



**Tshwane University
of Technology**

We empower people

WORK INTEGRATED LEARNING

WORK GUIDE

2023

WORK INTEGRATED LEARNING

FACULTY OF ICT
(INFORMATION AND COMMUNICATION
TECHNOLOGY)

Department of Computer Science

WORK INTEGRATED LEARNING WORK GUIDE

FACULTY: Information and Communication Technology

DEPARTMENT: Computer Science

Subject Code: WOC316D

Year:

Course Code: DPRS0FD

Semester:

Surname: MAVASA

Initials: MRD

Student number: 219627467

Documentation approved:

| | |
|---|--|
| 1. Student information | |
| 2. Workstation information | |
| 3. Undertaking by student | |
| 21a. Duties performed during placement | |
| 22. Log sheets (24 weeks) | |
| 23. Report | |
| 24. Evaluation by student | |
| 25. Students personal abilities evaluated by mentor | |
| 26. Declaration by the student | |

Result: Fail – Incomplete (FC)
Pass – Complete (PC)
Pass – Exemption (PE)
Pass – Recognition (PR)

| |
|--|
| |
| |
| |
| |

Coordinator

Date

Contents

| | |
|---|----|
| WORK INTEGRATED LEARNING | 1 |
| INDUSTRY EXPOSURE..... | 1 |
| WORK INTEGRATED LEARNING WORK GUIDE..... | 2 |
| 1. STUDENT INFORMATION | 5 |
| 3. UNDERTAKING BY THE STUDENT | 6 |
| 4. Introduction | 7 |
| 5. Vision and Mission statements (TUT) | 7 |
| 6. Vision and Mission statements (Dept: Computer Science) | 7 |
| 7. Definition of terms | 8 |
| 8. Advantage of the Work Integrated Learning program | 8 |
| 9. Application by students for Work Integrated Learning | 9 |
| 10. Registration for Experiential Learning (IDC30BD or IDC30BT) | 9 |
| 11. Registration for Work Integrate Learning (WIL) | 10 |
| 12. Work Integrated Learning..... | 10 |
| 13. Guidelines for mentor, student and T.U.T..... | 11 |
| 14. Visits to students by the Work Integrated Learning Co-ordinator | 12 |
| 15. Misconduct of students at workstations | 12 |
| 16. Abuse of students at workstations..... | 12 |
| 17. Sexual harassment | 12 |
| 18. Labour relations act: Work Integrated Learning | 13 |
| 19. Curriculum – Course Outline | 13 |
| 20. The objectives of Work Integrated Learning | 14 |
| 21. ASSESSMENT METHODS AND CRITERIA..... | 16 |
| 23. REPORT | 23 |
| 24. EVALUATION BY THE STUDENT | 24 |
| WORK INTEGRATED LEARNING STUDENT MARKSHEET | 27 |

Dear Student

Welcome to a very interesting and exciting phase of your studies.

By now you are in a fortunate position to be placed at a workstation for this specific level of your Work Integrated Learning (Experiential Learning).

As you probably know by now, finding a position at a workstation is not easy as the requests for placement exceed the placement possibilities by far. So, do your utmost and give your full co-operation to your mentor/supervisor. You still have a lot to learn and your future depends on your attitude towards your vocation.

Please read through all the information supplied and make sure that you understand fully what is expected of you. Your progress depends on you and will be reflected on your academic record.

This workbook must be submitted to Your Department as soon as you complete your training.

Last but not least you and your mentor are not alone in this venture. We are there to support and guide you both. So, should you need any help (including problems, advice or enquiries), do not hesitate to contact your WIL (Cooperative Education) Lecturer or the Office of Co-operative Education.

Contact Staff members:

1 Dr TTF Setshedi

FACULTY OF ICT: OFFICE OF CO-OPERATIVE EDUCATION

Tel: (012) 382 9777/9840

Fax: (012) 382 9884

Switch Board: (012) 382 9000

2 Mr HD Masethe

Department of Computer Science

Tel (012) 382 9714

Masethehd@tut.ac.za

3 Mr T Netshisumbewa

WIL Coordinator

Tel (012) 382 6481

NetshisumbewaT@tut.ac.za

4 Mrs MR Mokhari

WIL Coordinator

Tel (012) 382 9027

MokhariMR@tut.ac.za

5 Mr VN Ranko

WIL Coordinator

Tel (012) 382 9112

rankovn@tut.ac.za

We wish you everything of the best during this important phase of your studies.

Regards

3. UNDERTAKING BY THE STUDENT

I, Mavasa Musa Royal Desireh_____(ID No. 010328 5549 08 7_____),
(student no. 219627467_____), a student registered with Tshwane University of Technology
for the year 2020_____for the National Diploma in Information Technology: Software Development,
am required to do practical training as part of my academic programme.

I undertake:

1. To obey all rules and regulations governing the Company/Institution/Department where I have been placed for the duration of my training.
2. Not to claim any remuneration and/or allowance during and after completion of my work integrated learning, unless the Company/Institution/Department voluntarily offers me a stipend.
3. To be responsible for the provision of my own accommodation, meals and transport between my place of residence and work for the duration of my training, unless the Company/Institution/Department is in a position to offer such.
4. Not to hold the Company/Institution/Department liable for my employment after completion of my studies.
5. Not to hold the company or Department liable for any injury that may be sustained during the period of Work Integrated Learning.
6. I have personally attended the Work Integrated Learning period as arranged with this company/organisation.
7. I have met and carried out all the requirements for the Work Integrated Learning as set out in the Workbook.
8. I have completed all PROJECTS/ASSIGNMENTS on my own without any assistance from anyone.

Signed at midrand_____on the 15 day of february_____, 2024_____.

Student

Networks: installation, maintenance, support and management
Operating systems
Hardware: upgrading, installation, repair and support
Programming: write, test and install packages, support
Software engineering: project management, advanced system design
Databases: design and programming
Web development
Support

Primary Function

Responsibilities include maintenance or optimisation of the environments mention above.

Secondary Function

The design, development and implementation of additional or new systems.

Orientation

After the orientation the student should be familiar with:

- Management structures
- Company rules and regulations
- Working hours
- Training policies and procedures
- Industrial processes within the company
- Sign and keep a contract with a job description

Safety and first aid

A suitable course should be attended in order to:

- Empower the student to render first line medical aid
- Alert the student to unsafe conditions and practices.

General Administration

The student should be familiar with:

- Filing systems
- Record keeping
- General office procedures
- E-mail, telephone and fax

Report writing

The student should be able to:

- Report data and conclusions accurately and neatly
- Type neat reports using word processing facilities

21. ASSESSMENT METHODS AND CRITERIA

The outcome of this course is to gain practical industry related exposure which should be directly linked to the following skills:

- a) work ethics and proper work environment behaviour,
- b) communication skills both verbal and non-verbal,
- c) presentation skills,
- d) problem solving and critical thinking,
- e) report writing and documentation skills,
- f) business skills and
- g) Hands on work related practical skills depending on the field you are in.

Assessment of this course will be done partly by your supervisor / mentor at your workplace and by your WIL coordinator at the university. The assessment method will be integrated assessment which includes summative and formative assessment of the visits, logbook and supervisors report.

Please note that this module follows continuous assessment rules, therefore a predicate mark will not be computed. The following table reflects the allocation of marks for the calculation of the final mark:

The mark allocation will be divided into 4 sections with each satisfying different criteria:

- The weights of the various marks may change during the six (6) months WIL period; these will be discussed with you when such arises.
- Marks will be captured continuously on ITS. If you have queries about your mark, you must immediately consult your subject lecturer (refer contact details).
- Once the Assessment mark is entered on TUT's mainframe computer, the marks cannot be changed.
- The pass mark for this module is 50%.

To pass the module a student must achieve a final mark of 50%.

| Assessment | Code | Weight |
|--------------------------|------|----------------------|
| Preparation for Industry | PI | 25% |
| Industrial Exposure (IE) | IE | 35% |
| Industry Project (IP) | IP | 40% (Subminimum 40%) |
| TOTAL | | 100% |
| | | |

22. LOG SHEETS (24 weeks)

Month 1: From 15 February 2024_____to_____29 February 2024

| Summary of Tasks | Duration | | Evaluation | | |
|--|----------|------|------------|--------------|------|
| | Weeks | Days | Poor | Satisfactory | Good |
| Meeting with the client (GEPF), for a tender briefing, getting the specifications and requirements for a software service. | | 1 | | | X |
| We had a meeting as a team, drafting a sketch (architectural diagram), showing the flow and development entities using SDLC process. | | 2 | | X | |
| Documentation of a tender document, specifying problem statements, solutions, AWS services to use to build a robust and scalable system for public service, which can be able to accommodate multitudes of people. | 1 | | | X | |
| Meeting a client (Kyalami Shisanyama), to build a website for them, we went there to get the requirements of them first. | 3 | | | | X |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

Subtotal: Weeks Days

Total to date: Weeks Days

Number of days
absent from work:

Reason:

Melvin Zitha

Mentor/Supervisor Name

Mentor/Supervisor Signature

29/02/2024

Date _____

Month 2: From 01 March 2024 to 31 March 2024

| Summary of Tasks | Duration | | Evaluation | | |
|---|----------|------|------------|--------------|------|
| | Weeks | Days | Poor | Satisfactory | Good |
| First development stage presentation of developing Kyalami Shisanyama, at the client. | | 1 | | | x |
| Completing the second development stage of the website. | 1 | | | | x |
| Second development stage presentation at the client (Kyalami Shisanyama). | | 2 | | | x |
| Data collection, in terms of getting the approximate number of clients, who might use the web application | | 2 | | x | |
| Final stage of development of the website (testing). | 1 | | | | x |
| Maintenance of a website and filling loopholes of it, and take it into production. | 2 | | | | x |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

Subtotal: Weeks Days

Total to date: Weeks Days

Number of days absent from work:

Mentor/Supervisor Name

Company stamp

Reason:

Mentor/Supervisor Signature

Date

Month 3: From 01 April 2024 to 30 April 2024

[illegible]

Subtotal: Weeks Days

Total to date: Weeks **Days**

Number of days absent from work:

Company stamp

Reason:

Melvin Zitha

Mentor/Supervisor Name

Mentor/Supervisor Signature

Date

| | | | | | |
|--|--|--|--|--|--|
| | | | | | |
|--|--|--|--|--|--|

Subtotal: Weeks Days

Total to date: Weeks Days

Number of days
absent from work:

Reason:

Company stamp

Melvin Zitha

Mentor/Supervisor Name

Mentor/Supervisor Signature

Date

Number of days
absent from work:

Reason:

Melvin Zitha

Mentor/Supervisor Name

Mentor/Supervisor Signature

Date

Number of days
absent from work:

Reason:

Melvin Zitha

Mentor/Supervisor Name

Mentor/Supervisor Signature

Date

23. REPORT

It is essential that the workbook reports should contain the detail of all tasks allocated to the student during the months of Work Integrated Learning. Reports written in “telegram style” will not be acceptable. These reports should contain enough data to place academic staff in a position to evaluate the Work Integrated Learning done as either acceptable or unsatisfactory for the specific period.

Report

The student must write a report regarding the work he/she performs. The report must be compiled in the following manner:

Introduction (50 words)

This section helps the reader understand your workplace and must include:

- The geographical location of your workplace;
- The name of your employing organization;
- The position occupied by you;
- The chronology – duration of your work with the organization.

Background (300 words)

This section provides the context in which you are working. It should include details such as:

- The nature of the work performed by your section/department;
- The department objectives;
- The nature of your work area;
- A statement of your duties;

Personal Role at Workplace (1000 – 2000 words)

This section must describe the actual work performed by you. If you work in a team, then it is not sufficient to narrate the work performed by the team; your own role must be clearly stated. You will be evaluated based upon the competencies that you claim in this section. Include details such as:

- Technical details of your work;
- How you have applied your knowledge and skills;
- The specific duties delegated to you and how you accomplished them;
- How you worked with the other team members (if applicable).

24. EVALUATION BY THE STUDENT

| 1. SUPERVISION | Never | Seldom | Sometimes | Frequently | Always |
|---|-------|--------|-----------|------------|--------|
| Was your immediate supervisor of assistance in your developing an effective relationship with co-workers? | | | | | X |
| Did he/she appear interested in you as an individual? | X | | | | |
| Did he/she give or provide for adequate training? | | | | | X |
| Did he/she motivate you to improve yourself? | | | | | X |
| Did you receive adequate instruction or assistance from your supervisor in the conduct of your work? | | | | X | |
| Would you recommend that future students receive training at this company? | | | | | X |
| The job satisfaction was positive. | | | | | X |
| The overall impression of the work experience was good. | | | | | X |

| 2. CO-WORKERS | Never | Seldom | Sometimes | Frequently | Always |
|---|-------|--------|-----------|------------|--------|
| Did you get along well with your co-workers? | | | | | X |
| Was there enough work to keep the employees busy? | | | | | X |
| Co-workers showed interest in the employing organization. | | | | | X |
| My co-workers displayed a willingness to improve themselves in their jobs. | | | | | X |
| We communicated effectively with each other. | | | | | X |
| Co-operation among my co-workers in accomplishing the work was always good. | | | | | X |

| 3. SELF | Never | Seldom | Sometimes | Frequently | Always |
|--|-------|--------|-----------|------------|--------|
| Did you feel you were performing work of value to your employer? | | | | | X |
| My academic preparation for this employment opportunity was good. | | | | | X |
| I received adequate training in my job. | | | | | X |
| I had a good understanding of my job duties and responsibilities. | | | | | X |
| The work atmosphere allowed for expression of my ideas. | | | | | X |
| My present position provides skills development and training experience which will prepare me to achieve my specific career goals. | | | | | X |

| 4. T.U.T. | Never | Seldom | Sometimes | Frequently | Always |
|--|-------|--------|-----------|------------|--------|
| Did the proposed experiential training program satisfy all your personal needs and was provision made for shortcomings and expectations? | | | | | X |
| Was the program discussed beforehand with you and did you understand the organisational set-up of the institution? | | | | | X |
| Did you understand all the regulations of the University in connection with your experiential training and were you acquainted with the facts? | | | | | X |
| Can you reconcile the restrictions within the organisation in question with the regulations of the University? | | | | X | |
| Can you or your employer foresee any problems which need to be discussed? | | X | | | |
| Are you aware of the fact that you must complete experiential training, as incorporated in the subject Experiential Training, before the National Diploma can be issued? | | | | | X |
| Are you aware of the fact that you must register separately for Experiential Training I and Experiential Training II? | | | | | X |
| Are you aware that you must register for the subject Project Design III along with Experiential Training II? | X | | | | |
| Are you acquainted with the experiential training policy? | | | | | X |
| The Work Integrated Learning Co-ordinator/lecturer(s) provided sufficient guidance, advice, assistance, etc. during visits and/or with telephone calls. | | | | | X |
| Was the time sufficient that the Co-ordinator/lecturer(s) spent with you during the visit(s)? | X | | | | |
| All/most of the special knowledge/skill/requirement expected of me was provided by the Institution. | | | | X | |

5. What was your wage/salary scale? R8500

6. How much overtime was required from you? N/A

7. What major fringe benefits did you enjoy? Hybrid Working flexibility

8. Did this position contribute to your **personal** development (e.g. decision-making, responsibility, inter-personal relations, etc.) Yes, I learnt more about customer experience, and effectively communication

9. How did Work Integrated Learning contribute to your **professional** development? Learning more in development and knowledge of Cloud based development, interacting with clients getting to know clients' requirements and expectations.

10. What do you consider to be the main advantage/disadvantage of Work Integrated Learning with this company? They have high expectations more than being a learner, so as a student I need to work more than how I was supposed to, and I need to be on the research side a lot.

11. Explain briefly any **special** or **additional** training which were provided to you. Training of 4IR trend in cloud engineering, and getting to be paid vouchers to take international exams, AWS and Microsoft Certifications.

12. Are there any other suggestion/improvement/change etc. which you would like to mention with reference to Work Integrated Learning? I suggest lecturers can visit workplaces more often and do evaluations themselves regarding how a learner is working.

13. Suggestions for the improvement in our academic program. Academic program should keep on checking what is on the market trend, in order to equip students with relevant information and to make them ready for industry.

Student signature

24/07/2024
Date



**Tshwane University
of Technology**

We empower people

WORK INTEGRATED LEARNING STUDENT MARKSHEET

Student Name: Mavasa Musa Royal Desireh_____

Student Number: 219627467

Course: Computer Science Extended

Examiner Name: Dr D Chuene

Signature: _____

**FACULTY OF INFORMATION AND
COMMUNICATION TECHNOLOGY
Department Computer Science**

