whys", elaborates lessons learned, evaluates self and proposes action plans and resources.		
		Achievement of ILO	Conclusive achievement of the ILO selected.	Did not achieve ILO.	Some aspects of the ILO achieved.	Clearly and conclusively achieved the ILO specified.		
5		Overall Internship Reflection	Clear and critical reflection on the internship experience as a whole.	Poor/Unclear articulation of the experience. Mainly a description instead of a reflection of the internship experience.	Critical reflection of the experiences. Clearly self-aware and can articulate what needs improving. Little or no identification of potential career options. Little or no potential career and/or development plans.	Critical reflection of the experiences. Clearly self-aware, able to identify potential career options and lays out a potential career and/or development plan and resources/help needed.		
						Total Score		
						Maximum Possible	52	