THE INDEPENDENT
INSTITUTE OF
IIE EDUCATION

DIPLOMA IN IT SOFTWARE DEVELOPMENT
XISD5219
WORK INTEGRATED LEARNING
MODULE MANUAL 2022
(First Edition: 2012)

THE INDEPENDENT
INSTITUTE OF
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1. Introduction

Work Integrated Learning (WIL), formerly referred to as experiential learning, is an additional opportunity for students to develop their skills in work-like, or actual work situations. Thus, most qualifications at The IIE will give students the opportunity to use what they have learnt in modules that are specifically designed to replicate the workplace. All WIL modules will have Module Manuals that are similar.

This Module Manual is divided into several sections.

- Section 1: background information including defining WIL, the purpose of WIL, describing how WIL modules are assessed and when WIL modules will run.
- Section 2: provides the details that are specific to each WIL module.
- Section 3: provides the learning framework of the WIL.
- Section 4: provides the pacer for the WIL modules. The pacer will clearly outline how students will progress through the 12-week WIL modules.
- Section 5: describes in detail how students will be assessed, including more information on presentations.
- Section 6: describes in detail how students will be assessed, including more information about the Portfolio of Evidence (PoE).
- Section 7: provides the marking scheme.
- Section 8: provides information on supporting documents.
- Section 9: provides the table of skills.
- Section 10: provides the information on Intellectual Property.
- Section 11: provides the bibliography.
- Annexures: provide all the evaluation forms and letters.

1.1. Defining WIL

An essential part of IIE qualifications is to prepare students for the world of work. Students are prepared for their future careers in all modules, but there are also special WIL modules in which workplace activities are prioritised. This type of experiential learning occurs through activities designed to analyse situations that may be present in workplaces, simulate the workplace, or, through active participation in a workplace. The key differences between WIL modules and all other modules in qualifications is that, in the WIL project, students need to use all the knowledge and skills that they have developed in all their modules, and, further develop their abilities to reflect on themselves and others.

The kind of WIL present in a programme depends on the level of the programme. Over the course of a three-year qualification, the requirements of WIL will become more complex. Accordingly, case studies, scenarios and simulated workplaces are used at first- and second-year levels. In the final year of a qualification, the focus is on real-world work activities and some WIL modules may include real-world integration into the workplace.

This workplace could be an NGO/NPO or commercial business.

1.2. Exit-level Outcomes: The Purpose of WIL

Each qualification has its own specific outcomes that need to be achieved.

Diploma In IT in Software Development
Exit Level Outcomes
On achieving the qualification, a student will be able to: • Demonstrate applied competence in the analysis and design of software solutions to meet specific business requirements. • Integrate programming, database and web development techniques in creating applications for a business environment. • Demonstrate an ability to use a variety of programming tools and techniques to develop secure computer applications for a business to communicate effectively and professionally in a business environment. • Apply generally accepted coding best practice in the development of secure software solutions. • Test and quality assure software applications.

1.3. Critical Cross-field Outcomes: The Purpose of WIL

The purpose of having a WIL module in a qualification is to bring together all the knowledge and skills gained into one consolidated project thereby demonstrating that students have achieved overall competence in the field of study. WIL is also intended to ensure that the South African Qualifications Authority (SAQA) critical cross-field outcomes have been achieved. These are the Critical Outcomes adopted by SAQA:

- Identify and solve problems in which responses display that responsible decisions using critical and creative thinking have been made.
- Work effectively with others as a member of a team, group, organisation, community.
- Organise and manage oneself and one's activities responsibly and effectively.
- Collect, analyse, organise and critically evaluate information.
- Communicate effectively using visual, mathematical and/or language skills in the modes of oral and/or written presentation.
- Use science and technology effectively and critically, showing responsibility towards the environment and health of others.
- Demonstrate an understanding of the world as a set of related systems by recognising that problem-solving contexts do not exist in isolation.
- In order to contribute to the full personal development of each learner and the social and economic development of the society at large, it must be the underlying intention of any programme of learning to make an individual aware of the importance of:

  o reflecting on and exploring a variety of strategies to learn more effectively;
  o participating as responsible citizens in the life of local, national and global communities;

- being culturally and aesthetically sensitive across a range of social contexts;
- exploring education and career opportunities, and
- developing entrepreneurial opportunities.

1.4. WIL Role Players

WIL involves the following role players:

1. The **student** – the student is expected to attend all scheduled sessions (in person or in the case of distance students remotely), to meet deadlines, and collect and prepare evidence aligned to expectations as set out in the relevant WIL Module Manual. If a letter is required to make contact with stakeholders from industry, the student must request such letters from the WIL Coordinator.

2. The **WIL Coordinator** – takes responsibility for the overall operationalisation of WIL on a campus or for a group of students and issues any formal letters required by the student.

3. IIE approved **lecturers** – designated to guide, mentor, assess and monitor students' academic progress in the WIL module.

4. **External role players** in the workplace (where work placement is a requirement) – takes responsibility for mentoring the student, ensuring the student completes suitable work experiences and monitors the student's attendance.

A lecturer responsible for a WIL module may also be the designated WIL Coordinator.

1.5. Central Assessment in WIL: WIL Portfolio of Evidence

A Portfolio of Evidence (PoE) is a collection of materials that illustrates a person's skills and capabilities. A PoE also typically includes reflecting on the learning process.

The PoE is the place (usually a file) where students collect together documents which they can use for one or both of the following purposes:

- To demonstrate their competence during a WIL process by putting together evidence of what they did, for example, documentation, background research, reflections, lessons learnt, etc. This would include all types of WIL e.g. Project, Simulation, Work Placement.
- To keep in one place some of the documents they may wish to show a potential employer as evidence of their learning.

1.6. Self-Learning Evaluations, Peer Evaluations and Attendance

Because reflection is such an important part of the WIL modules, students will be assessed on their reflections and insights gained while engaging in work-like activities. Students will be assessed both on their ability to reflect on themselves (called a "self-learning evaluation") and will evaluate other students, or their peers (called a "peer evaluation"). All of the self-learning evaluations and peer evaluations will be standardised across all the WIL modules and will be weighted differently across a three-year qualification. The students are to complete the peer and self-evaluation forms in **ANNEXURE A** and submit these as part of their PoE.

In addition, participation in WIL modules will be encouraged by awarding 5% for attendance. Students should attend at least 80% of scheduled sessions AND sessions organised by groups working together. The team leaders will track attendance of these sessions.

First- and second-year students normally have simulations/scenarios/case studies for their WIL module and third year students interact with industry in either a Work Placement or a Project.

Table 1 (Individual WILs) and Table 2 (Team WILs) outline how the marks will be allocated for the different parts of the assessment.

Table 1:   Breakdown of Mark <u>Weighting</u> for <u>Individual</u> WIL Modules:

Year	Self only (Individual WILs)	Total for reflection and attendance	Mid-point submission	PoE
Second	15	5	5	75

Table 2: Breakdown of Mark <u>Weighting</u> for <u>Team</u> WIL Modules:

Year	Self and Peer (Team WILs)		Total for reflection and attendance	Mid-point submission	PoE
Second	10	5	5	5	75

1.7. Assessment Points

WIL will be conducted usually in one semester so as to create a more focused experience for students and thus increase the intensity and impact of the learning. However, it is important that students receive this guide in the <u>previous semester</u> when students are required to search for an appropriate organisation where they can carry out their WIL. Simulations for first and second year WILs will also be distributed to students in the previous semester.

The following additional principles apply:

- WIL will run over a 12-week period – not starting before May. This means that contact sessions will be organised in multiples of 12.
- Work Placements will be in multiples of 40 hours – normally between 80 and 120 hours (two or three weeks).
- The final submission of the portfolio (including self-evaluations) will be after the 12 weeks – normally in week 13.
- Where relevant for work placement, the final PoE for a WIL module will only be accepted for marking once ALL the required hours of work placement have been completed.
- Please refer to the WIL Policy (IIE006) and Assessment Strategy and Policy (IIE 009) for further information on the assessment of WIL modules.

2. Summary Sheet

ITEM	DESCRIPTION
Faculty	Faculty of ICT
Qualification	Diploma in Information Technology in Software Development
Module	XISD5219
Module Purpose	The purpose of this module requires the students to integrate their acquired knowledge and skills to develop software applications that meet specific given business requirements for a given scenario.
Module Outcomes	Successful completion of this module requires students to: MO001: Identify software requirements for a new IT software system to meet given business requirements. MO002: Design the implementation plan to meet the pre-determined software requirements. MO003: Develop the deliverables identified in the implementation plan. MO004: Create comprehensive documentation for each required deliverable for the development and implementation of the new IT software system. MO005: Work together as a group to produce all deliverables of the new IT software system.
Credits	10
Notional Hours	100
Co-/ Prerequisites	Co-requisite: IPMA6212
Type of WIL	Simulation
Group/Individual Work	Group (three – five members) and individual.
Assessment Structure	Project Mark = 75% Peer and self-evaluation = 15% Mid-point submission = 5% Attendance = 5% The pass mark for this work integrated learning module is 50%.
Summary Of Activities	Case Study Problem: a student needs to develop a software application for the administration and usage tracking of transport vehicles. This project will be based on instructions relating to the given case study. • Follow the SDLC for the given case study. • PowerPoint presentation on the application design and structure of the new system. • All supporting SDLC documents. • CD containing:

	o Installation for developed software; and o Help system to support developed software.
Tools and Resources	• Project management software. • Appropriate software packages to develop the software (Software applications covered during the diploma to date: JAVA/C#/SQL).
Additional Information	Focus on the actual activities. Please refer to the pacer and use the sessions as a weekly guide, e.g. Session 1 is Week 1. Final deadlines are as follows: Week 10: Final completed student portfolios must be submitted by the end of Week 10. This means that the final activity must be completed by Week 9. This will allow students a week for the final compilation of the portfolio. Week 11: Feedback on portfolios to be given to students and final changes made. Week 12: Lecturer to submit the final assessed portfolios and mark sheets.

3. Learning Framework

3.1. *Case Study: Fleet-Tracking Information System*

3.1.1 Overview

Cargo-Fleet wants a software system (Windows and/or Web application) to be developed that will be used for the administration and usage tracking of transport vehicles (Example: Retail trucks that transport Coke to vendors). Cargo-Fleet has a number of sites around South Africa, which have between 10 and 100 cargo vehicles.

The cargo vehicles can be contracted to transport various types of material from one depot (site) to the next. There are various types and makes of vehicles, which are used that depend on the cargo type and quantity being transported.
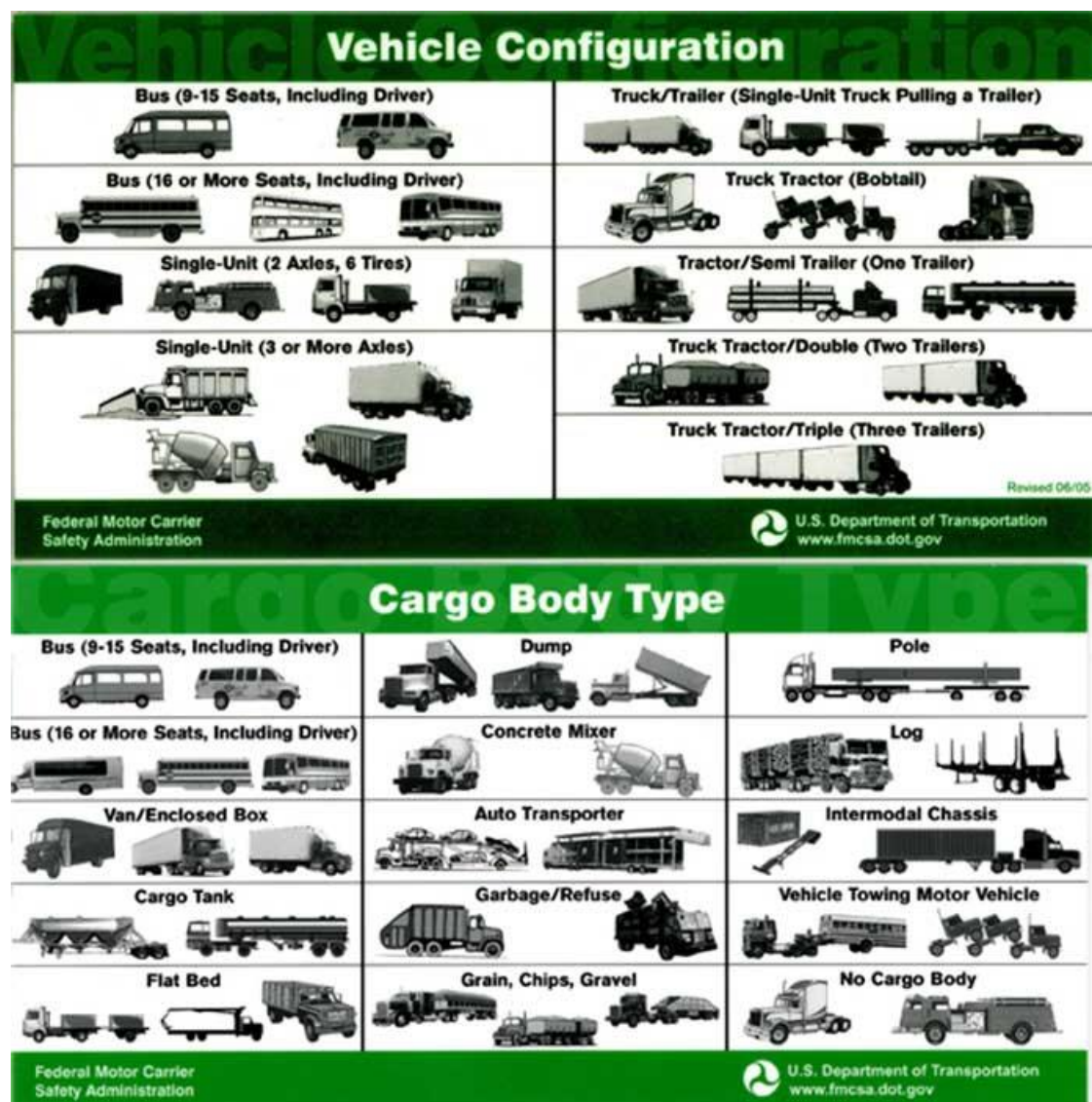
Web link: http://www.wsp.wa.gov/traveler/images/cvd/truck_types.jpg

Cargo-Fleet has various employees that need to perform specific functions on the new Fleet-Tracking system. Some of which are: Office manager; Vehicle information administrator; Trip/usage manager; Service manager and Timesheet manager.
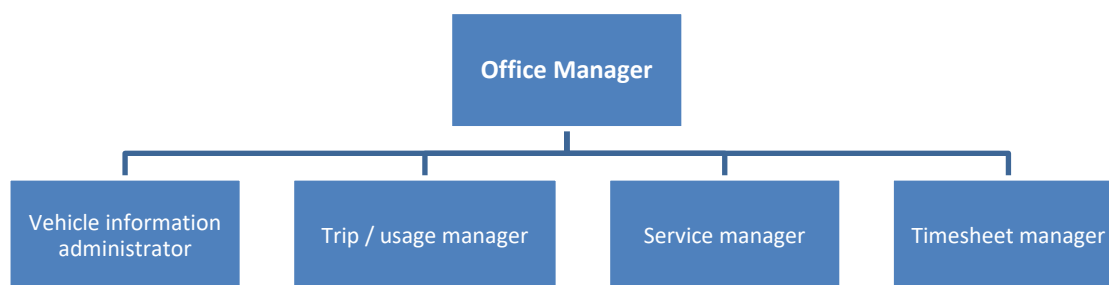
A list of responsibilities is outlined in the table below:

Employee	Responsibilities
Office manager	Application user management.
Vehicle information administrator	Maintenance of vehicle records.
Trip/usage manager	Scheduling of vehicle trips; Recording fuel usage per trip; Recording incidents per trip.
Service manager	Manage appointments scheduling for vehicle services. Prepare daily services job sheets.
Timesheet manager	Keeps track of the number of hours worked by drivers and mechanics.

Each office employee has one or more primary responsibilities. However, all members of staff help out whenever necessary with vehicle records, vehicle services, trip management and supplies. Timesheets is the only module that can only be handled by the specific assigned user. In addition to their regular responsibilities, all office employees are involved in the preparation of vehicle statements at the end of each month. Mechanics perform various vehicle service procedures. All service procedures are coded. The codes consist of five alpha-numeric characters and are used for all maintenance cost tracking.

Cargo-Fleet has decided to outsource the development of the Fleet-Tracking software system to your company: Business-Online-Basics. It has been decided, in order to bring the cost to Cargo-Fleet down, that the system must be developed in a manner that it can be leased out to other transport companies. Therefore, it has been decided that the other companies that want to purchase a licence can be located anywhere in South Africa and will also typically have between 10 and 10 000 vehicles.

Cargo-Fleet's current workload requires two hours of office employee overtime per session at a base rate of R150.00 per hour. Current projections indicate that the company will need to add another full-time administrator position for each branch in about six months. Neither the overtime nor the additional positions will be required if Cargo-Fleet receives the new Fleet-Tracking system. The current manual system also causes an average of three errors per day and errors can take anywhere from about 20 minutes to a day to correct. The new system should reduce the frequency of those errors.

The consulting rate for Business-Online-Basics is R850 per hour. There will also be costs associated with the database application for a networked commercial package. The employees will have to be trained so that Cargo-Fleet can handle routine maintenance tasks without any assistance.

Cargo-Fleet must also consider the costs associated with hardware and network installation. In systems analysis, the useful life of the system will be about five years, including the year in which the system becomes operational.

The proposed system Fleet-Tracking requires at least the reports below:

- Report 1 – Vehicle status report. This report should list the company vehicles including vehicle number (e.g., H101; T102), registration number, vehicle type (e.g., Horse, 10-ton Trailer), manufacturer, engine size, current odometer reading, next service odometer reading etc.
- Report 2 – A daily and weekly service appointment list. The list shows scheduled appointment times, vehicle number, services to be performed, including the procedure code and description.
- Report 3 – Service requirements job sheet. The call-service job sheet includes the vehicle number, service type, appointment date and time, and work to be completed. Each service type will have specific work to be completed (e.g., Oil service; major service; tyre check).
- Report 4 – Daily; weekly; monthly; yearly report on vehicle services completed, including costs.
- Report 5 – Specific service report, detailing complete service information for a completed service.
- Report 6 – Daily/weekly planned trip report; Each trip will indicate the destination and the number of kilometres to travel.
- Report 7 – Daily/weekly/monthly completed trip report. Each trip will indicate the destination and the actual number of kilometres travelled.
- Report 8 – Daily/weekly/monthly timesheet report to indicate how many hours a specific person has worked.

All reports must have a relevant company header and footer.

4. Pacer

WEEK	MILESTONE	TASK
1-2	Team Members Allocation	• Documentation handed out and team selection takes place. • Case study reviewed. • Appointment of a team leader and secretary. • Identification of the problem domain; business processes; system requirements; functions of the system; stakeholders and their functions; inputs, outputs and processing components.
3	Project Plan Criteria	• Project plan criteria are discussed and reviewed in the team meeting. Determine the scope of the new system and the key role players. • Identification of milestones and deliverables must be conducted. • A work breakdown structure; risk analysis; technical and economic feasibility must be completed. • Specify a project schedule using MS Project as a tool. • Teams submit a project plan document.
4	Requirements Analysis Criteria	• Requirements analysis criteria are reviewed in the team meeting. • Determine the functional requirements and develop use-case diagrams. • Develop a logical system model indicating inputs, outputs, processes and relationships. • Submit the business solution requirement and analysis document.
5 -6	System Design	• Design and solutions criteria are discussed in the team meeting. • Design the application architecture of the system using the different possible models such as three-tier design; two-tier design; thin or thick clients; centralised design with dumb terminals; etc.

WEEK	MILESTONE	TASK
		• Design the GUI; database with full referential integrity; reports and the system's website. • Solution design document is submitted by teams.
7-9	Implementation	• Implementation criteria are reviewed in the team meeting. • Begin working on implementation with guidance from lecturer. • Develop the code for the GUI. • Develop code for input controls. • Develop code for program modules. • Develop database tables using a DBMS. • Populate the database using real or simulated data (at least five records per table). • Verify and test the system. • Develop user support i.e. help system and user documentation. • Working prototype of the business solution is completed.
10-12	Presentation and Demonstration	• Presentation criteria is introduced in the team meeting. • Implement the prototype of your system. • Present and demonstrate a working prototype system.

5.   Assessment in WIL Modules: Oral Presentations

The WIL module will be assessed primarily in two different ways. These are, through an oral presentation and by submitting a Portfolio of Evidence (PoE). Each of these will be discussed below.

Many of the WIL modules require students to deliver an oral presentation describing their project or activity to their peers and/or lecturer(s). This will typically happen at the end of the project, i.e. towards the end of the WIL module.

Clearly and effectively presenting ideas to others is often an important skill needed for success in the workplace. For some students, this will be the first time this skill will be practiced. Students should not underestimate the time it takes to prepare for a presentation and how important it is to engage their audience during the presentation. Students may, therefore, find it useful to consider the following questions before preparing their presentations.

5.1. Why Oral Presentations?

Assessment of WIL requires evidence of the achievement of a number of skills, some of which cannot be demonstrated in formal documents such as the portfolio of evidence (PoE). The oral presentations provide students with the opportunity to demonstrate the running of the project to an audience consisting of at least peers (fellow students) and the lecturer. Invited guests may also attend the presentation.

Examples of presentation skills include oral communication and non-verbal skills such as audience engagement, facial expressions and body language. Many of these skills could impact on the success or failure of the students once in the workplace. In addition, lecturers sometimes need an opportunity to assess group dynamics and to probe the depth of understanding of related concepts during open discussions with students. Presentations provide the perfect platform for this.

5.2. What may be Assessed in Oral Presentations?

There are two main components of oral presentations, namely, a verbal component and a visual component. The verbal component focuses on the oral, or spoken, portion of the presentation during which aspects such as tone, delivery, language and audience engagement are assessed.

The visual component includes all other communication aids that are used during the presentation, e.g. slides, video clips, posters, handouts, models, simulations, diagrams, websites, etc. The visual images created by the students themselves may be included here if they are relevant to the environment which is being represented. A typical example would be when a group of students is simulating the presentation of a proposal to a prospective client. In such instances, appropriate dress, posture and body language are important.

Visual aids used in presentations should be used effectively. For example, PowerPoint slides should **support** the presentation, but not **become** the presentation. Consequently, students need to think about both what they say, how they say it, what they use to support what they say and how they are acting professionally and appropriately in a work-like environment.

5.3. How is an Oral Presentation Assessed?

In most cases, the lecturer will use a set of predetermined criteria to assess the presentation. The criteria are presented either on a marking scheme or on a rubric and should help students to focus on the skills which will be assessed. Students should, therefore, familiarise themselves with the criteria before they begin to plan their presentations.

Each student in the team is to be evaluated according to the rubric in **ANNEXURE B**. Please ensure enough copies are available when the team is doing their presentation.

5.4. Presentation and Demonstration Criteria

Before the presentation, the lecturer will do the following:

- Monitor the progress of the teams;
- Identify any problems (functional and interpersonal) that need to be resolved;
- Discuss the criteria document for assessing the presentation (in the team meetings);
- Prepare the venue for the presentations;
- Schedule the teams for their presentations.

The format of the presentations will typically be as follows:

- Students set up their project in the allocated venue;
- The team members introduce themselves to the lecturer and moderator;
- The presentation starts with a PowerPoint slide show;
- The project is demonstrated;
- The lecturer and moderator ask questions. (if peers are present, they may ask questions as well);
- The lecturer and moderator allocate marks according to the marking criteria.

The lecturer and moderator will allocate marks according to a set of criteria known to the students in the final presentation. **During this activity, the students complete peer evaluation forms which assess the participation of individual team members in the development of the project.** This forms the feedback to the students.

6. Assessment in WIL Modules: Portfolio of Evidence (PoE)

The PoE is typically a file that collates all the work on the WIL project. The PoE should contain **all supporting documents** and the **project presentation**. Each student will submit his/her own PoE.

Students are required to do the following and include evidence thereof in the PoE/Project submission:

- To demonstrate their competence during a WIL process by putting together evidence of what they did, e.g., documentation, flow diagram, background research, user guides, etc.
- To keep in one place some of the documents they may wish to show a potential employer as evidence of their learning.

Students need to submit documents demonstrating evidence of the work covered in the project. This means that it is a good idea for students to carefully collect and keep evidence of what they are working on as the project progresses. The supporting documentation includes:

1   A title sheet that contains the following information:*

- Your name and surname;
- Your module;
- Your campus;
- Your lecturer/mentor.

2   A copy of your Identity document.

3   Your Curriculum Vitae:

This is a document you will need when you are looking for a job and has been discussed in the Work Readiness Programme. Although it is not a requirement in all WIL modules, your lecturer can provide you with constructive feedback if you include it in your PoE.

4   Your WIL module summary sheet:*

Here you should insert a summary of the WIL activity you have undertaken – you could use the one from your student manual or you can adapt that to provide more information if you would like to do so.

5   Proof that you have completed the "Work Readiness Programme".

6   Confirmation letter:*

If your WIL requires a work placement, the original placement confirmation letter must be included.

7   Your completed project/assignment*

8   Your WIL Self-Evaluation Report* (Annexure A)

9   Your Peer Evaluation Forms/Supervisor Evaluation Forms* (Annexure A). Each member of a group must have their own.

10   Group based activities:*

Here you should insert any documents related to group-based activities, e.g. minutes of group meetings.

11   Industry logbook:*

If your WIL involved a work placement, you would have had to complete a logbook of your daily activities that you should insert here. This must be signed by your mentor/supervisor and should include a company stamp to indicate authenticity.

12   Other Evidence/Assessment:

Here you can insert any other evidence of skills or achievements or additional assessment documents.

Examples of additional evidence could be:

- Proof of any special workshops or tutorials that you attended;
- Academic, social or sporting achievements;
- Proof of your role in campus activities and structures;
- Testimonials;
- Evidence of part-time work;
- Evidence of service or community engagement;
- Awards and certificates.

Examples of additional assessment:

- The assessment done on your work by your workplace mentor.
- Any additional assessment done by your lecturer.

13   Declaration of authenticity* (Annexure E)

6.1. Attendance Record

Every student is responsible for recording his/her own attendance. Students must include this document in their PoEs to ensure that they receive a mark for attendance.

6.2. Team Member Allocation

The lecturer will explain the rules of the project in the following areas:

- Participation of the students;
- Attendance of the students;
- Responsibilities of the students;
- Importance of milestones/deliverables.

6.3. Project Plan Criteria

Team members are allocated responsibilities to tasks identified. The following table should be used to capture the tasks of each team member:

Task number	Description of the task	Team member responsible for the task	Duration of the task in time units
1.			
2.			

6.4. Requirements Analysis Criteria

Refer back to the table included in the discussion of the Project Plan Criteria (see Section 5.3). Requirements are identified for each of the tasks in the project plan. This includes requirements to complete the project as well as what is to be achieved by the team in their project.

6.5. Project Progression

Students need to communicate with the lecturer on the progression on their project, highlight constraints and problems (externally and within their team), participate in class discussions and submit evidence of project progression using reflective diaries. Reflective diaries could take the form of a one-page submission by each student on his/her experience thus far in the project highlighting what has been achieved, what needs to be achieved, any team problems experienced and external problems encountered relating to their project. A mark for the reflective diary could be added into the self-reflection category.

6.6. Implementation

During the team meeting discussions, the teams must be briefed on what is expected for the next deliverable. The following is a guide for implementation, indicating minimum requirements expected for the project. This forms part of the feedback given to the teams by the lecturer.

Minimum Requirements for the Project:

Topic	Level
Project Description	
Reports/ Documentation	• •

6.7. Project Presentation

Students are required to include the visual material that was used in the oral presentation in the PoE. The project presentation part of the PoE should include the following information:

- The team name;
- The team members;
- The organisation/department where the WIL project was conducted (simulations do not need to provide any information);
- Any documentation which illustrates the scope of the project;
- A discussion on the progression through the process, findings and recommendations;
- Screenshots of important items relating to your project.

6.8. PoE Submission

ALL students need to be aware of the submission date and the lecturer to whom they should submit.

The PoE should consist of the following sections:

- Outside Cover Page;
- Inside Cover Page;
- Content;
- Documentation:

  o Introduction;
  o Work Breakdown Structure;
  o Team Members;
  o Rubrics and Attendance Record
  o Milestones and Deliverables;

      o   Appendix/Annexures.

7. Marking Scheme

While there are general principles for the assessment of WIL modules, each WIL module will have its own specific marking criteria. Please have a look at these while completing each deliverable.

Assessment Part 1: Project Mark = 75% of Total Mark:

Assessment/ deliverable	Session	Format	Time	Marks	Weighting
Project plan	See Pacer	Document	See Pacer	100	10%
Requirements analysis	See Pacer	Document	See pacer	100	20%
Solution development	See Pacer	Document	See Pacer	100	20%
Implementation	See Pacer	Program modules; Database	See Pacer	100	40%
Presentation	See Pacer	PowerPoint slides; Working system	50 minutes	100	10%
Total Mark					**100%**

Assessment Part 2: Peer and self-evaluation = 15% of Final Mark

- Use the self-evaluation form (Annexure A) to determine each student's evaluation of his/her own strengths and weaknesses (10%);
- Use the peer evaluation form (Annexure A) to evaluate team members (5%);
- Each student completes a form assessing the other team members.

Assessment Part 3: Mid-point submission = 5% of Final Mark

- The presentation is marked by using the rubric provided.

Assessment Part 3: Attendance = 5% of Final Mark

- Attendance at a minimum of 80% of scheduled sessions AND sessions organised by groups working together;
- If required a logbook from the external stakeholder will be included in this section and included in the attendance register.

All criteria will be assessed using the following rating:

0.   Not done.
1.   Attempted, but not correct;
2.   Attempted, but can do better;
3.   Acceptable, all basics are covered;
4.   Acceptable, basics as well as some in-depth areas covered; and
5.   Excellent, much more extra work has been completed!

Once the parts have been awarded a mark, the mark will be multiplied by a weight to get the final mark for the criterion.

7.1. Project Plan Marking Scheme

1.	**Academic Mark for Project Plan**	**/100**
	1.1 Introduction	/5X2 = 10
	1.2 Milestones and Deliverables	/5X1 = 5
	1.3 Work Breakdown Structure	/5X4 = 20
	1.4 Project Schedules	
	1.4.1 Gantt chart and Interpretation	/5X1 = 5
	1.4.2 PERT chart and interpretation	/5X1 = 5
	1.5 Risk Management	/5X4 = 20
	1.6 Technical Feasibility Issues	/5X3 = 15
	1.7 Economic Feasibility Issues	/5X3 = 15
	1.8 Team Members	/5X1 = 5
2.	**Bonus Marks for Project Plan**	**/15**
	2.1 Layout of document	/5X1 = 5
	2.2 Appendix	/5X1 = 5
	2.3 Use of colour	/5X1 = 5

Total Mark Allocation for Project Plan		**/100**
1.	Academic marks for document	/100
2.	Bonus marks for document	/15

Final Percentage	% (Max 100%)

7.2. Requirement Analysis Marking Scheme

1.	**Problem Domain**	**/5X2 = 10**
2.	**Solution Domain**	**/20**
	2.1 Active Actors	/5X1 = 5
	2.2 Functions	/5X2 = 10
	2.3 Passive Actors	/5X1 = 5
3.	**Logical System Model**	**/20**
	3.1 Input Specifications	/5X1 = 5
	3.2 Output Specifications	/5X1 = 5

3.3	System Processes	/5X1 = 5
3.4	Entity Relationship Tables	/5X1 = 5

4.   **Class Diagrams**   **/50**

Marks per class:

Class#1:

Name and Properties For The Class	/5X1 = 5
Relationships With Other Classes	/5X1 = 5

Class#2:

Name and Properties For The Class	/5X1 = 5
Relationships With Other Classes	/5X1 = 5

Class#3:

Name and Properties For The Class	/5X1 = 5
Relationships With Other Classes	/5X1 = 5

Class#4:

Name and Properties For The Class	/5X1 = 5
Relationships With Other Classes	/5X1 = 5

Class#5:

Name and Properties For The Class	/5X1 = 5
Relationships With Other Classes	/5X1 = 5

Class#6:

Name and Properties For The Class	/5X1 = 5
Relationships With Other Classes	/5X1 = 5

Class#7:

Name and Properties For The Class	/5X1 = 5
Relationships With Other Classes	/5X1 = 5

Class#8:

Name and Properties For The Class	/5X1 = 5
Relationships With Other Classes	/5X1 = 5

Class#9:

Name and Properties For The Class	/5X1 = 5
Relationships With Other Classes	/5X1 = 5

Class#10:

Name and Properties For The Class	/5X1 = 5
Relationships With Other Classes	/5X1 = 5
Total All Classes	/50 (total/2)

5.   **Appendix (Bonus)**   **/5X1 = 5**

Total Mark Allocation for Requirement Analysis   **/100**

1 – 4	Total Academic contents	/100 +
5	Extra Bonus	/5X1 = 5

Final Percentage	% (Max 100%)

7.3. *System Design Marking Scheme*

1.	**Introduction**	**/5X1 = 5**
2.	**Logical Architectural Design**	**/15**
	2.1 High level design	/5X1 = 5
	2.2 Low level design	/5X2 = 10
3.	**User Interaction Design**	**/30**
	3.1 Input Interactions	/5X4 = 20
	3.2 Request Interactions	/5X2 = 10
4.		
5.	**Database Design**	**/30**
	4.1 Database Tables	/5X4 = 20
	4.2 ERD Design	/5X2 = 10
6.	**Report Design**	**/5X4 = 20**
7.	**Bonus for Appendix**	**/5X1 = 5**

Total Mark Allocation for System Design		**/100**
1-5	Academic marks for document	/100 +
6.	Bonus marks for document	/5

Final Percentage	% (Max 100%)

7.4. *Project Implementation Marking Scheme*

Note: Please carry the marks allocated as indicated in the Case Study over to the following Implementation Marking Scheme and scale accordingly.

1.	**Implementation criteria**	**/100**
	• Code for GUI	/5X4 = 20
	• Code for the input controls	/5X6 = 30
	• Database tables	/5X2 = 10
	• Database linked to program modules	/5X2 = 10
	• Testing of the system	/5X2 = 10
	• User support and documentation	/5X4 = 20
2.	**Bonus**	**/5X1 = 5**

Total Mark Allocation for Project Implementation		**/100**
1.	Academic marks for document	/100 +
2.	Bonus marks for document	/5

Final Percentage	% (Max 100%)

7.5. Project Presentation Criteria

1.	**Problem Statement**	**/5X2 = 10**

- How was the problem domain analysed and presented? (Results of the analysis.)

2.	**Business solution**	**/30**
	2.1 Description of the system	/5X2 = 10

- Architecture

	2.2 How was it solved?	/5X2 = 10

- How was the solution domain presented?
- Milestones and deliverables?
- WBS?
- Budgets?

	2.3 User requirements	/5X2 = 10

- Identification of business functionalities?

3.	**Utility of the system**	**/10**

- Value added? (Satisfy the needs.)   /5X1 = 5
- Reports?   /5X1 = 5

4.	**Database**	**/15**

- Scope (number of tables).   /5X1 = 5
- Table correctness (fields/datatypes)   /5X1 = 5
- Relationships (ERD).   /5X1 = 5

5.	**GUI**	**/15**

- Layout (aesthetics)/Forms;   /5X1 = 5
- Friendliness;   /5X1 = 5
- Menus/Navigation.   /5X1 = 5

6.	**Front-end to back-end links**	**/10**

- Enter new data (new, update, delete, requests).   /5X1 = 5
- Display results (on screen).   /5X1 = 5

7.	**Presentation skills mark**	**/5X2 = 10**

- Introduction of team;
- Eye-contact;
- Pace of presentation;
- Language (jargon);
- Use of notes;
- Confidence;
- Systematic;
- Dress;
- Layout of overheads.

Total Mark Allocation for Project Presentation	/100
Final Percentage	%

Comments:

8.   Supporting Documentation

8.1 Project Planning Document

8.1.1   Specifications for Project Planning Document:

Date: <date to be submitted>
Lecturer: <responsible lecturer>

8.1.2   Document Preparation

The document must be printed using a laser printer or a high-quality colour printer with Arial 11 font size. The document must be ring-bound, for easy paging. The cover page of the document must contain a logo of the team, serving as team identification.

8.1.3   Structure of the Document

The layout of the document with paragraph numbers must be exactly according to the specification in the following paragraphs. Marks will be deducted for any deviations.

8.1.4   Outside Cover Page

- Heading of document: Project Plan Document;
- Date: Date of the document;
- Logo: Logo of the team.

8.1.5   Inside Cover Page

- Number of the team;
- Name of the team;
- Name and student number of team leader;
- Names and student numbers of team members;
- Name and logo of the system.

8.1.6   Index of Contents

Give separate index lists for:

- Paragraphs listed per page:
  Paragraph number   Paragraph name   Page number
- Figures/Tables listed per page:
  Figure/Table number   Figure/ Table annotation   Page number

8.1.7   Documentation:

<u>Introduction</u>

This paragraph is directed towards the management of the company for which the system is developed. Therefore, a summary for justifying the system must be given. Give attention to the following aspects:

- The needs of the customer that the project should satisfy;
- The goals of the project;
- Cost constraints (budgets);
- Risks (if the project is not successful, late, over budget, etc.);
- Benefits for the customer if the project is successful.

<u>Milestones and Deliverables</u>

Every project has certain milestones, representing important achievements in the development process. For example, when the analysis of the system is completed, a milestone has been reached. Associated with each milestone is a deliverable resulting from the activities that led to the milestone. In the case of the analysis milestone, the deliverable is the <u>analysis document</u>.

Make a list in bullet form of the milestones and the associated deliverables.

<u>Work Breakdown Structure</u>

Draw up a table containing:

- The names of the tasks;
- Description of each task;
- Duration of each task in sessions;
- Predecessor(s) of each task;
- Team member(s) responsible for each task;
- Resources needed for each task.

Project Schedule

- Gantt Chart
    - Draw a Gantt chart of your project using MS Project.
    - Interpret the Gantt chart by describing the meanings of the different components of the chart for your project.
- PERT Charts
  PERT uses approximate time estimates: optimistic estimates, most likely estimates and pessimistic estimates.
  The PERT weighted average = (optimistic + 4x most likely + pessimistic)/ 6
    - Draw a task network diagram using MS Project.
    - Interpret the meaning of the diagram for your project.
    - Identify the critical path for your project and the importance of this path for planning your activities.

Risk Management

- Identify the risks to which your project may be exposed (e.g. team member leaves, no cooperation from sponsor, lack of technical expertise, team member does not contribute, running behind schedule, etc.)
- Determine the probability of each risk as Very Low, Low, Medium, High, Very High and the impact as Very Low, Low, Medium, High, Very High.
- Draw up a risk table for each risk indicating the above categories.
- Indicate the proactive steps to be taken to handle each risk.

Technical Feasibility Issues

To develop a project, certain resources are needed. These can be grouped into hardware resources and software resources.

- Make a list of the hardware resources you need to develop your project.
- Indicate if the hardware resources are available; if not, describe how you are going to solve the problem.
- Make a list of the software resources you need.
- Indicate if the software resources are available; if not, describe how you are going to solve the problem.
- Note: Do not refer to resources you need to implement the system.

Economic Feasibility Issues

Project managers must make cost estimates if they want to complete projects within budget constraints. There are a number of ways in which the budget calculations can be done using Rough Order of Magnitude (ROM) calculation; budgetary estimate and definitive estimate.

- Draw up a table indicating each activity/task (use the tasks identified in the WBS structure).

- For each activity/task state the team member(s) responsible for that task.
- For each team member indicate the time allocated for that task in terms of hours.
- For each team member indicate the tariff for that particular task in Rand/hour.
- Calculate the total budget for the effort (remember effort is person-time) for the project by adding all the effort values of all the team members. (Do not calculate any other budget costs, such as hardware or software costs).
- Note**:** For converting sessions to hours use the relationship:
  1 session = 40 hours.

Format of the table:

Task Identification	Team member(s) responsible	Time allocated per task per team member	Tariff per team member in Rand per hour	Cost per Task (time * tariff)
Analysis :: ::	Dave :: ::	30 hours :: ::	150 :: ::	4500 :: ::
Total budget for project				**xxxxxxxx**

Team Members

- Identify the team leader (use a photograph).
- Identify the team members (use photographs).
- Give a description of each team member's main responsibility in the project.
- Give a short CV of each team member.

Appendix

Enter any additional information on the project plan in the appendix. **This paragraph is optional.**

8.2 Requirements Analysis Document

8.2.1 Specifications for Requirements Analysis Document

Date: <date to be submitted>
Lecturer: <responsible lecturer>

8.2.2 Refer to part 8.1 above for specifications on the following headings:

- **Document Preparation;**
- **Structure of the Document;**
- **Outside Cover Page;**
- **Inside Cover Page;**
- **Index of Contents.**

8.2.3   Documentation:

Problem Domain (System Analysis)

A study is made of the given case study. Use the Introduction from the Planning Document, but give a more complete specification with more detail.

Solution Domain (Functional requirements specs and UML Use Cases)

A logical description of the functional requirements of the proposed system is given. You will use your UML background to draw a use case diagram of the system containing the following:

* The business system, divided into sub-systems if necessary.
* The use cases actions.
* The Actors taking part:

    o Human Actors;
    o Mechanical System Actors (such as linking to other systems).

* The name of each entity (that is system/sub-system use cases and actors) in the diagram.

Format of the functional requirements table:

Participant (Active actor)	Function of the system	Participant (Passive actor)
Customer	Book a DVD at the Video Shop	Shop assistant
Shop assistant	Sells goods	Customer
Manager	Prepares a sales report	

Logical System Model

The logical system is modelled by completing the following table that must be accurate, as it is the heart of the system.

Format of Logical System Model Table:

GUI		System Process (Method)	Entity relationship (Table)
Input	Output		
Enter customer details		Register a new customer	Customer table
No input	No output	Calculate sales figures	Sales table
No input	Sales report on printer	Print sales report	Sales table

Class Diagrams

Identify the classes using the entity relationship column in the above System Model Table. Each Entity Relationship Table represents an entity which could be a potential UML-class.

Format of Class Diagram Table:

Name of entity (UML Class)	Properties of entity (UML Class)	Related to:
Customer	• Name (string – 30 characters) • Address (string – 60 characters)	Account

When you are attempting to model relationships between classes using UML, you must consider the following:

• Draw diagrams indicating the relationships between the classes. Use Visual Modeller, Rational Rose or any other drawing tool (even MS Word) to prepare these diagrams.
• The standard UML class template contains a name, attributes and operations of the class. However, use a short-cut notation, only referring to the name of the class.
• The following relationships between the classes have to be modelled:

   o Associations;
   o Generalisations;
   o Aggregations;
   o Any other dependencies between classes/sub-classes/objects.

• The diagrams may become rather busy and cluttered. Therefore, segment the diagrams into smaller units called Packages. A practical approach is to do a global model of the total system and then to give relationships for every use-case, linking the use-cases when necessary.

Appendix

Use this paragraph to add any information not specified in the previous paragraphs, but worthwhile including in the document. Number each appendix: Appendix A, Appendix B etc. Also add an index of Appendices.

8.3 Design Document

8.3.1   Specification for Design Document

Date: <date of document>
Author: <lecturer>

8.3.2   Refer to part 8.1 above for specifications on the following headings:

- **Document Preparation;**
- **Structure of the Document;**
- **Outside Cover Page;**
- **Inside Cover Page.**

8.3.3   Table of Contents

Paragraph number   Paragraph name   Page number

8.3.4   Index of Figures

Figure number   Figure description   Page number

8.3.5   Documentation

Introduction:

Give a short description of your system (Use information from previous documents).

Logical Architectural Design:

- **High Level Architectural Design:**

  o   Block diagrams should be used to describe the logical design of your prototype system.
  o   Indicate whether it is a three-level, two-level or flat system; the clients and the servers, the position of the database, etc.
  o   Indicate how the functional building blocks are divided between the components of the system (functions allocated to the clients, to the server, etc.).
  o   Refer back to the system model table for details on the system Input/Output specification.
  o   Refer back to the Functional Requirements table for the system.

- **Low Level Architectural Design:**
-
  o   In the Low-Level Design, the relationships between Actors, Functions and the Database Tables are indicated.

o   A block diagram of the Low-Level Design is indicated in the following
      diagram:
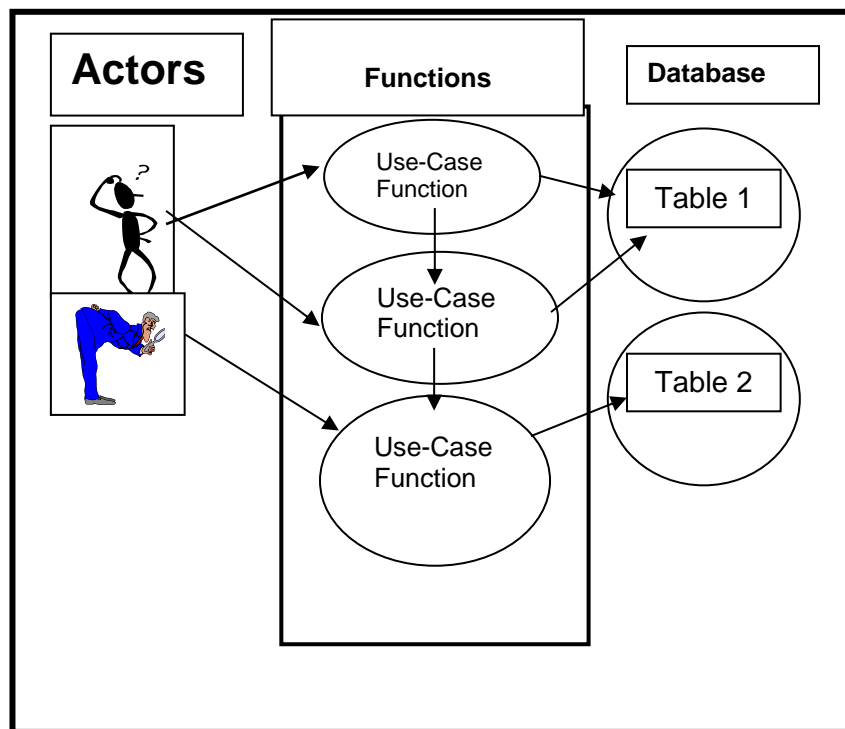
The low-level design diagram consists of three parts:

- **Actors:**

  The actors refer back to the actors identified in the Use-Case diagrams.

- **Functions:**

  The functionality of the system is modelled using <u>use-cases</u>. State the function
  of each use-case briefly. Any relationships between use-cases are indicated by
  arrows.

- **Database:**

  The database or table referred to in a use-case must be indicated using a
  circle. The meaning of a database has to be indicated using a note comment or
  a label.

8.3.6   Interactions with the User

The interactions of the user with the prototype is modelled. Use the input interactions identified in the Requirement Analysis Document as building blocks.

The interactions can be divided into two main categories, namely input interactions and requests interactions:

- **The Input interactions:**

These interactions represent data controls used to read data into the system. This is the first reference to the GUI containing the complete interaction specification. In this document, the input interactions have to be specified in detail.

There are two options you can follow:

<u>Option 1</u>: **Give a summary of the input options.**
Make a structured annotated list of all your inputs. The list must indicate the hierarchical relationship between the input menus.

For example:

Main Menu:	Main Menu Item#1	Main Menu Item#2
1st level	1.1 Sub Menu 1	2.1 Sub Menu 2
	1.2 Sub Menu 2	2.2 Sub Menu 2
	: : :	: : :
	1.n Sub Menu n	2.n Sub Menu n
2nd level	1.n.1 Sub sub Menu 1	
	1.n.2 Sub sub menu 2	

Etc.

Example: You want to register a student at your college:

Main Menu:	Student Personal info	Student Study	Financial
1st level	Biographical	Year of study	Bank act
2nd level	Name	Degree	Saving act
2nd level	Age	Subjects	Bursary
1st level	Address	subj#1	
2nd level	Street	subj#2	
2nd level	Post Box	subj#3	
1st level	Contact		
2nd level	Telephone		
2nd level	Cell Phone		

Option 2: Give a complete GUI definition.
Use VB or similar visual tool and design a complete GUI of all the input interactions. Include this design in your document.

Note: The input menus and forms play an important role in the identification of the attributes and services of the classes.

- **The Requests interactions:**

These interactions represent all service requests put to the system and include requests for functional processing (scheduling, calculating statistics, etc.) and outputs in the form of screen displays (graphical representations) and printed reports.

Request interactions refer to menus and output parameter forms used to specify the services (value added) provided by the system.

Again, you have two options:

Option 1: Give a summary of the interactions.
Make a complete hierarchical list of all the interactions, as explained in the Input section.

Option 2: Give a complete GUI definition.
Specify the interactions by doing the GUI design (menus and forms) using a visual tool (VB or a similar facility) and include a screen dump of the layout in your design document.

Note: In this document, the non-functional aspects such as creating a file, defining passwords and error messages are not covered. If you did not provide for all the interactions in your analysis document, you must now make sure that those interactions that were not considered are included in the design document. In your document, you must provide paragraphs where the interactions are described.

8.3.7 Database Design

Refer to the Class Diagram table above to indicate entities and their relationships:

- Use these entities as building blocks in the design of your ERD data model.
- Complete the following steps in designing your model:

  - o Identify all the entities in your database. This is possible by consulting the above table and also the input and output menus of your GUI.
  - o Identify all the relationships between the entities, and normalise it into 3NF.
  - o Use a CASE tool (e.g., Access) to draw the ERD logical database tables.

- As part of the relationship design, the keys related to each database table have to be identified and specified. There are primary keys, secondary keys, foreign keys, composite keys, etc.

• The following database table layout can be used:

Table Name:<insert table name>

Primary key	Secondary keys			Data fields				
	Secondary key #1	Secondary key #2		Field #1	Field #2	Field #3	……….	Field #n

Note that the properties of an entity in the Class Diagram become the data fields of the database table.

• Draw a set of database tables (see below).
• Draw the relationship diagrams between the tables (see below).

Database Tables

Draw diagrams of the individual table's design, using the following numbering scheme:

Database Table#1:<Insert Table #1 here>

Primary key	Secondary keys		Data fields				
	Secondary key #1	Secondary key #2	Field #1	Field #2	Field #3	……….	Field #n

Database Table#2:<Insert Table#2 here>

Primary key	Secondary keys		Data fields				
	Secondary key #1	Secondary key #2	Field #1	Field #2	Field #3	……….	Field #n

And so on …
In each table, at least three fictitious, although realistic, values have to be entered in order to serve as examples.

Entity Relationship Database Design:

Draw diagrams of the relationships between the tables using ERD diagrams.
Number each table according to the following scheme:

ERD diagram #1: <Insert ERD diagram here>
ERD diagram #2: <Insert ERD diagram here>

8.3.8 Report Design

Give a layout of all the printed reports of your prototype system. Each report layout serves as a template for reports to be printed.

Number each report according to the following scheme:

Printed report #1:<Insert report here>

```



                            Layout of report given here




```

Printed report #2:<Insert report here>

```



                            Layout of report given here




```
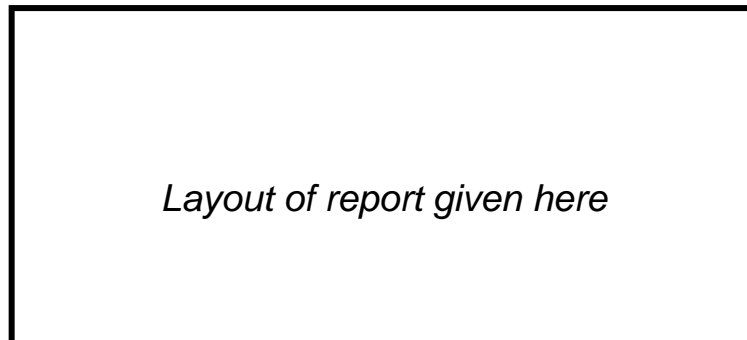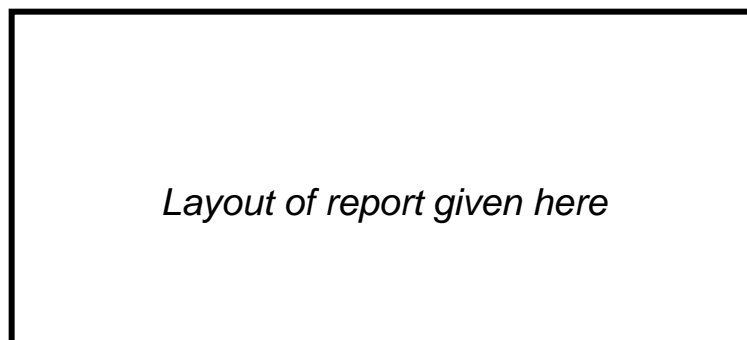
Do the same for all the reports.

8.3.9   Appendix

Appendices are <u>optional</u> paragraphs. Bonus marks will be allocated to each appendix. The format is free. It contains additional information of importance for the system. Number each appendix: Appendix A, Appendix B etc.

8.4 Supporting Documents

The following documents can be used by team members in order to complete some of the deliverables. If necessary, the documents can be adapted to suit the needs of the specific deliverables.

Client Name:	**Estimate/Budget Worksheet Marking Template**	
NGO/NPO details	A cost estimation is prepared in the beginning, outlining the planned cost for the project. The team will also need to hand in an actual cost template incurred during the project in their lessons learnt document. The approach is to consider primarily what it will cost (monetary and hours) to produce the deliverables given in the WBS/DBS and defined by scope, limits and constraints. The milestone responsibility matrix will provide some indication of the timing and resources required and these must be taken into consideration. Risk areas identified must be carefully considered and cost and time allowances made for the actions required to manage the risk.	
Sub-Project: Enter sub projects here.	**Compiled by:** Enter the name of the person who compiled the documents.	**Page no**
Date Initiated:	**Approved by:** Supervisor's name.	

Issues to look out for:

- Were there any spelling or punctuation mistakes?
- Does the information link up with previous document templates, especially the WBS/DBS, milestones objectives template and the risk template?

Work Element	Cost Components/Hourly Components						
Description	Equip (H/W)	HR	Matrl (S/W)	Subcon	Cntgcy (Risk)	Total R	Total Hours
A short description of what needs a cost budget; all work elements of the project and the hours associated with the elements.	Enter only the money value for elements associated with hardware.	Indicate the planned hours of team members on elements of the project.	Enter only the money value for elements associated with software, stationary, petrol, etc.	Enter only the hours for outsourcing a component of the work elements (i.e., laying of network cables).	Enter only the hours for catching up work associated with a risk identified in a specific work element.	Tally up the total money value per work element.	Tally up the total hours planned for work per element.
Total R (Total per cost component)							
Total Hours (Total per cost component)							

8.5 *Marking Template Feasibility Study*

- A feasibility study highlights whether a project is feasible or not.
- Three specific feasibility study aspects must be included in the reports:

  o Operational Feasibility – Will the system undertaken solve the problems which exist in the company/NGO? Will it be possible to complete the project in the given timeframe?

  o Technical Feasibility – Assessing the proposed technological requirements against the available expertise. (Do they have the knowledge and experience to undertake aspects of the project? If not, what will they do to obtain the knowledge, who will they consult, etc.?)

  o Economic Feasibility – Economic Feasibility consists of two tests:

    - Is the anticipated value of the benefits greater than projected costs of development? (Include reference to tangible (has a $ value) and intangible benefits (cannot be measured with $ value such as being more effective in decision making).

    - Does the organisation have adequate cash flow to fund the project during the development period? (Refer to the following here. trading division development cost is free, i.e. you do not get paid for the work that you will be completing; if you do need components such as h/w and s/w you need to include that sponsorships need to be obtained (from where?); or maybe the NGO said that they will pay for those components. Other development costs which you can include are: Salaries and wages; equipment and installation; software licences; training; consultation fees; facilities and their use; utilities and tools; support staff and travel expenses.)

Other issues to look out for:

- Were any spelling or punctuation mistakes made?
- Does the information link up with previous document templates?

Client Name:	**Milestone Responsibility Chart Marking Template**	
NGO/NPO details	During the initiation phase and project plan, the group identifies the core project team, as well as any other stakeholders (client, supervisor and other lecturers). These entities need to be identified based on their influence or involvement in the project milestones/deliverables. The project team indicates the involvement of the responsible entities according to the milestones developed in the WBS/DBS and the Milestones Objective Chart. This is done by placing the symbols representing the role of the responsible entities alongside the corresponding milestones. In this matrix, the rows represent the milestones and the columns the responsible entities.	
Sub-Project: Enter sub projects in here (database, networking etc.)	**Compiled by:** Enter the name of the person who compiled the documents.	**Page no**
	Approved by: Supervisor's name.	

ID	Description	Responsible Entity	Responsible Entity	Responsible Entity
Indicate the same ID number from Milestones Objectives Chart for each work element.	A short description of the task/ milestone/ activity.			

The following rules apply to the use of the symbols:

- Each row must contain at least a D, P and X.
- There can be multiple Cs on a row, but only one D and P.
- There can be multiple symbols in a cell.
- No student responsible entity can have only C, D, P or I symbols; they must have X symbols.

Goal Routes	ID	Plan Date	Description	Completion Date	Report Date	Report
	1	2	3	4	5	6
	7	8	9	10	11	12
	13	14	15	16	17	18
	19	20	21	22	23	24
	25	26	27	28	29	30

Client Name: NGO/NPO details	**Milestone Objective Chart** • You need to complete two of these. The first one will be during the planning stage in the project's life cycle. Here all the details on the document inform us of the timeframes they are planning to follow. • The objective of the Milestones Objective chart is to map how the project will proceed from start to finish, i.e., the sequence of tasks. The general rule is that there should not be more than 15-25 tasks; if there are more, the project should be subdivided into smaller projects. If your group battles to fit all tasks into one template, you may complete a milestone objective template and activity diagram for each component (i.e., Database, Network, etc.)	
Sub-Project: (E.g. database, networking etc.)	**Compiled by:** Enter the name of the person who compiled the documents.	**Page no**
	Approved by: Supervisor's name.	

Goal Routes	ID	Plan Date	Description	Completion Date	Report Date	Report
An activity diagram/a Gantt chart can be included as an appendix. Highlight the critical path on the diagram!	ID refers to a referencing number which links to the diagram.	Planned date must indicate the calendar date on which they plan to start the task/ milestone/ activity.	A short description of the task/milestone/ activity.	Completion date must indicate the calendar date on which they plan to complete the task/ milestone/activity.	Report date must indicate the calendar date on which they plan to report progress or successful completion of the task/milestone/ activity.	Who they will report to on the progress or successful completion of the task/milestone/ activity.

- Indicate the number of days you plan each task to take. Include a column stating the number of days taken to complete task; this is the difference between the planned start and completion dates.

8.6 *Marking Template Project Charter*

- This is a contract between the project team members, their client (NGO/NPO) and project supervisor (on behalf of <u>trading division</u> and the Faculty).
- It should include the following:

    o Project (what the project consists of, same as what is in scope);
    o Start and Completion Dates (these dates are examples and must be relevant to the current project);
    o Stakeholders with each stakeholder's role and responsibility;
    o Objectives of the project;
    o Performance measures (how we will benchmark whether the project was a success or not);
    o Signed component where each stakeholder signs their agreement to the details of this charter and the project. (NB. The charter must first be checked and only when the supervisor is satisfied with the contents, can it be signed and filed.)

Client Name: (Enter Client Name.)	Project Purpose and Objectives	
Sub-Project: (Enter the scope of your project.)	Compiled by: (Enter the name of the person who compiled the documents.)	Date Initiated: (Starting date for project.)
	Approved by: (Enter the facilitators' name.)	
Project Purpose/Mission:	Enter the purpose/mission of your specific project.	
Objectives and Performance Measures:	Enter objectives and performance indicators which will allow MGI to evaluate the successfulness of your project.	

Client Name:	Risk Evaluation Matrix Marking Template	
NGO/NPO details	A possible tool is the project risk analysis matrix shown below. This matrix can be used to assess the likelihood of the risk occurring and the consequences/impacts of the risk. The result of this analysis is the severity level. **Consequence /Impact** |		High (5)	Medium (3)	Low (1)
Likelihood Of occurrence	High (5)	25	15	5
	Medium (3)	15	9	3
	Low (1)	5	3	1 | After developing the risk evaluation, the project team should have gained a better understanding of which areas are critical to the success of the project. Risk is dynamic. A risk's likelihood of occurrence or impact on a project could change, thereby changing the severity level. In addition, planned risks might not even materialise within the project. Therefore, each project group should hand in two risk assessments. One is for their planning phase, drawing attention to what might occur and how the team will deal with the occurrence if it materialises. A second template (included in their lessons learned document) outlines the actual risks which did occur and explain what steps were taken by the team to manage that risk.	
Sub-Project: Enter sub projects in here.	Compiled by: Enter the name of the person who compiled the documents.	Page no
	Approved by: Supervisor's name.	

Risk Area	Occurrence H/L/M	Impact H/L/M	Risk Response
Identify the type of risk and where it might occur.	Use the matrix discussed above to calculate the identified risk's impact and likelihood.		Describe how the risk will be handled if it occurs.

Client Name: (Enter Client Name.)	Initial Scope, Constraints and Limiting Criteria	
Sub-Project: (Enter the Scope of your Project, what your project entails.)	**Compiled by:** (Enter the name of the person who compiled the documents.)	**Date Initiated:** (Starting date for project.)
	Approved by: (Enter the facilitators' name.)	
Scope, Constraints and Limiting Criteria:	Enter the scope of your specific project.	
What is out of scope:		

9.   Table of Skills

Use the table below to confirm whether you have mastered the skills listed.

REQUIRED SKILL	ACHIEVED/NOT ACHIEVED
Participate as a team member.	
Be a responsible team member.	
Understand aspects within the case study, i.e., problem domain, system requirements, processes, etc.	
Determine aspects within the project schedule, i.e., milestones, WBS, risk management, etc.	
Analysis of requirements for the business solution, i.e., functional requirements, use-case diagrams, etc.	
Design aspects for the system solution, i.e., GUI, database, reports, website, etc.	
Implementation of the system solution, i.e., coding the GUI, input controls, modules, database, etc.	
Verification and testing of the system solution using appropriate input/output.	
Development of aspects within the user documentation/manuals and support files.	
Demonstration of a working prototype system.	
Presentation preparation, i.e., setup of allocated venue, dress-code, PowerPoint presentation, etc.	

10. Intellectual Property

Plagiarism occurs in a variety of forms. Ultimately though, it refers to the use of the words, ideas or images of another person without acknowledging the source using the required conventions. The IIE publishes a Quick Reference Guide that provides more detailed guidance, but a brief description of plagiarism and referencing is included below for your reference. It is vital that you are familiar with this information and the Intellectual Integrity Policy before attempting any assignments.

Introduction to Referencing and Plagiarism

What is 'Plagiarism'?

'Plagiarism' is the act of taking someone's words or ideas and presenting them as your own.

What is 'Referencing'?

'Referencing' is the act of citing or giving credit to the authors of any work that you have referred to or consulted. A 'reference' then refers to a citation (a credit) or the actual information from a publication that is referred to.

Referencing is the acknowledgment of any work that is not your own, but is used by you in an academic document. It is simply a way of giving credit to and acknowledging the ideas and words of others.

When writing assignments, students are required to acknowledge the work, words or ideas of others through the technique of referencing. Referencing occurs in the text at the place where the work of others is being cited, and at the end of the document, in the bibliography.

The bibliography is a list of all the work (published and unpublished) that a writer has read in the course of preparing a piece of writing. This includes items that are not directly cited in the work.

A reference is required when you:

- Quote directly: when you use the exact words as they appear in the source;
- Copy directly: when you copy data, figures, tables, images, music, videos or frameworks;
- Summarise: when you write a short account of what is in the source;
- Paraphrase: when you state the work, words and ideas of someone else in your own words.

It is standard practice in the academic world to recognise and respect the ownership of ideas, known as <u>intellectual property</u>, through good referencing techniques. However, there are other reasons why referencing is useful.

Good Reasons for Referencing

It is good academic practice to reference because:

- It enhances the quality of your writing;
- It demonstrates the scope, depth and breadth of your research;
- It gives structure and strength to the aims of your article or paper;
- It endorses your arguments;
- It allows readers to access source documents relating to your work, quickly and easily.

Sources

The following would count as 'sources':

- Books,
- Chapters from books,
- Encyclopaedias,
- Articles,
- Journals,
- Magazines,
- Periodicals,
- Newspaper articles,
- Items from the Internet (images, videos, etc.),
- Pictures,
- Unpublished notes, articles, papers, books, manuscripts, dissertations, theses, etc.,
- Diagrams,
- Videos,
- Films,
- Music,
- Works of fiction (novels, short stories or poetry).

What You Need to Document from the Hard Copy Source You are Using

<u>(Not every detail will be applicable in every case. However, the following lists provide a guide to what information is needed.)</u>

You need to acknowledge:

- The words or work of the author(s),
- The author(s)'s or editor(s)'s full names,
- If your source is a group/ organisation/ body, you need all the details,
- Name of the journal, periodical, magazine, book, etc.,
- Edition,
- Publisher's name,
- Place of publication (i.e., the <u>city</u> of publication),
- Year of publication,
- Volume number,
- Issue number,
- Page numbers.

What You Need to Document if you are Citing Electronic Sources

- Author(s)'s/ editor(s)'s name,
- Title of the page,
- Title of the site,
- Copyright date, or the date that the page was last updated,
- Full Internet address of page(s),
- Date you accessed/ viewed the source,
- Any other relevant information pertaining to the web page or website.

Referencing Systems

There are a number of referencing systems in use and each has its own consistent rules. While these may differ from system-to-system, the referencing system followed needs to be used consistently, throughout the text. Different referencing systems cannot be mixed in the same piece of work!

A detailed guide to referencing, entitled <u>Referencing and Plagiarism Guide</u> is available from your library. Please refer to it if you require further assistance.

When is Referencing Not Necessary?

This is a difficult question to answer – usually when something is 'common knowledge'. However, it is not always clear what 'common knowledge' is.

Examples of 'common knowledge' are:

- Nelson Mandela was released from prison in 1990;
- The world's largest diamond was found in South Africa;
- South Africa is divided into nine (9) provinces;
- The lion is also known as 'The King of the Jungle'.
- $E = mc^2$
- The sky is blue.

Usually, all of the above examples would not be referenced. The equation $E = mc^2$ is Einstein's famous equation for calculations of total energy and has become so familiar that it is not referenced to Einstein.

Sometimes what we think is 'common knowledge', is not. For example, the above statement about the sky being blue is only partly true. The light from the sun looks white, but it is actually made up of all the colours of the rainbow. Sunlight reaches the Earth's atmosphere and is scattered in all directions by all the gases and particles in the air. The smallest particles are by coincidence the same length as the wavelength of blue light. Blue is scattered more than the other colours because it travels as shorter, smaller waves. It is not entirely accurate then to claim that the sky is blue. It is thus generally safer to always check your facts and try to find a reputable source for your claim.

Important Plagiarism Reminders

The IIE respects the intellectual property of other people and requires its students to be familiar with the necessary referencing conventions. Please ensure that you seek assistance in this regard before submitting work if you are uncertain.

If you fail to acknowledge the work or ideas of others or do so inadequately this will be handled in terms of the Intellectual Integrity Policy (available in the library) and/ or the Student Code of Conduct – depending on whether or not plagiarism and/ or cheating (passing off the work of other people as your own by copying the work of other students or copying off the Internet or from another source) is suspected.

Your campus offers individual and group training on referencing conventions – please speak to your librarian or ADC/ Campus Co-Navigator in this regard.

Reiteration of the Declaration you have signed:

1. I have been informed about the seriousness of acts of plagiarism.
2. I understand what plagiarism is.
3. I am aware that The Independent Institute of Education (IIE) has a policy regarding plagiarism and that it does not accept acts of plagiarism.
4. I am aware that the Intellectual Integrity Policy and the Student Code of Conduct prescribe the consequences of plagiarism.

5.   I am aware that referencing guides are available in my student handbook or equivalent and in the library and that following them is a requirement for successful completion of my programme.

6.   I am aware that should I require support or assistance in using referencing guides to avoid plagiarism I may speak to the lecturers, the librarian or the campus ADC/ Campus Co-Navigator.

7.   I am aware of the consequences of plagiarism.

Please ask for assistance prior to submitting work if you are at all unsure.

11. Bibliography

Shelly, G.B. Cashman T.J., and Rosenblatt H.J. 2006. System Analysis and Design. Thompson Course Technology, USA.

ANNEXURE A

SELF and PEER EVALUATION FORMS

Please complete and submit this self-/peer evaluation form to your lecturer before your final PoE submission.

This form contains confidential information. Do not discuss your evaluation with your team members. This must be submitted individually.

EVALUATION REPORT

The purpose of the WIL Self-Evaluation Report is to provide you with an opportunity to reflect (think about) and evaluate your learning during the WIL. Normally, this forms part of your PoE. The report should be:

- Typed;
- On one side of the page only;
- One-and-a-half spacing.

Please leave adequate margins for comments. The questions under some of the following headings are to assist you with this report – feel free to include additional ideas if you have them.

1. **Title/Cover Sheet**

    - Student name;
    - Learning programme name, and year;
    - Name of your campus;
    - If this was a work placement, the name of the workplace;
    - Mentor's name and position (if a work placement).

2. **Table of Contents**

    Headings of sections should be used to identify the subject matter and should be numbered. Remember to include appendices and attachments.

3. **Introduction**

    This should outline *your understanding and expectations* of the nature and purpose of the WIL activity.

4.   Skills learned

Think about the things you have learned to do during the WIL activity – which of these do you think will assist you when you are working? List the things you have learnt, e.g.,

- Practical things you have learned to do;
- Ways you have learned to interact with other people;
- Communication skills.

For each one, state how you think you could use these in the workplace.

5.   Role in the team

Describe your role in the team, e.g.,

- Were you the leader or did you follow?
- Did you do as much or more than others?
- How did you feel about being in the group?
- What did you do when there was conflict in the group?
- Is there anything you have learned about being a member of a group?

6.   Time management and planning

For example:

- Did you finish the task on time?
- Was it rushed at the end?
- How did you plan your time?
- Did this work or is there something different you should or could have done?
- Could this have been done differently or better?
- What was good about the way you managed your time and planning?

7.   Technology, presentation and information

Answer the following:

- Where did you find the information you needed to do this work?
- What technology did you use?
- How well?
- What else could you have used?
- What would you do differently/the same if you needed to do this again as far as the use of technology and presentations goes?

8.   **Strengths and areas to do better (weaknesses)**

For example:

- What did you do really well?
- How do you know you did this well?
- What did you not do that well?
- What would you do differently next time and why?

9.   **Mentor or supervisor**

Describe your relationship with the WIL coordinator or the mentor in the workplace, e.g.,

- What part of this relationship worked well for you and what did not?
- How could you have made the relationship better or stronger?

10.   **Impact**

This refers to your contributions to the activity, e.g.,

- How do you think others (the organisation, others in your group, the simulated workplace) benefitted from the work you did?
- Could you have had a greater impact? How?

11.   **Conclusion**

Summarise the most important things you have learned – these should be things you have discussed above.

_____   _____

STUDENT SIGNATURE   **DATE**

PEER EVALUATION

TEAM NAME/NUMBER: ……………………….. DATE: …………………………..

Please rate each of your <u>project team members</u> using the following scale detailed in the assessment criteria descriptions provided. Marks received from each member of the team will be added up and then averaged. Each team member must have a separate evaluation form completed.

Name of student being evaluated:	Never	Seldom	Frequently	Always
	0	**1**	**2**	**3**
The student's personal work				
1. He/she contributed good ideas that added value to the project.				
2. He/she performed his or her tasks in line with what was expected of him/her.				
3. He/she produced high quality work.				
4. He/she managed his/her own time well and met deadlines.				
The student's work as part of a team (when relevant)				
5. He/she accepted responsibility for a fair portion of the tasks.				
6. He/she was an enthusiastic member of my team.				
7. He/she helped others to be successful.				
8. He/she worked well with other members of the team.				
Sub-totals				
TOTAL: /24				

Comments:

………………………………………………………………………………………………………
………………………………………………………………………………………………………
………………………………………………………………………………………………..…………
………………………………………………………………………………………………………
………………………

NAME: ………………………………… SIGNATURE: ………………………………

SELF-EVALUATION

STUDENT NAME: ……………………………………….   **STUDENT NUMBER: ……………………..**   **DATE: ……………………**

Please rate **yourself** using the following scale detailed in the descriptions provided:

Criteria	1 **You have learned something – but you are not proving it.**	2 **You are on the right track but you can do better.**	3 **Well done.**	4 **You have done exceptionally well.**	Score
Reflection	• I did not think about what I had learned at all. • I do not know how to think about my learning. • I cannot provide details and examples about what and how I learned.	• I can think about some of my learning, but this did not cover the whole project. • I can only give examples for some of what I learned. • I cannot fully explain what I have learned.	• I could think about what I learned in all parts of the project. • I could always give an example of what and how I learned. • I could always explain what and how I had learned.	• I really understand and can explain to others how I learned in the WIL module. • I can provide many examples for what and how I learned for all parts of the WIL module. • I think that I can explain all aspects of my learning in all aspects of the WIL module. • Reflection is complete and done well.	

Criteria	1 You have learned something – but you are not proving it.	2 You are on the right track but you can do better.	3 Well done.	4 You have done exceptionally well.	Score
Demonstration of learning	• I can describe my experiences and events in the WIL module.	• I can describe and briefly explain my experience and events in the WIL module, but I do not think that I can fully explain all my learning.	• I have tried to analyse and explain my experience and events in the WIL module, but I am not sure that I have completely explained everything.	• I can fully explain my experience and events in the WIL module. • I can clearly explain how all my learning in the WIL module occurred. • I can relate my experience and events in the WIL module to how my learning occurred and how I developed in this module.	
Quality of ideas	• The ideas that I discussed did not relate to my experience and events in the WIL module.	• The ideas that I have discussed relate to my experience and events in the WIL module. • I cannot provide explanations and examples.	• The ideas that I have discussed clearly relate to my experience and events in the WIL module. • I can provide some examples and explanations.	• The ideas that I have discussed clearly and coherently relate to my experience and the events in the WIL module. • I have provided detailed explanations and examples for all of my experiences and events in the WIL module.	

Criteria	1 You have learned something – but you are not proving it.	2 You are on the right track but you can do better.	3 Well done.	4 You have done exceptionally well.	Score
Organisation of report	• I have presented my ideas, but could not order them logically.	• I have organised my ideas, but they do not really link to one another.	• My ideas are organised and they all link to one another.	• My ideas are well-organised because they all link together to provide a comprehensive, logically ordered discussion of the WIL module.	
Clarity of report	• I have not written the report clearly. • The report is confusing.	• There are many parts of my report that are confusing.	• There are a few parts of my report that are not clear.	• The language throughout my report is clear and expressive. • Whoever reads my report can create a mental picture of the situation being described. • Somebody who knows nothing about the WIL module could read my report and understand exactly what happened and what I did.	
TOTAL SCORE:					**/20**

SUPERVISOR OR COORDINATOR EVALUATION REPORT

	Never	Seldom	Sometimes	Frequently	Always
Name of student being evaluated:					
Name of person doing evaluation:	**1**	**2**	**3**	**4**	**5**
The student's personal work					
1. He/she contributed with good ideas that added value to the project					
2. He/she performed his or her tasks in line with what was expected of him/her					
3. He/she produced high quality work.					
4. He/she managed his/her own time well and met deadlines.					
The student's work as part of a team (when relevant)					
5. He/she accepted responsibility for a fair part of the tasks.					
6. He/she was an enthusiastic member of the team.					
7. He/she helped others to be successful.					
8. He/she worked well with others.					
Sub-totals					

Evaluation of Student by Supervisor or Coordinator

ANNEXURE B

PRESENTATION RUBRIC

NAME OF STUDENT .... **STUDENT NUMBER** ....**MODULE:** ....

CRITERIA	1 - You have learned something – but you are not proving it.	2 - You are on the right track but you can do better.	3 - Well done.	4 - You have done exceptionally well.	TOTAL
NONVERBAL SKILLS					
• Audience Engagement	• Makes no attempt to interact with the audience.	• Sometimes interacts with one or two members of the audience.	• Has frequent interaction with the same people in the audience.	• Holds attention through direct interaction with various members of audience.	
• Body language	• Does not promote engagement, sits during his/her part of the presentation.	• Tense, anxious, appears defensive, distracting, unnatural and unnecessary movement.	• Movements enhance delivery, some interaction with the audience.	• Stands up straight, engaged, interested, positive.	
• Poise	• Unprepared, does not cope with interruptions	• Does not recover well when making mistakes.	• Recovers quickly and smoothly when mistakes are made.	• Interacts with audience, no distracting movements.	

• Dress code	during presentation. • Clothing inappropriate for purpose of presentation.	• Clothing is not entirely appropriate for purpose of presentation.	• Neat, well-groomed, mostly appropriately dressed for the purpose of the presentation.	• Professional, well-groomed, entirely appropriately dressed for the purpose of the presentation.	
VERBAL SKILLS					
• Tone	• Too loud/too soft, abrupt, condescending.	• Cannot be heard by audience.	• Varies volume and pitch.	• Clear, easy to listen to, articulate.	
• Language	• Inappropriate, in poor taste, mumbles, incorrect use of terminology.	• Unable to articulate ideas.	• Correct use and pronunciation of terms.	• Correct and effective use of language.	
• Delivery	• Shows no interest in topic or activity/does not participate in oral part of presentation.	• Mumbles, appears distracted or unfocussed, reads notes word for word.	• Thoughts well-articulated, uses own words, but unable to keep audience engaged throughout presentation.	• Enthusiastic, relaxed, self-confident, seldom refers to notes, maintains interest of audience throughout presentation.	

CRITERIA	1 - You have learned something – but you are not proving it.	2 - You are on the right track but you can do better.	3 - Well done.	4 - You have done exceptionally well.	TOTAL
VISUAL AIDS					
• Physical, e.g., posters, models, charts, etc. • Electronic, e.g., video, computer simulation • PowerPoint slides	• Unrelated to presentation.	• Poor, distracts audience, adds nothing to presentation.	• Commercially available visual aids, relevant to topic, enhance understanding and explanation.	• Original visual aids, relevant to topic, support and enhance understanding and explanation.	
PACE					
• Timing	• Presentation is too short or takes much longer than allocated time.	• Presentation is somewhat close to the allocated time.	• Length of presentation close to allocated time.	• Length of presentation close to allocated time.	
• Structure, e.g. introduction, conclusion.	• Disjointed, unstructured, no introduction and/or conclusion.	• Audience has difficulty following discussion, content presented haphazardly without appropriate structure.	• Mostly structured, easy to follow in spite of occasional lapses in logical flow.	• Structured, logical flow, accompanied by good explanations that aid understanding.	

CRITERIA	1 - You have learned something – but you are not proving it.	2 - You are on the right track but you can do better.	3 - Well done.	4 - You have done exceptionally well.	TOTAL
SUBJECT KNOWLEDGE					
• Concepts	• Demonstrates no understanding of concepts.	• Demonstrates limited understanding of concepts.	• Demonstrates adequate understanding of concepts.	• Demonstrates deep understanding of concepts.	
• Depth	• Is unable to answer any questions, when required.	• Has difficulty answering questions.	• Able to answer most questions.	• Is able to provide in depth explanations in response to all questions.	
GROUP DYNAMIC					
Interaction with: • Team members	• Does not participate in presentation.	• Little participation in presentation.	• Participates in presentation, shares responsibilities with peers.	• Participates enthusiastically in presentation, supports peers, takes lead when appropriate.	
• Audience	• Does not respond to feedback (verbal and nonverbal) from audience.	• Occasionally responds to feedback (verbal and nonverbal) from audience.	• Frequently responds to feedback (verbal and nonverbal) from audience.	• Smoothly integrates appropriate feedback (verbal and nonverbal) from audience into presentation.	

BONUS: Any exceptional parts of the presentation can be awarded the extra mark	**1**

GENERAL FEEDBACK:

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TOTAL	**/25**

ANNEXURE C

LECTURER FEEDBACK

NAME OF STUDENT: ....   **STUDENT NUMBER: ....**   **MODULE: ....**

TASK	STUDENT SUBMISSION	MAXIMUM MARK	STUDENT MARK	WEIGHT	LECTURER FEEDBACK
Project Plan	Documentation	100		10%	
Requirements Analysis	Documentation	100		20%	
Solution Development	Documentation	100		20%	
Implementation	Program modules; Database	100		40%	
Presentation	PowerPoint slides; Working system	100		10%	
Total Mark				**100%**	

Additional Comments:

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ANNEXURE D
ATTENDANCE RECORD

Student	W1	W2	W3	W4	W5	W6	W7	W8	W9	W10	W11	W12

ANNEXURE E
DECLARATION OF AUTHENTICITY

Declaration of authenticity	

I, _____ ID Number, _____
hereby declare that this portfolio, and any evidence included therein, contains my own independent work and that I have not received help from other groups.

I confirm that we have not committed plagiarism in the accomplishment of this work, nor have I falsified and/or invented experimental data.

I accept the academic penalties that may be imposed for violations of the above.

_____   _____
STUDENT SIGNATURE   **DATE**

ANNEXURE F

LETTER TEMPLATES FOR STAKEHOLDERS

Your WIL may require an interaction or placement at a place of work or NGO/NPO. **Please obtain the forms from your campus WIL co-ordinator** and as instructed, complete the form and get the relevant signatures.

This form should be submitted to your lecturer at the first submission point where your initial WIL project plan is presented. A copy of this letter must be included in your final project/PoE file for submission.

STUDENT APPLICATION FOR A PLACEMENT: LETTER TO ORGANISATION

TO BE COMPLETED BY STUDENT REQUIRING A LETTER FROM THE CAMPUS

DATE: _____

STUDENT NUMBER: _____
QUALIFICATION: _____

NAME AND SURNAME:

_____
SIGNATURE: _____

ADDRESS OF COMPANY:

_____

_____

_____

NAME OF CONTACT PERSON: _____
TELEPHONE NUMBER: _____
E-MAIL ADDRESS: _____

STUDENT APPLICATION FOR A PLACEMENT: LETTER TO ORGANISATION

LETTER TO POTENTIAL PLACEMENT/INVESTIGATION OR OBSERVATION ORGANISATION

Brand Letterhead   **Date**
Student number: **xxxxxxxx**
Name: **Student full names and surname**
ADDRESS: **Name of company/organisation**
                         Company address

Dear Prof/Dr/Mr/Mrs/Miss

OPPORTUNITY FOR WORK INTEGRATED LEARNING

The Independent Institute of Education (The IIE) is a registered and accredited private higher education provider. Brand name is a brand of The IIE. One of our key aims with all our qualifications is to ensure students are work ready and that includes providing opportunities, where relevant or appropriate, for students to either observe or investigate a workplace or in fact spend some time on a placement in such an environment.

In the case of the Name of programme, the requirement is brief outline of requirement and as briefly mentioned in our conversation earlier, we would be grateful if you could accommodate number of student/s for duration period to carry out the requirement. In particular, the student/s would need to slightly more detailed explanation of what the student must do.

Our students are briefed and trained in relation to professional conduct at work and our expectations of them when they are with you – we will also provide you with a direct contact person on the campus for questions, queries or concerns.

If you are able to consider this request, I will provide you with more complete information. In the interim included, please find the necessary background information in terms of the Work Integrated Learning outcomes to be assessed during this period. Please do not hesitate to contact me if you would like more information before making a decision.

Looking forward to hearing from you at your earliest convenience.

Yours sincerely,

_____
Name of your Coordinator
WORK INTEGRATED LEARNING COORDINATOR
Brand name and campus

_____
Name of Principal
PRINCIPAL

CONFIRMATION LETTER FOR WORK INTEGRATED LEARNING PLACEMENT

Date

ADDRESS: **Company Name**
                              Company address

Dear Prof/Dr/Mr/Mrs/Miss

CONFIRMATION OF WORK INTEGRATED LEARNING PLACEMENT

I have pleasure in confirming our recent discussion where your organisation indicated that the following opportunities are available:

1. A enter time period Work Integrated Learning for a student completing the enter name of qualification.

2. Duties during placement will include:

> 2.1
> 2.2
> 2.3
> 2.4

The student assigned to enter name of company/organisation is full names, surname and student number of student.

The student will make an appointment to meet you in person and will provide the necessary evaluation forms to be completed by a mentor at the end of the Work Integrated Learning period.

We previously provided you with the relevant module information OR Included please find the relevant module information providing you with the requirements of this module. Should you for any reason need to get hold of me, you are welcome to contact me on Tel 000 000 0000 or xxx@xxx.ac.za

Once again, may I express our sincere appreciation of your willingness to assist in this process.

Yours sincerely,

_____   _____
Name of WIL Coordinator   **Name of your Principal**
WORK INTEGRATED LEARNING COORDINATOR   **PRINCIPAL**
Brand name & campus

ANNEXURE G
PROFESSIONAL CONDUCT IN THE WORKPLACE

THE INDEPENDENT
INSTITUTE OF
IIE EDUCATION

[DOCUMENT TITLE]

1   Introduction

This learning unit is designed to highlight <u>transferable skills</u> which are necessary to succeed in the <u>21st century workplace</u>. These skills include teamwork, critical thinking, high-level problem-solving, communication, self-management and career readiness.

After completing this learning unit, you should be able to:

- Conduct yourself professionally in the workplace;
- Apply appropriate interpersonal skills in a professional context;
- Develop yourself and promote your career.

There are short videos and links embedded throughout the learning unit directing you to more readings on important topics. These are designed to give you a deeper understanding of some of the terms and terminology that you will encounter in this learning unit, as well as the circumstances that you may encounter as you enter the workplace.

2   Progressing from student-life to work-life

In the South African economy, employment opportunities are available in a range of very different organisations such as local government, public administration, the banking industry, private business, non-profit organisations and small, medium and micro-sized enterprises (SMME). Each of these potential employers have their own rules, expectations and organisational cultures. This means that you as a new employee would need to adapt and fit into this new environment.

The Future: How to create opportunities from change

[Source](#)
Run time: 1:50

As you move into the workplace, it is your responsibility to manage yourself. When you were at school, somebody actively looked after you (your parents and teachers); at university, you were encouraged to explore your identities and given more freedom of choice in your lives. However, you still had parents and lecturers who provided support and guided you.

Once you enter the world of work, you are expected to behave in certain ways and be professional, efficient and effective in your role as an employee. Any actions you choose to follow will have consequences (both good and bad). It is your responsibility to ensure you follow any instructions from your line managers and take control of your own performance and reputation.

Your first line of responsibility before moving into the workplace will be to secure interviews for yourself. [Compile](#) your curriculum vitae (CV) and include some specific information which would showcase your abilities and your educational achievements. Some information is considered irrelevant and should be [excluded](#) from your CV for various reasons. There are many CV templates on the Internet which you can choose from. If you are applying for jobs which are predominantly in a corporate environment, then your CV should be simple and reflect the formality of the company. However, if you will be applying for jobs with an arty or creative edge, then your CV can be much more elaborate and colourful.

You could hear of potential jobs through various channels, such as:

- Word of mouth – someone you know may hear about a vacancy and pass on the information.
- Media – newspapers and the Internet have thousands of jobs advertised.
- LinkedIn – create your own professional profile and upload your CV. Make connections and network in your chosen field.

- Recruitment companies.

It is important to be professional in your job search and this includes professional email addresses. Email addresses which do not portray you as an employee with integrity should not be used. An email address such as IwantToParty@gmail.com or tequila@yahoo.com will not give a good first impression of you and may be considered junk mail and never be seen by the person who the email is addressed to. Choose a professional looking email address e.g. Vusi.Molefe@gmail.com.

Each year you will have a meeting with your line manager or someone who manages your performance. This is normally called a Performance Review and will have a number of Key Performance Areas (KPAs) which your performance is measured against. You will be notified of these when you enter the workplace and relate to the job profile that you work in. These are reviewed annually as you grow in your job and take on more responsibility. Your salary increases will most probably be based on your KPA score.

One of the most important areas for you to attend to is meeting deadlines. Businesses function on the timeous delivery of their products and services and in most cases the deadlines cannot be extended. Think about your salary, you expect to be paid at the same time every month. What would happen if someone missed a deadline and you were paid a week later or even worse, never received it? Often, the work you will be required to complete by a deadline needs to move on to another person or department and if you miss your deadline, then you are holding up the process and putting those other employees under pressure to meet their deadlines.

3   Behaviour in the workplace

Your new employer would expect you to conduct yourself professionally and ethically from the first day.

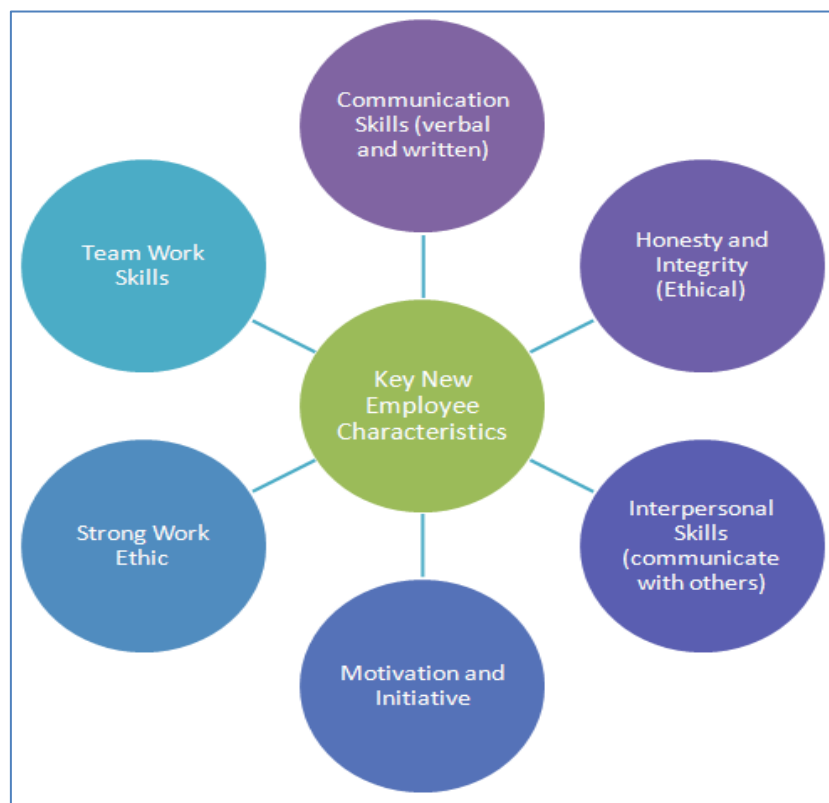**Professionalism at the workplace**
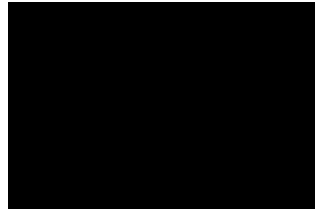
[Source](#)
Run time: 1:44

Most employers will have an induction programme for new employees, where you will get an introduction into the sections and operations of your new environment. It is a good idea to be prepared and make the most of learning about your new work environment during the induction. However, there is far more that you would need to do and learn. This will help you to understand what is expected of you and what is seen as appropriate behaviour. When you start working in a new position make sure you know what the organisation's culture is.

The more you understand your new work environment, the sooner you will be able to fit right in.

[Source](#)

These key skills are also referred to as interpersonal skills or soft skills in the workplace. Let us look a bit closer at each of these key skills:

3.1 Communication skills

Communication in the workplace must always be professional. It can never be on the same informal level as at home or with friends. If your office environment has a policy that English is the language of business, adhere to it. Professional communication at work includes language proficiency, reading, writing, problem solving and the use of information technologies.

Both written and oral communication in the workplace must always be professional. There are many books and articles written on the dos and don'ts of office communication. Here are some of the most important ones:

Communication Dos and Don'ts:

DO	DON'T
Develop your "business vocabulary":	Never use poor grammar, or slang.
Texting in the workplace should only be done when it is absolutely necessary. This article on texting language may be helpful on how to do this.	Never use the abbreviated language that you use with your friends on social media.
Listen to the presentations of your managers and research terms and terminology pertaining to your environment with which you are not familiar.	Refrain from using inappropriate phrases or any form of sexist, racist or heteronormative language.
Make use of a spelling and grammar checker when typing emails, reports and letters.	Do not let anger or frustration reflect in the tone of your verbal or written communication. Do not use CAPITAL LETTERS, bold font, slang or emoticons to indicate frustration.
Use the correct letterheads, stationery and templates for official business communication and refrain from using them for personal use.	Never gossip or constantly complain about trivial matters or use abrasive language.

But what about nonverbal communication in the workplace? Actions such a facial expression, eye contact, gestures and posture communicate far more that you could realise. It could even include the way you dress. Together with verbal communication, nonverbal communication may be used as important cues to strengthen the message. As a new employee, you should be aware how your nonverbal cues can be interpreted.

Consider the following scenario:

Your manager asks you to compile a report and then present this report at a meeting. This task provides you with a number of opportunities to showcase your abilities, work ethic and performance. What choices would you need to make?

There are many considerations, but those listed below are some of the important ones:

- Communication:

  o The language used in your report. Is it suitable for the audience you will be presenting to?
  o Verbal and non-verbal communication skills.

- Appearance:

  o The clothes you will be wearing to do the presentation. This should again be appropriate for the audience and the occasion.
  o It is not advisable to chew gum in an office environment if you are expected to have face-to-face meetings with people or do presentations.

If you are unsure of what you are expected to do, then ask for assistance. Your manager would rather you do this than have a presentation which is not fit for purpose or lacks vital information.

3.1.1 Meetings

Conducting yourself professionally and actively participating in business meetings would require a good understanding of the different types of meetings, their purpose and structure. The business environment generally has regular meetings for a range of business reasons.

Some examples are:

- Staff meetings;
- Product meetings;
- Stakeholder meetings;
- Committee meetings.

Communication in these meetings follows strict meeting protocols. It is also a good idea to take notes during meetings, especially if they are used to allocate work and responsibilities.

3.1.2   Telephone Etiquette

You will be required to be professional in your telephone communication. It is good business practise to state your name when answering your phone. Be polite and take notes if you are being requested to do tasks or pass on a message. Getting the message communicated correctly is an important function in the workplace. Knowledge of Business phone etiquette will assist you in dealing with clients, suppliers and associates in a professional way that will promote both your image and your organisation's reputation.

Another important consideration is your phone's ringtone. Keep it simple and professional.

3.2   Working with others: teamwork and group work

At work you will be required to work with people, either formally in teams or informally by sharing office environments. Your success will depend on cooperation with individuals and groups. You need a special set of skills when working on a one-on-one situation or in teams. This will require people skills:

Creating Value through People Skills (Source**)**

To be a good team member you would need to:

- Build a good rapport with other team members;
- Improve your listening skills;
- Develop speaking and presentation skills;
- Communicate to different audiences;
- Respect diversity;

- Give and receive criticism more effectively without being offensive or taking the criticism personally;
- Be assertive and diligent;
- Resolve conflict and deal with difficult people;
- Develop negotiation skills;
- Build leadership skills.

Many of these skills will be developed over time as you build experience in the workplace and receive further training.

3.2.1 Office politics and social protocols

All offices and organisations will experience office politics. There are many reasons why most work environments go through stages where office politics can cause problems. There are many reasons why these problems may surface and why this should be carefully managed.

Some of the reasons include:

- Employees aspiring to be noticed;
- Employees overstep and cross boundaries and their authority;
- Employees lack supervision and control in the workplace;
- Gossip at work leads to poor office politics;
- Jealous colleagues (professional jealousy) or people who perceive others as a threat.

As a professional, you are responsible for managing difficult situations: How can professional jealousy be prevented?

You will be spending many hours at work. It is, therefore, important that these situations be handled with great care and professionalism to prevent the conflict and to keep office relationships professional.

Dealing with differences in opinion and conflict is an important life skill to have which can be effectively used in the workplace. It is important to regulate your emotions and not take other individuals' opinions personally. Do not email or phone anyone until you have thought through your response carefully and remove all emotions out of your communication. If you do not, you run the risk of inflaming the situation and coming across as volatile and unprofessional.

3.2.2. Professional networking

Networking with co-workers in the organisation and with professional bodies helps you to grow and develop your skills and career and build communities of practice. Social networking such as creating professional profiles on LinkedIn helps to open up opportunities, create awareness and build your professional portfolio.

4   Ethics, trust, honesty and integrity

Ethical behaviour means you are doing the right thing for the right reasons. E.g. not taking home office stationery, using the company's Internet connectivity for personal use, gossiping about fellow employees, harassment and discrimination of any kind. There are various offences you could commit in the workplace which you could possibly be fired for. Many are related to ethics, such as stealing, revealing confidential information, insubordination, dereliction of duty, harassment and discrimination etc.

You want to trust your employer and believe that they will always have your best interest at heart. Your professional conduct will create a mutual trust relationship at the organisation. This requires ethical behaviour, knowing what is right and acting accordingly. Ethics is doing the right thing even when no-one is watching.

The following are some pointers that will guide you towards creating this trust relationship:

- Never exaggerate on a Curriculum Vitae or add skills and qualifications that you do not have.
- Be punctual for meetings and appointments.
- Meet deadlines.
- Do what you said you will do and communicate immediately if you are not able to honour your commitments.
- Conform to the organisational culture and stick to the "rules".
- Be open and honest with your colleagues and manager if something goes wrong. Do not lie.
- Respect your organisation, their resources and management.
- Sensitive information must be kept confidential. This includes any information about your salary or other forms of remuneration. You may not discuss with other employees how much you earn.
- Do not use the organisation's resources such as stationery, Internet connectivity and telephones for personal purposes.

5   Managing professional spaces and appearances

One of the biggest adjustments that is required when bridging the stage of being an informal student to a professional in the workplace is dress code. Would you trust a bank manager who wears dirty shoes, chews gum and uses informal language or slang? You must dress for success – you must look the part if you want to succeed. Dressing appropriately will boost your self-confidence. Read this article for more information: 20 Personal Appearances Tips for the Workplace.

In open office environments, it is particularly important to consider your colleagues in the shared space. These are some of the areas that can cause conflict:

*   Noise - Do not talk too loudly as you may distract your colleagues from their work. It is very difficult to concentrate when there is too much noise.
*   Temperature - Do not adjust the temperature of the air conditioner. These are normally set at a standard temperature which is considered comfortable for the majority of people. This is around 23 degrees. If you feel too hot or cold then plan to adjust your personal space (an extra jersey, lap blanket, or a desk fan) to your comfort level.
*   Neatness - Keep your office area neat and organised. You may be permitted to personalise your area with photographs or other small items. Keep these to the minimum so they do not intrude on your workspace. All décor must be appropriate and portray a professional image.
*   Smells – Keep the smelly food for home. Your colleagues may not appreciate your tuna or garlic-laced lunch.

6   Behaviour and conduct outside of working hours

Your conduct outside of office hours is as important as your conduct during working hours. This is also true for your online behaviour. Recruiters and companies often scrutinise online social media and behaviour when they decide on the suitability of a candidate. If you are irresponsible and post inappropriate pictures or comments, it may cost you your job.

The following are actions on social media that may have dire consequences for you as an employee:

- Making negative comments about your manager, your colleagues or organisation;
- Making derogatory comments or commenting on controversial social media posts;
- Mentioning salaries, complaining about your salary or new job offers;
- Sharing photos of wild parties, alcohol consumption and nudity;
- Making threats online, even jokingly.

The conduct and standards expected for online communication is often referred to as [Netiquette](#).

7   Contracts and legal matters

When you start working either permanently, as an intern or as a contract employee, you need to know what your responsibilities and rights are in advance. The very first document you will be expected to sign will be your conditions of service for employment. These are normally standard for colleagues in the same or similar positions but could have been customised to include additional responsibilities as the job requires. Read your contracts carefully before signing them as by signing them, you acknowledge that you are accepting the tasks specified. Ask if you do not understand certain clauses and information.

8   In Closing

It is better to be well prepared and have the appropriate expectations when you enter the job market. In this learning unit, we introduced some areas that will assist you in this preparation. It is also important to realise that we live in a fast-paced world where technology, information and situations constantly change.

In summary, make sure that you always stay informed and well-prepared, keep records and conduct yourself in a way that will grow your opportunities to your long-term advantage.

9   Bibliography

Lawson, K. 2016. *New Employee Orientation Training*. Alexandra, Virginia: Association For Talent Development (ATD Workshop Series). [Online]. Available at: https://ezproxy.iielearn.ac.za/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=e020mww&AN=1107620&site=ehost-live [Accessed 9 December 2020].

National Research Council. 2012. Education for Life and Work: Developing Transferable Knowledge and Skills in the 21st Century. Washington, DC: The National Academies Press. https://doi.org/10.17226/13398 [Accessed 9 December 2020].

Robles, M. M.2012. 'Executive Perceptions of the Top 10 Soft Skills Needed in Today's Workplace', Business Communication Quarterly, 75(4), pp. 453–465. doi: 10.1177/1080569912460400.