Academic Year	AY2023-24	Semester	Semester 1				
Course Coordinator	Prof Wang Li-L	Prof Wang Li-Lian					
Course Code	MH4914						
Course Title	Work Study De	gree Final Year	Project				
Pre-requisites	PS2001, PS50	01, PS5002					
Mutually Exclusive	MH4900 Final Year Project MH4908 Professional Internship I (Co-op) (with FYP) MH4909 Professional Internship II (Co-op) (w/o FYP)						
No of AUs	8						
Contact Hours	Over 2 semesters - project work onsite (min. 8 hours a week) =approx. 320 hours						
Proposal Date	16 Feb 2022						

A. Course Aims

The proposed 2 semester long WSDeg Final Year Project offered under the NTU Work Study Degree Programme is offered as part of the programme requirements.

The main objective of the WSDeg project under the NTU Work Study Degree Programme 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.

Students are allocated at least 8 hours per week onsite with the organisation to work on their sponsored project, spread over 2 semesters. In practice, you may spend more time than this and may be allowed to use any free time slots to complete the project.

B. Intended Learning Outcomes (ILOs)

At the end of WSDeg FYP course, you (as a student) should be able to progressively: -

Research /WSDeg FYP (To be assessed by Faculty Supervisor for Grading Purposes)

- 1. Undertake research projects within a workplace setting independently and successfully within the given time and resources.
- 2. Apply appropriate research approaches and technical knowledge to determine, make sense and address the problem or issues faced by the stakeholders/sponsors.
- 3. Discuss and recommend sound solutions, responses and/or future directions based on the findings.
- 4. Write quality technical reports that communicate the significance of the problems, the application of technical knowledge and research methodology to reach the recommendations presented in the reports.
- 5. Deliver presentations that clearly communicate the research findings in the reports.

Work Performance (To be evaluated by Organisation Project Supervisor for Employability Testimonial Purpose)

I. Cognitive

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

II. Context

- 11. Discuss the internship organisation's nature and context of business.
- 12. Reflect on the organisational culture at the internship organisation.
- 13. Appraise the significance and impact of the project/work/assignment undertaken at the internship organisation.
- 14. Describe the career pathways within the internship organisation as well as the broader industry.
- 15. 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.
- 16. Apply time and task management strategies effectively.

III. Relationship

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

IV. Affective/Moral

- 19. Tolerate ambiguity and handle anxiety.
- 20. Contribute proactively to the internship organisation.
- 21. Demonstrate responsibility, integrity and professionalism in the fulfilment of all workplace and internship requirements.
- 22. Demonstrate the persistence to learn, overcome and improve.

V. Technical

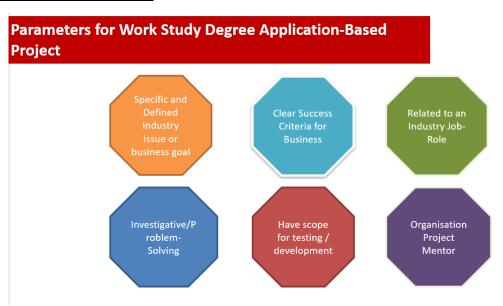
- 23. Use tools that enable and facilitate effective project/work/assignment undertaken at the internship organisation.
- 24. Execute projects by managing stakeholders, resources, budgets and resolving problems and resolving problems effectively.
- 25. Manage stakeholder expectations to ensure continuous levels of engagement by identifying and addressing needs and resolving issues in accordance with procedures.
- 26. Analyse, prioritise and document different task requirements at various stages to ensure meeting of goals.
- 27. Design, redesign & develop plans and approaches to maximise the impact throughout the project process in alignment with goals.
- 28. Identify, analyse risks and develop risk management solutions to support the continuity of operations and services.
- 29. Use of design thinking methodologies and processes to solve specific challenges.
- 30. identify and scope business requirements and priorities through rigorous information gathering and analysis as well as clarification of the solutions, initiatives and programmes to enable effective delivery.

C. Course Content

The WSDeg FYP 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 sufficient structure and rigour that will enable students to achieve the intended learning outcomes listed above.
- 3. It enhances the career prospects of the student.
- 4. The internship workplace is safe and conducive for student learning and development.
- 5. The internship workplace is equipped with the necessary tools and resources for the project work.
- 6. The internship organisation has standing policies to safeguard the welfare of interns.
- 7. The internship organisation supervisor possesses the competencies, experience, and commitment to provide guidance to the students.
- 8. The internship organisation will use NTU's internship assessment scheme for students

Parameters of WSDeg FYP



WSDeg FYP Project Types

Work Study Degree Application-Based Project Types

Process-Based **Product-Based Market Research Operational Process** Tangible Product Business Expansion **Methodology Process** Deliverables **Market Penetration** Systems Process Competitive Analysis E.g. 1. Development of E.g. 1. Design of Membrane human-recognition 1. Market Penetration sensors for elderly in into Asia for AR/VR network in gas conditioning to remove technology homes undesirable components 2. Development of a 2. Branding Perception 2. System Management product made from shoe on organic cosmetic to maximise monitoring waste product and its of faults in production effectiveness

D. Assessments

This is a graded course with the final outcome determined collectively by your Faculty Supervisor. The assessments will be based on the intended learning outcomes (ILO) 1 to 5 in section (B) above and you should familiarise yourself with them as they will be your focus throughout the course.

WSDeg Project Assessment

During the application research project, your progress will be closely monitored by the supervisor through meetings and project milestone summary reports. Your interim and final reports can be an extension to your project milestone summary which would also reflect your development in the graduate attributes highlighted in the assessment table below.

The interim and final reports are further elaborated below: -

1) Interim Assessment

A short project plan/strategy report is required from you about six weeks from the start of the project. The Project Plan/Strategy should contain the main objectives of the project, its background, the student's proposed way of carrying out the project tasks, and a proposed weekly schedule in a chart form.

An interim assessment of the project is conducted at the end of the first semester of the project by the faculty project supervisor(s), when the project is about halfway through. This consists of the project plan/strategy report and interim report at the end of the first semester. The interim report should highlight the progress made, tasks completed, results obtained, and potential problems identified. The report should be 5-10 A4 pages. Your Interim Report will require your Organisation Project Supervisor's evidence of endorsement before submission to your faculty supervisor and/or examiner. Before submitting it to faculty supervisor and/or examiner, you have to submit the Interim Report to Turnitin service to check for plagiarism.

The faculty supervisor and/or examiner will then assess you on your progress and performance at the end of the first semester of the project.

2) Final Assessment

The Final Assessment, which consists of Final Report, Demonstration, Oral Presentation, is carried out at the end of the second semester of the project. To have an independent examination in the Interim and Main Assessments, the School will appoint an examiner for each project. Both the faculty supervisor(s) and the examiner will perform an independent evaluation. All documentation under Final Assessment will require your Organisation Project Supervisor's evidence of endorsement before submission to your faculty supervisor and/or examiner.

i) Research Project Final Report

A formal, type-written final report in one-and-a-half spacing is required from each student. The main body of the report should normally contain 40 - 60 pages. If this guideline is not complied with, the student may be asked to resubmit the report. The student has to submit the draft report to Turnitin service to check for plagiarism. A copy of the detailed guidelines on the format of the report and other requirements for the project is attached in Appendix A.

ii) Oral Presentation

An oral presentation by each student is compulsory. During the oral presentation each student will make a presentation. The supervisor(s) and the examiner including organisation supervisor (by invitation, optional) will attend and assess the presentation. The time for an oral presentation will be 25 minutes for student, 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 and examiner well before the oral presentation.

Assessment Summary

A summary of the various assessments made by NTU supervisor(s) and examiner & organisation supervisor is shown in the Table below.

Component	ILO	Related Programme LO or Graduate Critical Core Skills/ Attributes	Weighting	Assessor	Assessment Rubrics
Interim Assessment	1 to 4	Problem-Solving	10%	NTU Supervisor	See Appendix
Final Assessment					1
Final Report	1 to 5	Research	30%	NTU Supervisor and Examiner	
		Communication.			
Final Presentation	1 to 5	Research	30%	NTU Supervisor and Examiner	
		Communication.			
Approach during the Project Year	1 to 3	Self-Management	30% (20% - Organisation	NTU Supervisor and/or Examiner	
-		Learning Agility	Supervisor; 10% - NTU Supervisor)	And	
		Sense-Making		Organisation Project Supervisor	

	Organisation supervisor	NTU supervisor	NTU examiner(s)	total
Interim report	NA	10	NA	10
Final report	NA	10	20	30
Final presentation	NA	10	20	30
Approach during Project Year (continuous assessment)	20	10	NA	30
Total	20	40	40	100

Please refer to Appendix 1 for detailed assessment rubrics.

ORGANISATION EVALUATION

The Organisation Project Supervisor will also provide <u>end-of-project performance evaluation</u> that will culminate to provide an industry testimonial and performance report which would focus on the intended learning outcomes (ILO) 6 to 29.

Please refer to Appendix 2 & 3 for detailed assessment rubrics.

CONFIDENTIALITY IN REPORTS FOR SUBMISSION

All interim and final reports or presentation materials will need to be endorsed by the organisation project mentors prior to submission to NTU. At the end of the reports, there must be an indication and signature by

the organisation project mentors. Submissions without the organisation endorsement will be deemed invalid. Please manage time for necessary endorsement required.

If there is sensitive/confidential information of the organisation involved, please discuss with the organisation supervisors in the company/institute (if any) on what can be included in the reports and exclude the information if necessary.

Please note a copy of the WSDeg FYP final report may be submitted to the Library after the Oral Presentation, subject to approval from the organisation supervisors. Therefore, it is important for students to clear their reports with the organisation supervisors first before submitting to Turnitin.

E. Formative Feedback

Continuous feedback on progress and performance can be expected from both faculty and project supervisor from the organisation.

You should maintain your project milestone summary and use it as evidence and artefact for discussions with your supervisors.

Faculty supervisor will help you to achieve the learning academic requirements required for this course. He or she would provide formative feedback to you during the regular meetings with project supervisor and/or teammates. Formative feedback may be provided verbally and/or in writing over the 2 semesters.

F. Learning and Teaching Approach

Approach	Why does this approach support students in achieving the learning outcomes?
Research and Inquiry	Engaging in undergraduate research is a way to deepen your understanding of your discipline through a process of inquiry. It will encourage you to synthesize existing literature to critically inform a new problem, and to analyse and interpret results to draw appropriate conclusions and suggest meaningful recommendations. This will also promote self-regulated learning that can sustain lifelong learning and continuous improvement. This may involve literature review, problem solving methodologies, result analysis and deriving conclusions and formulating recommendations of future work.
Authentic Assessment	This course situates your FYP in the context of an authentic workplace environment, allowing you to apply your knowledge to a problem that is potentially relevant, significant in the real world. Furthermore, you will have to sharpen your oral and written communication skills in response to the diverse workplace colleagues and real-world stakeholders.
Experiential Learning	Informally, you will gain from this course a myriad of workplace experiences to help cultivate important professional behaviours and attitudes. Even though these are not formally assessed, you will gain formative feedback and perhaps even testimonies that can support your future work.

G. Course Policies and Student Responsibilities

As a student of the course, you are required to abide by both the University Code of Conduct and the Student Code of Conduct. The Codes provide information on the responsibilities of all NTU students, as well as examples of misconduct and details about how students can report suspected misconduct. The university also has the Student Mental Health Policy. The Policy states the University's commitment to providing a supportive environment for the holistic development of students, including the improvement of your mental health and wellbeing. These policies and codes concerning students can be found in the following link:

https://www.ntu.edu.sg/life-at-ntu/student-life/student-conduct

H. Professional and Academic Integrity

An 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 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. Refer to this link for details: https://www.ntu.edu.sg/docs/default-source/tlpd-documents/academic-integrity-handbook_july-2017.pdf?sfvrsn=fc5a5b24_2

As a student, it is important that you recognize your responsibilities in understanding and applying the principles of integrity in all the work you do as a student of NTU. Not knowing what is involved in maintaining integrity does not excuse professional and academic dishonesty. You need to actively equip yourself with strategies to avoid all forms of professional and academic dishonesty, including and not limited to, plagiarism, 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 faculty supervisor if you need any clarification about the requirements of professional and academic integrity in the course.

I. Course Instructors

School FYP Coordinator	Office Location	Phone	Email
Prof Wang Li-Lian	SPMS-MAS-05-20	6513 7465	lilian@ntu.edu.sg

J. Planned Weekly Schedule

Your WSDeg Work schedule over 2 semesters is as follows:-

Week From Start of Project	Activity	Course ILO	Readings/ Activities
Week 5 (Month of Sept)	Project Milestone 1 Summary	1 to 5	
Week 1 to 30	Project Execution	1 to 5	
Week 13 (Month of Nov)	Project Milestone 2 Summary	1 to 5	
Week 14 (ie Sem Academic Teaching Week 13)	Interim Report & Assessment	1 to 5	
Week 29 (Month of Feb following year)	Project Milestone 3 Week	1 to 5	
Week 33 (ie Sem Academic Teaching Week 13) (Month of April following year)	Final Report	1 to 5	
Week 36 (Month of April following year)	Oral Presentation and Final Assessment	1 to 5	

Appendix 1 : Assessment Criteria For WSDeg FYP

(I) Interim Report Assessment (10%)

Components	ILO	Fail standard (0-4)	Pass standard (5-7)	High standard (8-10)
Project Plan/Strategy	1, 2	Unable to identify research plan to address problem. Proposal is vague, even after supervisor's feedback.	Able to identify research problem and propose reasonable research plan with guidelines and procedures to address problem, with help from supervisor if needed.	Able to analyse research problem clearly and propose appropriate research plan with guidelines and procedures to address problem, with minimal supervision .
Interim Report	1, 2	Unable to complete the interim report on time, even after supervisor's feedback. Unable to implement research plan to address problem. Issues, decisions to be made as well as corrective actions to monitor progress against goals are absent or vague.	Able to complete the interim report on time Able to implement research plan to address problem, identifying issues, decisions to be made as well as corrective actions to monitor progress against goals.	Able to complete the interim report punctually. Able to implement research plan to address problem, involving stakeholders in reviewing issues, decisions to be made as well as corrective actions to monitor effectiveness of approach against goals.

(II) Final Assessment

a) Final Report & Presentation (60%)

Components	ILO	Fail standard	Pass standard	High standard
		(0-4)	(5-7)	(8-10)
Organisational, Structure Flow & Citing Reference	4	Many typos and grammatical errors with poorly constructed sentences. Layout of report is not logical and report is not properly formatted. Few and not up to date references are listed. Lack of citing in literature review of report.	Some typos and grammatical errors. Layout and order of report is acceptable and reasonable logical and report is properly formatted. Adequate references are listed and cited in the report.	No typos or errors of any kind. Properly constructed sentences. Layout and order of report is good and logical. The chapters are well-organized and report is properly formatted. excellent Relevant and valid references are listed and cited in the literature review and throughout the report.

Introduction, Interpretation, discuss, review and compare with relevant key concepts and theories with conclusions	1,2,3	Review demonstrates inability to approach a research study adequately. No or irrelevant background information is provided, and analysis of problems and findings demonstrate weak or misunderstanding of key concepts and theories. Conclusions and recommendations are absent or simplistic, even after supervisor's feedback.	Review demonstrates ability to conduct a comprehensive research study. Relevant background information is provided, and analysis of problems and findings demonstrate reasonable understanding of key concepts and theories. Conclusions and recommendations are linked to analysis.	Review demonstrates ability to design a research strategy to meet identified needs. Relevant and appropriate background information are provided, and analysis of problems and findings demonstrate indepth understanding of key concepts and theories. Conclusions and recommendations demonstrate critical review of relevance and usefulness of analysis and findings.
Demonstration & Oral Presentation (Content, Slide Design, Presentation Sequence, Depth in explanation)	5	Unable to convey intent of presentation. Ideas are presented using insufficient content with confusing flow or slide design. Explanations demonstrate weak understanding. When engaging audience, unable to respond appropriately to inquiries.	Able to convey intent of presentation. Ideas are presented clearly using adequate content with suitable slide design. Explanations are concise , demonstrating reasonable depth of understanding. When engaging audience, able to respond appropriately to inquiries and seek clarification when needed.	Able to clarify priorities of presentation. Ideas are presented in a logical flow, using effectively curated content highlighting major outcomes. Explanations are persuasive, demonstrating in-depth understanding. When engaging audience, able to adapt responses to audience's needs and encourage interactivity.

(b) Approach during the Project Year (30%) *

Components	ILO	Fail standard	Pass standard	High standard
		(0-4)	(5 to 7)	(8-10)
Initiative & Responsibility	1	Demonstrate little or no awareness of one's actions and relies heavily on supervisor for direction to fulfil goals and scope of project. Takes little responsibility to identify issues and make decisions, even after supervisor's feedback. Little or no updates to supervisor.	Demonstrate awareness of one's actions and able to monitor and take action to fulfil goals and scope of project. Able to take responsibility to identify priorities, issues and make decisions. Update supervisor adequately.	Demonstrate awareness of one's actions and personal effectiveness. Able to monitor and develop strategies to regulate one's action to fulfil goals and scope of project and build personal brand. Able to take responsibility to resolve issues and make effective decisions. Update supervisor regularly.
		feedback. Little or no updates to supervisor.		effective decisions. Update superv

Development & Progress	2,3	Unable to consider factors to analyse information and data adequately. No or inappropriate application of research methods and techniques, with major errors. Unable to present relevant results and discussion.	Able to consider some factors to analyse information and data adequately . Apply appropriate research methods and techniques in a structured manner to identify relationships and linkages that suggest inferences and impact. Able to present relevant results and discussion.	Able to consider sufficient factors to analyse information and data comprehensively . Apply appropriate research methods and techniques in a systematic and meticulous manner to uncover patterns, opportunities and impact. Able to identify potential limitations which may impact conclusions and recommend improvements to research methods.
Achievement & Conclusion	2,3	Poor ability and not independent. Unable to extend ideas or expand on suggestions, even after supervisor's feedback. No effort or contribution to project. Lack of achievement.	Shows ability in carrying out the research project independently. Able to partially extend ideas and expand on suggestions with adequate understanding which translate to some contribution to new understanding of the problem or issue. The proposed recommendation, solution and/or future work is of some potential use to the stakeholder/sponsor.	Demonstrates ability to learn new technical knowledge and/or research approaches independently. Able to extend ideas and expand on suggestions with good understanding which translate to new significant understanding of the problem or issue. The proposed recommendation, solution or future work has potentially high impact for the stakeholder/sponsor.

^{*} The assessment of the approach can be done in consultation between both faculty supervisor and organisation supervisor

Appendix 2: Assessment Rubrics for Assessment of Project Work in the Organisation (APWO)

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

ILOs	Focus	CCS	Criteria
Work	Organisation Perform		
1	Knowledge and Skills	Transdisciplinary Thinking	Able to apply knowledge and skills (whether prior or newly learned) appropriately in the workplace and/or projects/tasks.
4	Problem-solving	Problem Solving	Able to solve problems systematically and effectively.
5	Resourcefulness	Sense Making Decision Making	Able to source for relevant information to make informed judgement, decisions and/or recommendations.
11	Time and Task Management	Self- Management	Able to plan, organise, manage and complete assignments effectively and in a timely manner.
12	Written and Oral Communication	Communication	Able to communicate effectively and appropriately in writing and verbally.
13	Team Work	Collaboration	Able to function effectively with other colleagues/stakeholders in the work environment.
14	Adaptability	Adaptability	Able to function effectively under ambiguity and/or change.
15	Initiative	Problem Solving Sense Making	Able to remain consistently pro-active towards contributing to the work and/or organisation.
16	Responsibility	Developing People	Consistently demonstrates commitment, responsibility, integrity, professionalism and ethical behaviour at the workplace.
17	Persistence to Learn and Improve	Learning Agility	Consistently demonstrates persistence and grit to overcome challenges, to learn and improve continuously at the workplace.
18	Fluency with Tools	Digital Fluency	Able to use tools, whether software or hardware tools, (and learn new ones where necessary) proficiently to accomplish tasks and assignments.
Projec	ct Work Managemen	t	
24	Project Management	Decision Making	Able to execute projects by managing stakeholders, resources, budgets and resolving problems effectively
25	Stakeholder Management	Collaboration Building inclusivity Influence	Able to manage stakeholder expectations to ensure continuous levels of engagement by identifying and addressing needs and resolving issues in accordance with organisational procedures
26	Requirements Management	Decision Making	Able to prioritise document and analyse different task requirements at various project stages to ensure meeting of project goals
27	Design and Optimization	Problem Solving	Able to design, redesign & develop plans and approaches to maximise the impact throughout the project process in alignment with business goals.
28	Risk Management	Problem Solving Decision Making	Able to identify, analyse, develop risk management solutions to support the continuity of project for business operations and services.
29	Adopt Design Thinking	Creative Thinking	Demonstrates design thinking methodologies and processes to solve specific challenges for the project.
30	Business Need Analysis	Sense Making	Able to identify and scope business requirements and priorities through rigorous information gathering and analysis as well as clarification of the solutions, initiatives and programmes to enable effective delivery.

Appendix 3: Detailed rubrics for APWO

No	Criteria	Description	Unsatisfactory	Functional	Proficient	Advanced	Score
			1	2	3	4	
		Able to apply knowledge and skills (whether prior or newly learned) appropriately in the	Fails to apply knowledge and/or skills as necessary most of the time. Consistently exhibits difficulties in performing work tasks/	Work reflects adequate application of knowledge and/or skills. Possesses	Thorough application of knowledge and/or skills for work assignments as necessary and appropriate. Uses opportunities to expand knowledge and/or	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	
	Knowledge and Skills (ILO)	workplace and/or projects/tasks.	assignments. Lacks basic job knowledge and/or skills.	sufficient knowledge of the work to get it done.	skills. Shares knowledge and/or skills with colleagues	and relevant techniques. Demonstrates ability to	
					Identifies and addresses existing and potential complex problems (and/or contribute significantly to their resolution) systematically and effectively. Demonstrates	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	
		Able to solve problems	Fails to demonstrate ability to solve problems effectively. Requires more than routine supervision to address	Solves mostly routine problems (or at least able to contribute towards their resolution) systematically	consideration towards scalability and/or sustainability of solutions as a matter of addressing	consideration towards scalability and/or sustainability of solutions to address potential problems.	
!	Problem-solving 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.	Promotes improvements. Creative in approach to identify, qualify, and acquire all necessary resources (or their alternatives) for a given purpose, often times independently.	
	Time and Task	Able to plan, organise, manage and complete assignments effectively and in a timely	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	

					I	supervisor collection	
						supervisor, colleagues and/or stakeholders.	
						Communicates in a highly	
						convincing and/or	
					Communicates and explains	persuasive manner.	
					ideas clearly and concisely,	Presents messages using	
					getting the message across	excellent structure,	
					effectively and in a	organisation and flow.	
					structured, sensitive	Balances listening and	
				Regularly communicates	manner. Actively listens to	responding. Synthesizes	
			Poor verbal and/or written	ideas and relates clearly to	others and responds	what has been heard, and	
		Able to communicate	communication and listening	others. Able to listen to	appropriately, reflecting a	responds and evaluates or	
		effectively and appropriately	skills accompanied by a lack of	ideas of others and	personal and clear	elaborates on ideas,	
	Written and Oral	in writing and verbally	self-awareness of impact on	regularly respond to them	understanding of the	offering alternative	
5	Communication	(including listening).	others.	in appropriate manners.	viewpoint expressed.	perspectives.	
		, 0		la la la la la communación	h h	Contributes in valuable	
						ways to the work objectives	
						not just through and with	
					Contributes to the	colleagues, but also helps to	
					organisation/assignments in	enhance the team	
				Works well with colleagues	valuable ways through	dynamics. Demonstrates	
				most of the time with only	active and sustained	high degree of trust,	
		Able to function effectively	Unable to function properly	limited occurrences of	collaboration with	respect, and collaboration.	
		with other	with others to achieve work	communication	colleagues. Deals with	Promotes and maintains a	
		colleagues/stakeholders in the	objectives. A lack of respect	breakdown or failure to	conflict, frustration	harmonious/ productive	
6	Teamwork	work environment.	and regard frequently noted.	collaborate.	appropriately.	work environment.	
						Demonstrates ability to	
					Accepts changes readily but	cope effectively with	
					intelligently and adapts to	change and/or ambiguity.	
					surrounding circumstances.	Implements clear	
1			Not prepared for uncertainty.		Adjusts work/routine to	coping/adaptation	
1		Abberta Carrier Const.	Remained inflexible where	Accepts changes and	meet the needs of change	strategies. Provides support	
		Able to function effectively	need for change is clear.	makes adjustments but	(or cater to ambiguity) when	to others and improves	
,	Adaptability	under ambiguity and/or	Demonstrates resistance to	often only under	required without need to be	team/work dynamics to	
7	Adaptability	change.	change.	instructions.	told.	cope with change.	
1						Consistently proactive in	
1						proposing	
						solutions/innovations to problems, and/or	
			Always needing to be			highlighting and discussing	
			instructed and/or motivated.			potential issues. Conduct	
			Does not exhibit keenness			analysis beyond	
			towards contributing or		Suggests innovations to	expectation to identify	
		Able to remain consistently	excellence. Rarely suggests	Suggests or assists in	improve operations or	ways to improve current	
		pro-active towards	improvements. Requires	developing solutions to	streamline procedures.	practice and carries them	
		contributing to the work	frequent reminders and	issues and/or	Develops them with	through with minimal	
8	Initiative	and/or organisation.	supervision.	improvements.	moderate supervision.	supervision.	
	ı			•			

		I	T	I	I	T	
						Consistently demonstrates	
						high levels of commitment,	
						responsibility, integrity,	
						professionalism, and ethical	
						behaviour. Actively reflects	
					Demonstrates high levels of	such values and principles	
					commitment, responsibility,	and encourages others to	
		Consistantly domanstrates		Domenstrates assentable		do likewise. Exhibits	
		Consistently demonstrates		Demonstrates acceptable	integrity, professionalism,		
		commitment, responsibility,		levels of commitment,	and ethical behaviour.	humility, learns from	
		integrity, professionalism and	Demonstrates irresponsible,	responsibility, integrity,	Exhibits humility, learns	mistakes and course-	
		ethical behaviour at the	unprofessional, or unethical	professionalism, and	from mistakes and course-	corrects promptly. Role	
9	Responsibility	workplace.	behaviours.	ethical behaviour.	corrects promptly.	model.	
						Demonstrates exceptional	
						effort in overcoming	
		Consistently demonstrates			Demonstrates effort in	challenges. Encourages	
		persistence and grit to	Gives up easily and/or		overcoming challenges	others to remain focused	
		overcome challenges, to learn	frequently. Stops the pursuit of	Diligent and sustains	and/or setbacks to achieve a	and to overcome.	
	Damietanea te leann cod			Diligent and sustains			
	Persistence to Learn and	and improve continuously at	an objective at the slightest	interest enough to get job	goal. Focused and not easily	Consistently making effort	
10	Improve	the workplace.	obstacles.	done (satisficing).	discouraged.	in learning and improving.	
						Demonstrates exceptional	
						skills with the required tools	
		Able to use tools, whether				which contributes	
		software or hardware tools,				significantly to the work	
		(and learn new ones where		Perfunctory skills with the	Demonstrates flair with the	assignment. Helps	
		necessary) proficiently to	Unable to function properly	required tools. Not familiar	tools required for work and	colleagues with these tools	
		accomplish tasks and	with the tools even under basic	with advanced features or	fluent with the advanced	or actively guides/coaches	
11	Fluency with Tools	assignments.	expectations.	functions.	functions and/or features.	them.	
11	Tideficy with 100is	assignments.	expectations.	Tutictions.	functions and/or reacures.	tileili.	
Proj	ect Work Management						
		Able to execute projects by			Demonstrates highly	Demonstrates exceptional	
		managing stakeholders,			productive project	project management skills	
		resources, budgets and			management skills with	under minimal guidance	
		resolving problems effectively	Unable to manage projects		little need for guidance and	and supervision. Highly	
			effectively or efficiently.		supervision. Well capable of	capable of planning,	
			Frequent lapses in managing	Perfunctory project	planning, monitoring,	monitoring, controlling, to	
			the various parts/components	management skills. Able to	controlling, to ensure	ensure project completes	
					O,		
			of project(s). Manages	plan, monitor, control, in	project completes within	well within specifications	
			components in silos and does	order to manage project	specifications and timeline.	and timeline. Shows a clear	
			not see overall project picture.	within set parameters but	Shows a clear appreciation	and keen appreciation of	
			Did not demonstrate ability in	often under prompting	of the project objectives	the project objectives and	
			planning, monitoring,	from supervisor or	along with the constituent	remained flexible towards	
12	Project Management		controlling, or communicating.	colleague.	components.	achieving them.	
13	Stakeholder Management	Able to manage stakeholder		Demonstrates satisfactory	Demonstrates good	Demonstrates excellent	
	_	expectations to ensure		stakeholder management	stakeholder management	stakeholder management	
		continuous levels of		skills with guided	skills with some supervision.	skills under minimal	
		engagement by identifying	Unable to manage stakeholder	supervision. Able to	Most of the time, able to	guidance and supervision.	
		and addressing needs and	management skills even with	identify, communicate and	accurately identify,	Highly capable of	
1		•		able to address needs and	communicate and able to	identifying, communicating	
		resolving issues in accordance	guided supervision.				

14	Requirements Management	with organisational procedures Able to prioritise, document and analyse different task requirements at various		resolving issues of stakeholders in accordance with accordance with organisation goals in consultation with supervisors Demonstrates satisfactory requirement management	address needs and resolving issues of stakeholders in accordance with accordance with organisation goals Demonstrates good requirement management skills. Able to break down,	to and addressing needs and resolving issues of stakeholders in accordance with accordance with organisation goals independently Demonstrates excellent requirement management skills. Able to break down,	
		project stages to ensure meeting of project goals	Unable to break down, identify key tasks components in the project, organise and organisation for each project stage even with supervision	skills. Require help to break down, organise and analyse various necessary task components in each project stage based on its importance to the project	organise and analyse various necessary task components in each project stage based on its importance to the project with guided supervision	organise and analyse various necessary task components in each project stage based on its importance to the project with minimal supervision	
15	Design and Optimization	Able to design, redesign & develop plans and approaches to maximise the impact throughout the project process in alignment with business goals.	Unable to design and develop plans and suggest approaches to maximise project processes.	Show clarity in the development of plans and able to apply approaches to maximise the impact of the project processes with supervision	Show clarity in the development of plans and able to apply approaches to maximise the impact of the project processes with minimal help	Show excellent clarity in the development of plans and apply thoughtful approaches to maximise the impact of the project processes independently	
16	Risk Management	Able to identify, analyse, develop risk management solutions to support the continuity of project for business operations and services.	Unable to identify risk factors project tasks and develop solutions to ensure continuity of project for business operations and services with support.	Able to identify risk factors project tasks and develop solutions to ensure continuity of project for business operations and services with support	Able to identify most risk factors project tasks and adequately develop solutions to ensure continuity of project for business operations and services	Able to identify all risk factors project tasks and develop effective solutions to ensure continuity of project for business operations and services	
17	Adopt Design Thinking	Demonstrates design thinking methodologies and processes to solve specific challenges for the project.	Little knowledge of design thinking and haphazard in approaches of design thinking towards solving the challenge at hand.	Demonstrate satisfactory understanding of design thinking methodologies to identify challenges, engage stakeholders to accurately understand the root of the issue, ideate solutions that is able to solve specific challenges effectively but require guidance to work through the process.	Demonstrate good understanding of design thinking methodologies to identify challenges is required to solve, engage stakeholders to accurately understand the root of the issue, ideate solutions that is able to solve specific challenges effectively but lacking in application of some areas of the designing thinking process.	Demonstrate full understanding & use of design thinking methodologies to identify challenges is required to solve, engage stakeholders to accurately understand the root of the issue, ideate solutions that is able to solve specific challenges effectively and reiterate the process of refining the solution.	
18	Business Need Analysis	Able to identify and scope business requirements and priorities through rigorous information gathering and analysis as well as clarification	Lack in skills in gathering information to support identification of business requirement and not to able scope the requirements.	Demonstrate satisfactory ability to gather information effectively to support identification of business requirement and	Demonstrate excellent ability to gather information effectively to support identification of business requirements. Effectively	Demonstrate strong ability to gather information effectively to support identification of business requirements. Effectively	

of the solutions, initiatives and	able scope	the scope the requirements ar	d scope the requirements and	
programmes to enable	requirements and p	prioritise prioritise them with minim	al prioritise them with	
effective delivery.	them only with hel	p. supervision. Demonstra	e minimal supervision.	
	Demonstrate	some understanding of the	e Demonstrate	
	understanding o	of the approaches, solutions ar	d understanding of the	
	approaches, soluti	ons and initiatives to drive the	e approaches, solutions and	
	initiatives to dri	ive the delivery of solutions	initiatives to drive the	
	delivery of solution	ns.	delivery of solutions	

Ref:

Critical Core Skills (CCS)

