



COLLEGE OF ENGINEERING, SCIENCE & TECHNOLOGY

DEPARTMENT OF PRINTING TECHNOLOGY

**CERTIFICATE IV IN PRINTING TECHNOLOGY
PROGRAMME DOCUMENT**

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PROGRAMME TITLE: CERTIFICATE IV IN PRINTING TECHNOLOGY

1.0 INTRODUCTION:

The Certificate IV is a level lower than the Diploma programme.

Experience over the years has proved that there is need to offer a programme to meet the growing demands of the industry and to keep pace with the fast technological advancements of the printing world.

The course has been re-designed to better meet these needs by running a one and a half year course.

The first year is designed to give students a comprehensive introductory knowledge across a broad spectrum of aspects within the subject of Printing Technology. The course will provide students with a full-time educational programme that also offers a wide range of practical experience

The department has in the past offered Trade Certificate in the two major areas of printing, namely press and pre-press. Focusing on the new development, the two major areas have now been merged so that students cover all areas. This will enable them to thoroughly study the overall process and be involved in all aspects of the programme rather than focusing in one particular area.

The course will provide students with a full-time educational programme that provides a wide range of practical experience.

1.1 Rationale:

- (a) The Fiji National University (FNU) is Fiji's premier university for Technical and Vocational Educational (TVET) serving Fiji and the region.
- (b) FNU has the infrastructure, a high quality educational system, a local network of educational centres manned by highly skilled professionals in capacity building in Printing Technology.
- (c) It is the hope of the school that in the very near future that part of the programme will finally be transferred to the Secondary School level, to run as part of the FNU Franchised Courses that are already in place in selected Vocational Secondary schools around the country and the region..
- (d) This programme has been approved by the Industrial Committee as certified by the enclosed minutes.

1.2 Programme Philosophy:

[a] It is realized that learners' needs differ and with the view that learning is a "life-long process" this programme is designed to meet the needs of the students in the hope that they maintain a life-long interest and career in the field .

[b] *The Certificate IV programme is intended for those who have a natural aptitude in printing.*

[c] The intensive hands-on programme provides the students with basic practical skills and broad theoretical knowledge needed to prepare them for further studies

1.3 Aims:

The general aims of the programme include the following:

- *exploration of the basic skills, technical knowledge and understanding that will lay the foundation for subsequent industrial training in the specialized field of printing*
- *provision of opportunities for students to progress into specialized vocational education associated with the areas in which they have displayed a particular aptitude and level of ability*
- *to develop in students, an interest to make an objective choice of a particular occupation or career.*

1.4 Objectives:

At the end of the programme students should be able to:

- *demonstrate their understanding of the structure of the art by using design elements and design principles,*
- *appreciate that an effective design has elements and designs working together to make a unified unit,*
- *develop the necessary knowledge, techniques and skills to use in graphic reproduction and apply the principles of layout, drawing and image preparation,*
- *acquire knowledge, basic skills and practical training in principles and techniques required in press and finishing,*
- *acquire the basic knowledge and understanding of the relevance of arithmetic in the printing trade and associated subjects and to develop the knowledge of trade calculation applicable to costing and estimating in the printing industry.*
- *acquire and improve basic communication skills in clear thinking, speaking, reading and writing,*
- *demonstrate skills to show understanding of knowledge gained in the use of Apple Macintosh Computers,*

1.5 Graduate profile:

First year participants are school leavers with a careers interest in the Graphic Arts including Printing, Graphic Design, Screen Printing, Bookbinding and Print-Finishing.

Students, who successfully complete the programme, are then awarded with a Certificate IV in Printing Technology.

2.0 PROGRAMMEME REGULATIONS

2.1 Admission Requirements:

Applicants for the programme of studies must satisfy the following requirements;

- (a) minimum entry requirement is a pass in Fiji School Leaving Certificate (FSLC) with a pass in English, Mathematics, Chemistry and Physics*

- (b) a special interest or artistic flare for the subject as shown by a portfolio*

- (c) Company sponsorship*

Some computer experience would be an advantage

The Board of Studies may vary the entry requirement where there is a reason to believe that a candidate's background and experience are such that he/she can attain the required standard.

2.2 Credit Value of the Programme:

The Certificate IV Programme has a total value of 240 credit points.

2.3 Duration of the Programme:

The entire programme should be completed in three trimesters with six units in each of the first three semesters plus a six months of industrial training attachment.

Full completion of each of the three trimesters earns 60 credit points.

2.4 Attendance Requirement:

The programme requires a minimum 75% attendance per semester.

2.5 Cross Crediting:

Cross crediting is the prerogative of the Board of Studies responsible for the programme.

2.6 Assessment:

The standard required for the grades of performance in a unit and for the basis on which academic credits shall be granted shall be determined by the Board of Studies responsible for the programme.

3.0 PROGRAMME STRUCTURE

3.1 General:

The Certificate IV is a one and a half-year programme (three trimesters) with a structure of six units per semester with a value of 55 credit points per semester. The first semester of year two is fulfilled by a six months Industrial Attachment which, on successful completion, earns the required 60 credit points

3.2 Order of Delivery:

Students will proceed to the Diploma level upon successful completion of Certificate IV.

Summary tables of each semester programme can be found on page 7-8 prior to unit descriptors.

4.0 ASSESSMENT

4.1 Assessment Philosophy:

- The program designers see assessment as one of the key stages in the teaching-learning cycle, therefore the form of assessment they consider applicable is one that is practical and on-going.
- Continuous assessment is done as teaching progresses through the course. Assessment will be based on the areas covered by the students.
- Competency test, written assignments and projects are areas in which students will be tested.
- Written assignments, practical skills tests, and topic/unit tests are used to assess students' learning. Tasks set are those mainly requiring high levels of thinking.

4.2 Methods of Assessment:

The programme encourages the use of both Formative and Summative forms of assessment, as the two are believed to serve different purposes.

- *Formative assessment is a continuous process that is done both formally and informally through the course. This is done through observations during teaching as well as by closely monitoring the students' practical skills. Through these forms of assessment, facilitators are able to gauge the students' progress and use the result to help plan for improvement when required.*
- *Assignments, and tests at the end of the unit or after a topic is covered, are forms of summative assessment used. The results when added help to make up the final credit value that is used for reporting purposes.*
- *Assessment methods in the programme include:*

- *Written assignments /Projects /Tutorial presentations*
- *Practical skills tests and written tests*
- *Attendance requirement*

Assessment methods are detailed in the unit descriptors.

4.3 Criteria for Assessment:

- a. *Total mark:*
 - After successful completion of all the six (6) units a semester pass is awarded.
- b. *Unit Grading:*
 - Each unit has assessment components and related weighting.
 - In all units a total of at least 50% is required for a PASS to be awarded
 - A grade for each unit will be given using the FNU formal grading system

4.4 Validity & Reliability:

Validity:

Assessment methods are valid if they measure what is intended to be measured. The assessment procedures most appropriate for the units of this course are prescribed in each unit descriptor. The course encourages the use of continuous assessment because of its practical nature and tests are developed from a set of standard mini-blue prints to ensure validity.

Reliability:

Assessment methods are valid if the results can be relied upon as an accurate measurement of the student ability achieved in the area that is being assessed. In this programme the following measures are taken to maintain reliability:

- Use of marking schemes for the tests, assignments, projects and tutorial presentation
- Provision of a supportive assessment environment for students
- Team marking and checking

5.0 MONITORING, EVALUATION AND REVIEW

5.1 Board of Studies

Membership of the **Board of Studies** includes the following:

The school librarian or her/his nominee

The Head of School

The Head of the School of General Studies or his nominee

All the full-time staff involved in delivering the programme.

A representative of the teaching support staff that is involved with the programme

A student representative

The Board of Studies meets once a year and is responsible to the Academic Board:

- (a) to ensure that the curriculum is continuously developed and maintained as relevant to the objectives of the programme
- (b) to ensure the quality standards of teaching and student performance
- (c) to advise on procedures and criteria for recruitment, selection and admission of students
- (d) to identify additional resource requirements
- (e)

5.2 Examination Board

Membership of the Examination Board includes the following:

1. The Head of School
2. The programme leader(s)
3. The teaching staff who are involved in the programme

The Examination Board meets twice a year before and after the Examination and is responsible to the Academic Board for:

- (a) the maintenance of pass and grade standards in granting credits
- (b) fair treatment of students in granting credits
- (c) recommending the list of passes and grades for the approval of the Academic Board.

5.3 INDUSTRY ADVISORY COMMITTEE

Membership of the current Industrial Advisory Committee includes the following:

- 1 The Head of School (Executive Secretary)
- 2 The Programme leader(s).
- 3 Representative from the NTPC
- 4 Representative from the Ministry of Education
- 5 Representative from the University of the South Pacific
- 6 Government Printer (or nominee)
- 7 Francis Ben Lee : Pacific Printery
- 8 Sandeep Chauhan : Star Printery
- 9 Rupendra Sharma : Bluebird Printery
- 10 Frank Asesela : Franklin Designs
- 11 Representative from Scannertronics Ltd : Caines Jannif Ltd.
- 12 Penina Magnus (Mrs) : Fiji Times Ltd (Past Student)
- 13 Teaching Staff. (to provide information and clarify presentations)
- 14 One or more recent graduates

The Industry Advisory Committee meets once a year or whenever required.

Each Industrial Committee is responsible to the Council for advising the Board of Studies responsible for the programme within their field of interest or on matters relating to the relevance of the curricula and the appropriateness of the way in which the programme is organized and delivered.

Each Industrial Committee is responsible to the FNU Council and the Board of Studies for advice within their fields of interest and/or expertise on matters relating to the relevance of the curricula and the appropriateness of the way in which the programme is organized and delivered.

Certificate IV in Printing Technology

1st Trimester

Level	Unit	Code	Credit Points	Contact Hours	SDL Hours	Total SDL + Cont. per wk for 12 wks
3	Layout & Design 1	GAD 416	5	6 x 12 = 72	7 x 12=84	156
3	Graphic Pre-Press 1	PRT 303	5	6 x 12 = 72	7 x 12=84	156
3	Print Finishing 1	PRT 305	5	6 x 12= 72	7 x 12= 84	156
3	Trade Calculation 1	PRT 307	2	2 x 12=24	3 x 12=36	60
3	Printing Science 1	PRT 309	3	4 x 12=48	3 x 12=36	84
3	Technical Communication	COMM 301	3	4 x 12=48	3 x 12=36	84
	Totals		23	28x12	30x12	
	Total hours for the Trimester			336	360	696

2nd Trimester

Level	Unit	Code	Credit Points	Contact Hours	SDL Hours	Total SDL + Contact. per Semester
3	Layout & Design 2	GAD 418	5	6 x 12 = 72	7 x 12=84	156
3	Graphic Pre-Press 2	PRT 304	5	6 x 12 = 72	7 x 12=84	156
3	Print Finishing 2	PRT 306	5	6 x 12 = 72	7 x 12= 84	156
3	Trade Calculation 2	PRT 308	2	2 x 12=24	3 x 12=36	60
3	Printing Science 2	PRT 310	3	4 x 12=48	3 x 12=36	84
3	Occupational Health & Safety	OHS 403	3	4 x 12=48	3 x 12=36	84
	Total		23	28 hrs per wk x 12wks	30hrs per wk x 12wks	
	Total hours for the Trimester			336	360	696

3rd Trimester

Level	Unit Name	Unit Code	Credits Points	Contact Hours	SDL Hours	Total SDL + Cont. per wk
4	Screen Printing	PRT 405	5	6 x 12 = 72	7 x 12=84	156
4	Graphic Pre-press 3	PRT 401	5	6 x 12 = 72	7 x 12=84	156
4	Press & Print Finish. 3	PRT 402	5	6 x 12 = 72	7 x 12= 84	156
4	T/Calculation	PRT 403	2	2 x 12=24	3 x 12=36	60
4	Ethics, Value	EVG 401	3	4 x 12=48	3 x 12=36	84
4	P/Science	PRT 404	3	4 x 12=48	3 x 12=36	84
	Total		23	28 x12	30x12	
	Total hours for the semester			336	360	696

4.3 Delivery Mode:

This programme is conducted on a full time basis for three months called one Trimester. Details of the programme as mentioned above. Staff and students hours are calculated on twelve (12) contact weeks.

4.4 Industrial Attachment

Students are required to do six months of Industrial Attachment after completing the three Trimesters.

UNIT TITLE : GRAPHIC PRE – PRESS I

Level	:	3
Code	:	PRT 303
Stage	:	I
Credits Points	:	5

1.0 PURPOSE:

The purpose of this unit is to help students develop the basic knowledge, techniques and skills to use in Graphic Pre-press. This will include basic principles of layout drawing, image preparation, and introduction to computing and software awareness.

1.0 ENTRY REQUIREMENTS:

- 2.1 Minimum entry requirement is a pass in Fiji School Leaving Certificate (FSLC) or equivalent.
- 2.2 Company sponsorship
- 2.3 A special interest or artistic flare for the subject as shown by a portfolio
- 2.4 Some computer experience will be an advantage.

3.0 LEARNING HOURS:

3.1 Lectures	:	24 hours
Practical	:	48 hours
Total Contact	:	72 hours
Self directed Learning	:	84 hours

4.0 CONTENT:

Students will learn the five basic factors needed to produce an image.

4.1 Graphic Reproduction:

- Light - types and application on sensitive materials
- Camera – types and operation,
- Chemicals – identify different types, functions of each, preparation and safety.
- Original/Copy – types of original and classification
- Sensitive material – types and relationship to light.

4.2 Computing:

- *Introduction to Computing*
 - Identify hardware components and their uses
 - Operation procedure
 - Software and uses
 - Terms
 - Opening and saving files
 - Safety awareness

5.0 LEARNING OUTCOMES:

Upon successful completion of this unit students should be able to:

- 5.1 produce an image using the five factors
- 5.2 use tools correctly
- 5.3 use computer programmes at a basic level

6.0 ASSESSMENT CRITERIA:

The students will be able to:

- 6.1 Demonstrate the ability to produce an image
- 6.2 Demonstrate the ability to use the tools correctly
- 6.3 Demonstrate the ability to produce simple graphics and typesetting using PageMaker program

7.0 ASSESSMENT PROCEDURE:

Students will have continuous assessment throughout the semester on practical work and a written test.

7.1 Course Work:

Project	-	50%
Short Test I	-	25%
Short Test	-	25%
Total	-	100 marks

7.2 Final Exam

- 100%

7.3 Final mark

- 100% (200/2)

8.0 LEARNING AND TEACHING STRATEGIES

Students will have:

- lectures
- practical lab/ workshop
- fieldtrips
- self-directed learning

9.0 TEACHING AND LEARNING RESOURCES:

9.1 Prescribed Textbooks and reference material include:

- *Printing Fundamentals* :
- *Pira Visual Aids, British Printers, NZ Printers and Australian Printers magazines*
- *Macintosh II Manual* :Apple Computer Inc.
- *Graphic Arts Manuall* Frederick D Kagy
- *Printing Industry Manual* :
- *The Step-by-step Guide to Photo-Offset Lithography* : Robert M Swerdlow

9.2 TEACHING APPARATUS:

- OHP/Transparencies,
- Computers,
- Multi-media,
- Charts,
- White & blackboard,
- Library,
- Lecturers,
- Tutorial assistance
- Photocopier

UNIT TITLE : PRESS & PRINT FINISHING I

Level	:	3
Code	:	PRT 305
Stage	:	I
Credits Points	:	5

1.0 Purpose:

The purpose of this unit is to provide students with the knowledge, basic skills and practical training in the principles and techniques required in Press and Finishing.

2.0 ENTRY REQUIREMENTS:

- 2.1 Minimum entry requirement is a pass in Fiji School Leaving Certificate (FSLC) or equivalent.
- 2.2 Company sponsorship
- 2.3 A special interest or artistic flare for the subject as shown by a portfolio
- 2.4 Some computer experience will be an advantage.

3.0 LEARNING HOURS:

3.1 Lectures	:	24 hours
Practical	:	48 hours
Total Contact	:	72 hours
Self Directed Learning	:	84 hours

4.0 CONTENT:

Students will learn the following areas:

4.1 In Press

- General maintenance and lubrication of machines
- Correct use of tools
- The point system
- Basic methods of printing
- “Small machine” operation
- Printing single colour sheet-fed
- Image-carrier forms and plates
- Trouble shooting
- Correct use of materials and solutions

4.2 In Finishing:

Styles of Bookbinding

- quarter flush
- Padding

Securing Operation

- adhesive
- wire stitching
- sewing

Paper Classification

- types of paper and board
- weight and size
- storage

5.0 LEARNING OUTCOMES:

Upon successful completion of this unit students should be able to:

5.1 In Press:

- apply basic skills in press and finishing,
- maintain and lubricate printing and finishing machines,
- identify types of press and finishing machine parts and their uses,
- identify solutions to problems on basic machine operation.

5.2 Finishing

- Demonstrate small machine operation,
- Use correct solution and tools in maintaining and lubricating of machines,
- Demonstrate how the machine parts are adjusted and explain their uses,
- demonstrate the ability to solve minor problems on machine operation.

7.0 ASSESSMENT PROCEDURES:

Students will have continuous assessment throughout the semester on practical and written tests

7.1 Course Work:

Project	-	30%
Assignment	-	30%
Test	-	40%
Total	-	100 marks

7.2 Final Exam	-	100%
Total		200 marks

7.3 Final mark	-	100 (200/2)
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8.0 LEARNING AND TEACHING STRATEGIES:

- Lectures
- Practical Lab/Workshop
- Self-directed learning
- Research

9.0 LEARNING AND TEACHING RESOURCES:

9.1 Prescribed Textbooks and references s:

- *Hints for Pressman* : Heidelberg
- *TCl Assignments*
- *Manual for Lithography* : Ian Faux
- *Printing Industry* : Straus

9.1 Teaching apparatus

- OHP/Transparencies, Computers,
- Multi Media,
- Charts,
- White & Blackboard, Library, Lecturers,
- Tutorial assistance and Photocopier
- Heidelberg 10 X 15 platen Multi-lith 1250,hamada Star 500,
- GTO, Folding, Guillotine and Stitching machine.

UNIT TITLE :	TRADE CALCULATION I
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Level : **3**

Code : **PRT 307**

Stage : **I**

Credits Points : **2**

1.0 PURPOSE:

- 1.1 The purpose of this unit is to provide basic understanding of the relevance of arithmetic in the printing trade and associated subjects, and to develop the knowledge of trade calculation applicable to costing and estimating in the printing industry.

2.0 ENTRY REQUIREMENTS:

- 2.1 Minimum entry requirement is a pass in Fiji School Leaving Certificate (FSLC) or equivalent.
2.5 Company sponsorship
2.6 A special interest or artistic flare for the subject as shown by a portfolio
2.7 Some computer experience will be an advantage.

3.0 LEARNING HOURS:

- 3.1 Lectures : 24 hours
Total Contact : 24 hours
Self directed Learning : 36 hours

4.0 CONTENT:

Students will study the following areas:

- 4.1 Arithmetic for Printers:
- Fractions:
 - Add, subtract and divide fractions
 - Convert fractions to whole numbers etc.

 - Percentage:
 - Work on percentage when adding, subtracting and dividing whole numbers or part.
 - Convert figures, decimals or fractions to percentage.

 - Decimal:
 - Work on decimals and application when adding, subtracting, dividing, and converting figures.

- Weight (Mass/Length/Volume):
 - Add, subtract, divide and convert kilograms to grams
 - Differentiate between kilograms and grams
 - Use measurement on the ruler correctly
 - Convert millimetres to centimetres and vice-versa.
- 4.2 Introduction to International Standard Organization (I.S.O):
- Paper sizes:
 - Differentiate between paper sizes.
 - Identify the untrimmed and trimmed sizes.
 - Identify the different paper sizes to specific jobs.
 - Paper Calculations:
 - Differentiate the series of paper sizes.
 - Work out the amount of paper used for any given jobs.
 - Calculate the quantity of paper for a given job.
 - Paper Weight:
 - Identify the various weights of paper.
 - Work out the total weight of paper required for a given job.
 - Calculate the cost of paper for a given job.
- 4.3 'En' Measurement:
- Theory:
 - Define different standard units of measurements (em/en/points/pica/ems)
 - Work out number of 'ens' in a paper.
 - Calculate the number of printed pages using the 'en' theory.

6.0 LEARNING OUTCOMES:

Upon successful completion of the programme students should be able to:

- 6.1 differentiate between the standard units of measurement (em/en/points/pica/ems)
- 6.2 Learn 'en' method in calculation
- 6.3 Use printer's arithmetic efficiently where applicable.
- 6.4 Identify different sizes and weights of paper.

7.0 ASSESSMENT CRITERIA:

Students will demonstrate how they can:

- 7.1 Differentiate the standard units of measurements
- 7.2 Use 'en' method in material calculation
- 7.3 Use printer's arithmetic efficiently where applicable.
- 7.4 Identify different sizes and weights of paper

8.0 ASSESSMENT PROCEDURES:

7.1	Course Work :		
	3 Class Tests	-	60%
	Assignments	-	40%
			100 marks
7.2	Final Examination (2 Hours)	-	100%
	Course Work mark	-	200 marks
7.3	Final mark	-	100 %

8.0 TEACHING AND LEARNING STRATEGIES:

- Formal lectures
- Tutorials
- Self directed work

9.0 TEACHING AND LEARNING RESOURCES:

- 9.1 Prescribed text: and Reference materials include:
- *Printers Arithmetic*
 - *Costing and Estimating:* London Institute of Printing publication
- 9.2 Teaching /Learning Apparatus:
- White board
 - OHP and multi media

UNIT TITLE : APPLIED PRINTING SCIENCE I

Level : **3**

Code : **PRT 309**

Stage : **I**

Credits Points : **3**

1.0 PURPOSE:

The purpose of this unit is to introduce the students to the concepts and techniques of science in the printing industry.

2.0 Entry Requirement:

- 2.1 Minimum entry requirement is a pass in Fiji School Leaving Certificate (FSLC) with a pass in English, Mathematics, Chemistry and Physics
- 2.2 Company sponsorship
- 2.3 A special interest or artistic flare for the subject as shown by a portfolio
- 2.4 Some computer experience will be an advantage.

3.0 LEARNING HOURS:

3.1 Lectures	:	24 hours
Tutorial	:	24 hours
Total Contact	:	48 hours
Self directed Learning	:	36 hours

4.0 CONTENT:

2.8 Measurement

- International system of metric units. (SI Units) and Conversions.

4.2 Chemical used in Photo Process

- paper size:
- acids, handling.
- miscellaneous chemicals, protective measures.
- flammable liquids, flash points of solvents,
- safety precautions,
- acid or alkaline burns,
- first aid treatment

- 4.3 **Machines – Force and energy**
- Printing process and materials
 - Distinguish between mass and weight.
 - Learn the units for measuring mass and force.
 - Learn the various forms of energy in the electro-magnetic spectrum and explain their inter-relation.
 - Determine work done by force.
 - Explain the meaning of ‘torque’
- 4.4 **Relative Density and Buoyancy**
- :
- solid heavier than water,
 - solids lighter than the same volume of water.
 - relative density of a geometrical form.
 - relative density of liquids (measurements).
- 4.5 **Basic Chemistry**
- The nature of: elements and compounds, atoms and molecules, and mixtures.
 - The three forms of matter, changes of state, physical and chemical changes.
 - Metal and non-metals.
 - Classes of chemical compounds, oxides, acids, bases and salts.
 - Solutions, efflorescence, deliquescence
- 4.6 **Photographic Chemicals**
- Halogens and halides, silver halides, gelatin.
 - Solutions, suspensions and emulsions, photographic emulsion.
 - Development, accelerator, restrainer, preservative chemicals
 - Fixing image, hypo sulphite alum.
- 4.7 **Heat and Temperature**
- Measurement of temperature.
 - Temperature control
 - Measurement of heat.
 - Specific heat capacity, latent heat.
 - Humidity – absolute and relative.
 - Air-conditioning.

5.0 LEARNING OUTCOMES:

Upon successful completion of this unit, the students should be able to demonstrate understanding of :

- 5.1 International system of metric units.
- 5.2 The printing processes and the different materials used.
- 5.3 Density and buoyancy and its relevance to printing.
- 5.4 The basic chemistry required in printing
- 5.5 The heat and temperature control required in printing.

6.0 ASSESSMENT CRITERIA:

Students will demonstrate that they can:

- 6.1 Learn international system of metric unit,
- 6.2 Explain the printing process using types of materials,
- 6.3 Differentiate the importance and relevancy of density and buoyancy in printing,
- 6.4 Use chemistry correctly in printing
- 6.5 Identify factors affecting printing.

6.0 ASSESSMENT PROCEDURES;

7.1 Course Work:

• Short Test 1	-	20%
• Short Test 2	-	20%
• Assignments 1	-	15%
• Assignment 2	-	15%
• Practical lab. Test	-	30%
Total		100 Marks

7.2 Final examination

Semester total - 100%
200 marks

7.3 Final mark - 100 %s (200/2)

8.0 TEACHING / LEARNING STRATEGIES

- Lectures
- Practical Lab / Workshops
- Field Trip
- Research Assignments

9.0 TEACHING / LEARNING RESOURCES:

Prescribed text: and Reference materials include :

- *Complete Junior Physics* : Arthur Atkinson
- *Photography* : Gibson
- *Science of Printing Tech* : RR Coupe

- *The Printing Industry* : Strau

UNIT TITLE	:	GRAPHIC PRE – PRESS 2
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Level : **3**

Code : **PRT 304**

Stage : **2**

Credits Points : **5**

1.0 PURPOSE:

The purpose of this unit is to further help the students to develop necessary knowledge, skills and techniques to use in Graphic Pre-press.

2.0 ENTRY REQUIREMENTS:

- 2.1 A successful pass in Stage I of the programme

3.0 LEARNING HOURS:

3.1 Lectures	:	24 hours
Practical	:	48 hours
Total Contact	:	72 hours
Self Directed Learning	:	84 hours

4.0 CONTENT:

Students will use the five basic factors to produce different types of image.

4.1 **Graphic Reproduction**

- Line-work original, tint, halftone photos, continuous tone original, black & white copy or coloured.
- Planning of multi-colour and combination work.
- Layout Preparation
- Layout size, gripper allowance – paper & plate, image position, image size, work & turn, work & tumble, work and twist.

4.2 **Computing**

- Introduction to design and software, output devices II, storage devices II, saving and electronic document II, managing a file format, managing files II

- Introduction to Adobe illustrator 5.5 II, tools palette II, illustrator design II, saving the electronic data II.

5.0 LEARNING OUTCOMES:

Upon successful completion of this unit students should be able to:

- 5.1 Follow correct procedures on preparation of an image, halftone negative/positive, tint and use right exposure, developing time and the correct Lens aperture
- 5.2 Prepare a page with different dimensions, allowance, format and be familiar with the different types of tools and their uses.
- 5.3 Design and work on Layout Software, understand the function of Output and Storage Devices, and able to save, work on File Format, Managing Files.
- 5.4 Use Graphic Software with understanding of Saving the Electronic Data, Tools and their uses.

6.0 ASSESSMENT CRITERIA:

The students will be able to:

- 6.1 Produce different types of images with correct developing, exposure and F/No.
- 6.2 Demonstrate his/her ability to prepare page Layout with correct allowance, format and familiar with 'When'. 'How' and 'When' to use Tools on Page Layout.
- 6.3 Demonstrate the ability in producing different Designs work on Layout Software.
- 6.4 Produce any Text and Graphics using available Graphic Software with the understanding of the Tools and their uses.

7.0 ASSESSMENT PROCEDURE:

Students will have continuous assessment throughout the semester on practical work and a written test.

7.1	Course Work:		
	Project	-	50%
	Short Test I	-	25%
	Short Test	-	25%
	Total	-	100 marks
7.2	Final Exam	-	100%
	Total Semester mark		200 marks
7.3	Final mark	-	100% (200/2)

8.0 LEARNING AND TEACHING STRATEGIES:

Students will have:

- Lectures and research
- Fieldtrips
- Practical Lab/ Workshop

- Self-directed learning

9.0 TEACHING AND LEARNING RESOURCES:

9.1 Prescribed Textbooks and references include:

- *Printing Fundamentals* : *Pira Visual Aids, British Printers,*
- *NZ Printers and Australian*
- *Printers magazine*
- *Macintosh II Manual* : *Apple Computer Inc.*
- *Graphic Arts Manual* :
- *Printing Industry Manual* :

9.2 TEACHING APPARATUS:

- OHP/Transparencies,
- Computers,
- Multi Media,
- Charts,
- Photocopier.
- White & Blackboard,
- Library, Lecturers,
- Tutorial assistance and

UNIT TITLE : PRESS & PRINT FINISHING 2
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Level : **3**

Code : **PRT 306**

Stage : **2**

Credits Points : **5**

1.0 PURPOSE:

The purpose of this unit is to further provide students with the knowledge, basic skills and practical training in the principles and techniques required in press and finishing.

2.0 ENTRY REQUIREMENTS:

2.1 A successful pass in Stage I of the programme.

3.0 LEARNING HOURS:

3.1 Lectures	:	24 hours
Practical	:	48 hours
Total Contact	:	72 hours
Self Directed Learning	:	84 hours

4.0 CONTENT:

Students to enhance their learning in these areas:

4.1 Press:

- Press Design
- Rollers
- Registration Devices
- Feeder & Delivery
- Inking & Damping Rollers
- Printing two or three colour (line-work)
- Extra Operation (auxiliary)
- Image Carriers–formes and plates II
- Offset Cylinder Configurations
- Trouble Shooting II

5.0 LEARNING OUTCOMES:

Upon successful completion of this unit students should be able to:

- 5.1 Apply basic skills in press and finishing with confidence.
- 5.2 Identify machine parts.
- 5.3 Maintain and lubricate small printing machines
- 5.4 Be familiar with small machine operation
- 5.5 Be familiar with job instruction
- 5.6 Prepare and produce their own pad
- 5.7 Identify the main parts of the machine and their functions
- 5.8 Be familiar with standard paper size.
- 5.9 Be familiar with paper and board handling.

3.0 ASSESSMENT CRITERIA:

Students should be able to:

- 6.1 Demonstrate the correct use of lubrication oils and, when and where to use them.
- 6.2 Demonstrate machine operation
- 6.3 Follow instructions on the job bag
- 6.4 Demonstrate how to make pad
- 6.5 Demonstrate stitching machine operations
- 6.6 Differentiate between paper sizes and thickness.

7.0 ASSESSMENT PROCEDURES:

Students will have continuous assessment throughout the semester with practical and written tests.

7.1	Course Work:	Project	-	30%
		Assignment	-	30%
		Test	-	40%
	Total		-	100 marks
7.2	Final Exam		-	100%
	Total Course work mark			100 marks
7.3	Spreadsheet mark		-	100 % (200/2)

8.0 LEARNING AND TEACHING STRATEGIES:

Students will have:

- Lectures
- Practical Lab. Workshop`
- Fieldtrips (Industries)
- Self – directed learning
- Research

9.0 TEACHING AND LEARNING RESOURCES:

9.1 Prescribed Textbooks and references include:

- *Hints for Pressman* : Heidelberg
- *TCI Assignments*
- *Manual for Lithography* : Ian Faux
- *Printing Industry* : Straus

9.2 Teaching Apparatus:

- OHP/ Transparencies,
- Computers,
- Multi Media,
- Charts,
- White & Blackboard,
- Library,
- Lectures,
- Tutorial assistance
- Photocopier,
- Heidelberg 10 x 15 platen,
- Multi-lith 1250,
- Hamada Star 500,
- GTO,
- Folding, Guillotine and stitching machine.

UNIT TITLE : TRADE CALCULATIONS 2

Level : **3**

Code : **PRT 308**

Stage : **2**

Credits Points : **2**

1.0 PURPOSE:

To further provide understanding of the relevancy of arithmetic in the printing trade and associated subjects and to further extend the knowledge of trade calculation applicable to costing and estimating in the printing industry.

2.0 ENTRY REQUIREMENTS:

2.1 Student must have successfully completed Stage 1 of the programme

3.0 LEARNING HOURS:

3.1 Lectures	:	24 hours
Total Contact	:	24 hours
Self-directed learning	:	36 hours

4.0 CONTENT:

4.1 Paper and Board:

Weight:

- Identify the different types of paper and board and their respective weights.
- Select the most appropriate type of paper and board for a particular job

Size:

- Identify the different sizes.
- Select the most appropriate cutting size, so that particular sheet is utilized to its maximum.

4.2 Casting Off:

- Copy fitting:
- Standardized methods/measure/type size to fit a particular trimmed size length/depth.
- Also to work out the total number of 'ens' for a particular number of typescript; the number of lines per page and the total number printed pages.

4.3 Calculations:

- Work out the total number of printed pages using a standardized method/measure/length and leading.

5.0 LEARNING OUTCOMES:

Upon successful completion of this unit students should be able to:

- 5.1 Identify the most appropriate type of paper and board for a particular job.
- 5.2 Select the most appropriate cutting size, so that a particular sheet is utilized to its maximum.
- 5.3 Use basic principle in calculating materials and time for print production.

6.0 ASSESSMENT CRITERIA:

The student will:

- 6.1 Select the paper and board suitable for a particular job.
- 6.2 Demonstrate cutting skill to whatever size given
- 6.3 Show by calculation the material and time for print production

7.0 ASSESSMENT PROCEDURES:

7.1	Course Work:Project	Short Test 1	-	30%
		Short Test 2	-	30%
		Assignment 1	-	20%
		Assignment 2	-	20%
		Total	-	100 marks
7.1		Final Exam	-	100%
7.3		Final mark	-	100%

8.0 TEACHING AND LEARNING STRATEGIES:

- Lectures
- Self directed learning

9.0 TEACHING AND LEARNING RESOURCES:

9.1 Prescribed text:

- *Printers Arithmetic*
- *Costing and Estimating: London Institute of Printing Publication*

9.2 Teaching /Learning Apparatus:

- Lab work
- OHP and Multi media

UNIT TITLE : APPLIED PRINTING SCIENCE 2
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Level	:	3
Code	:	PRT 310
Stage	:	2
Credits Points	:	3

1.0 PURPOSE:

The purpose of this unit is to further develop students understanding of the concepts and techniques of science in the printing industry.

2.0 ENTRY REQUIREMENT:

2.1 Successful completion of Printing Science I

3.0 LEARNING HOURS:

3.1 Lectures	:	24 hours
Tutorial	:	24 hours
Total Contact Hours	:	48 hours
Self-directed	:	36 hours

4.0 CONTENT:

4.1 Chemical Reaction

Chemical reactions in all processes e.g. photography, etching corrosion fading. Printing materials, e.g. plastics, polymers, aluminium, paper etc.

- Explain simple chemical reactions as the breakdown of molecules or as the formation of oxides of elements
- Explain the process of combustion in air and the formation of oxides of elements
- State the conditions under which corrosion occurs and outline methods of combating it
- Outline the chemical reactions involved in etching printing materials

4.2 Lithographic Plate-making Letters:

Metals for plate-making (copper, zinc, aluminium etc) – Hardness M. Pt., Relative Density

- No-metals – paper & plate

4.3 Electricity

- The primary cell
- Measuring electricity
- Methods of controlling Carbon Arc
- Describe the concept of positive and negative charges and the forces between them
- Name the uses of static electricity in printing and allied operations
- Explain the operation of devices used for the elimination of static electricity
- Describe the conditions under which static electricity is a fire hazard

5.0 LEARNING OUTCOMES:

Upon successful completion of this unit, the students should be able to demonstrate understanding of:

- 5.1 Simple chemical reactions in different printing materials
- 5.2 Lithographic plate-making
- 5.3 Electricity and printing
- 5.4 Structure of different printing materials
- 5.5 Properties of polymers, polymerization and photo-polymerization**
- 5.6 Chemistry and printing

6.0 ASSESSMENT CRITERIA:

Students will demonstrate that they can:

- 6.1 Use international system of metric unit
- 6.2 Demonstrate the ability to explain the printing process using types of materials
- 6.3 Demonstrate the importance and relevancy of density and buoyancy in printing.
- 6.4 Demonstrate the ability to use chemistry correctly in printing

7.0 ASSESSMENT PROCEDURES:

7.1	Course Work:		
	• Short Test 1	-	20%
	• Short Test 2	-	20%
	• Assignment 1	-	15%
	• Assignment 2	-	15%
	• Practical lab. Test	-	30%
	Total Coursework mark	-	100%
7.2	Final examination	-	100%
7.3	Final Mark	-	100%

8.0 TEACHING AND LEARNING STRATEGIES:

- Lectures
- Practical Lab / Workshops
- Research Assignments

9.0 TEACHING AND LEARNING RESOURCES:

9.1 teaching / learning resources:

- Prescribed text and Reference materials:
- *Complete Junior Physics* : Arthur Atkinson
- *Photography* : Gibson
- *Science of Printing Tech.* : RR Coupe
- *The Printing Industry* : Strauss

UNIT TITLE : GRAPHIC PRE-PRESS 3
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Level	:	4
Code	:	PRT 401
Stage	:	3
Credit Points	:	5

1.0 PURPOSE:

The purpose of this unit is to encourage students learning to advance with minimum supervision.

2.0 ENTRY REQUIREMENTS:

Students must successfully completed stage 2 of Graphic Pre-press.

3.0 LEARNING HOURS:

3.1 Lectures	:	24 hours
Practical	:	48 hours
Total Contact	:	72 hours
Self Directed Learning	:	84 hours

3.2 Six months industrial attachment prior to graduation.

4.0 CONTENT:

Students will learn the following areas:

In Pre-press

4.1 Color Theory

- Color reproduction- methods, materials, equipments and contrast

4.2 Filters:

- Factors and equipment, use of filters, principles relating to color processing

4.3 Color Correction:

- Masking, Electronic Scanner, dot etching, quality control

4.4 Pre & Pre-press Proofing System:

- Types, advantages and Disadvantages, purpose

4.5 Quality Control:

- Importance of quality control, quality control devices, when and where to use them

4.6 Color Separation:

- Discuss the purpose and how color photos are separated

4.7 Multi-image Assembly:

- Layout Drawing- Prepare layout for multi-color work with job specifications this will include 2 page to 16 page imposition, sheet-work and half-sheet work.

4.8 In Computing:

- Familiar with the software, output devices, storage devices, saving an electronic document, choosing file format, managing file format and managing files.
- Produce black and white artwork or colored using illustrator, page-maker and photo-shop program.
- Introduction of new software versions e.g. In-Design, Quart Express, Publisher, Corel Draw etc.

5.0 LEARNING OUTCOMES:

Upon successful completion of this unit students should be able to:

- 5.1 Fully learn the process involved in image preparation this will include the following; black and white copy and multi-color work
- 5.2 Prepare the imposition of multi-page work whether it is half-sheet work or sheet-work
- 5.3 Prepare layout for any type of job despite of their finishing style
- 5.4 Select suitable programs that will match any type of artwork.

6.0 ASSESSMENT CRITERIA FOR LEARNING OUTCOME:

- 6.1 Ability to demonstrate the preparation of image Black & white or coloured
- 6.2 Demonstrate on paper the imposition method of half- sheet work and sheet-work
- 6.3 Draw layout depending on its finishing style
- 6.4 Demonstrate the ability to use each program on any type of artwork

7.0 ASSESSMENT PROCEDURE:

Students will have continuous assessment throughout the semester on practical work and a written test.

7.1 Course Work:

Project	-	50%
Short Test 1	-	25%
Short Test 2	-	25%
Total	-	100 marks
7.2 Final Exam	-	100%
7.3 Final mark	-	100%

8.0 LEARNING AND TEACHING STRATEGIES:

Students will have:

- Lectures
- Practical Lab/Workshop
- Fieldtrips (industries)
- Self-directed learning
- Research

9.0 TEACHING AND LEARNING RESOURCERS:

9.1 Prescribed Textbooks:

- *Color*
- *Complete Junior Physics - Arthur Atkinson*
- *Printing Industry*
- *Photo process- Practice 1,2,3- NZ Institute of Tech Correspondence*
- *The step-by-step guide to photo-offset Lithography: Robert M Swerdlow*

9.0 TEACHING APPARATUS:

- OHP/Transparencies,
- Computers,
- Multi Media,
- Charts, white & Blackboard,
- Library,
- Lectures, Tutorial assistance and
- Photocopier etc.

UNIT TITLE : PRESS & PRINT FINISHING 3

Level : **4**
Code : **PRT 402**
Stage : **3**
Credits Points : **12**

1.0 Purpose:

The purpose of this unit is to upgrade student's ability to a more advanced level so that they would be able to:

- 1.1 carries out jobs with minimum supervision
- 1.2 increase their practical knowledge and technique to a satisfactory level
- 1.3 provide student with more knowledge on finishing style and decoration

2.0 Entry requirements:

- 2.1 Students must successfully completed Foundation level

3.0 LEARNING HOURS:

3.1 Lectures	:	24 hours
Practical	:	48 hours
Total Contact	:	72 hours
Self directed Learning	:	84 hours

- 3.2 Six months industrial attachment prior to graduation.

3.0 Content:

Students will learn the following areas:

4.1 In Press

- Foundation
- Trouble Shooting
- Setting type for letterpress
- Locking-up types for letterpress
- Locking-up types and plates
- Press operation
- Press maintenance
- Image carriers Forms and Plate II
- Imposition
- Line-work and Halftone (full color) printing

4.2 In Finishing:

- Book Decoration
- Binding Styles
- Security Operation- Types Methods and Application
- Guillotine Operation

4.0 Learning Outcomes:

Upon successful completion of this unit students should be able to:

5.1 Solve problems on machines

5.2 Select and set types for job to be printed on letterpress

5.3 Lock-up types and plates

5.4 Operate all machines

5.5 Set machine for monochrome and full-color work

5.6 Bind and repair books with different finishing styles

5.0 Assessment Criteria for Learning Outcome:

Students will:

6.1 Remedy problems related to poor outcome of results

6.2 Demonstrate the ability to compose and select type face for any letterpress job

6.3 Demonstrate the ability to lock and feed the chase on the press

6.4 Demonstrate the ability to operate all machines-letterpress and offset

6.5 Demonstrate the ability to print monochrome and color jobs

6.6 Demonstrate in confidence the ability to bind and repair books.

6.0 Assessment Procedures:

Students will have continuous assessment throughout the semester on practical and written test:

7.1 Course Work:

Short Test 1	-	25%
Short Test 2	-	25%
Assignment 1	-	15%
Assignment 2	-	15
Project	-	20%
Total Course Work	-	100%

7.2 Final Exam - 100%

7.3 Final mark - 100%

7.0 LEARNING AND TEACHING STRATEGIES:

Students will be:

- Lectures
- Practical Lab/Workshop
- Fieldtrips (industries)
- Self-directed learning
- Research

8.0 TEACHING AND LEARNIG RESOURCES:

9.1 Prescribed Textbooks:

- *Printing Fundamentals*
- *Hints for Pressman : Heidelberg*
- *T C I assignments*
- *Manual for Lithography: Ian Faux*
- *Printing Industry: Strauss*

9.0 TEACHING APPARATUS:

- KORD,
- GTO,
- Multi-lith 1250,
- Hamada Star 500,
- Folding Machines, Stitching machine,
- Wholenberg Guillotine,
- OHP/Transparencies,
- Computers
- Multi Media,
- Charts,
- White & Blackboard,
- Library,
- Lecturers, Tutorial assistance and
- Photocopier etc.

UNIT TITLE	:	TRADE CALCULATION 3
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Level : **4**

Code : **PRT 403**

Stage : **2**

Credits Points : **2**

1.0 Purpose:

The purpose of this unit is to provide understanding on *estimating for a complete printing order and costing and analysing cost.*

2.0 Entry Requirements:

Students must successfully completed stage 2 of Trade calculation.

3.0 LEARNING HOURS:

3.1	Lectures	:	24hours
	Total Contact	:	24 hours
	Self-directed	:	36 hours

3.2 Six months industrial attachment prior to Graduation.

4.0 Content:

Students will learn the following areas:

4.1 Statistics

- Graphs; identify and draw types of graph

4.2 Introduction to estimating/Costing

- Interpret estimating and costing
- Work out the difference
- State the principles and purpose of estimating
- Inter-relationship with costing

4.3 Costing in Estimating

- Text System (en method/computer type setting)
- Pre-press, press, Finishing
- Material, labor (mechanical/manual), make- ready, proofing and handling cost in respective sections

5.0 Learning Outcomes:

Upon successful completion of this unit students should be able to:

- 5.1 Calculate materials, time and labor for any printing job
- 5.2 Express estimating in broad way.

6.0 Assessment Criteria for Learning Outcome:

Students will:

- 6.1 Show the ability to cost out simple monochrome and process color work
- 6.2 Work-out the amount work involved in each section (pre-press- press)

7.0 Assessment Procedures:

Students will have continuous assessment throughout the semester on practical and written test.

7.1	Course Work:Project	Short Test 1	-	30%	
		Short Test 2	-	30%	
		Assignment 1	-	20%	
		Assignment 2	-	20%	
		Total	-		100 marks
7.2		Final Exam	-	100%	
7.3		Final mark	-	100%	

8.0 Learning and Teaching Strategies:

Students will have:

- Lectures
- Self-directed learning

9.0 Teaching and Learning Resources

9.1 Prescribe Textbooks:

- *Printers Arithmetic*
- *Costing and estimating: London Inst. Of Printing Publication*

9.2 TEAHING APPARATUS:

- OHP, Charts,
- White & Blackboard,
- Library,
- Lectures, Tutorial assistance and
- Photocopier etc

TITLE	:	PRINTING SCIENCE
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Level	:	4
Code	:	PRT 404
Stage	:	3
Credit points	:	3

1.0 Purpose:

The purpose of this unit is to further develop students understanding to a more advance level.

2.0 Entry Requirements:

2.1 Students must successfully completed Stage 2 of Printing Science

3.0 Learning Hours:

3.1 Lectures	:	24 hours
Tutorial	:	24 hours
Total Contact	:	48 hours
Self-directed	:	36 hours

3.2 Six months industrial attachment

4.0 Content:

Students will learn the following areas:

4.1 Structure of materials:

- Linkage Printing process and material

4.2 Ink Drying

- Distinguish between ionic and covalent chemical bonding
- Physical states that relates to forces and ions, molecules or metal atoms
- Bonding in simple organic compounds in terms of covalent and ionic bonding
- Nature of carbon compounds in reference to the bonding characteristics of carbon
- Nature of attractive forces between molecules
-

4.3 Polymers/Polymerization/Photo-polymerization:

- Light sensitive layers in plate-making

- Photo-polymer plates, printing ink resins and vehicles, adhesives. Film base, cellulose gelatin and natural polymers.
- Outline the basic methods of polymer formation and relate the structures of polymers to their simple properties
- Relate the properties of polymers to their uses
- Describe applications of natural and synthetic polymers in plate-making printing, finishing and covering
- Compare the merits of natural and synthetic materials in printing and finishing

4.4 Chemistry:

- pH and printing
- measuring pH value
- dimensional stability
- temperature changes
- moisture content
- surface smoothness
- oil absorbency
- surface strength

5.0 Learning Outcomes:

Upon successful completion of this unit students should be able to:

5.1 State pH in printing

5.2 Differentiate paper printability

5.3 State properties of ink

5.4 Describe the effects of light on sensitive emulsion

6.0 Assessment Criteria for Learning Outcome:

Students will:

6.1 Demonstrate the ability to measure pH on solution

6.2 Demonstrate the different effects of printing results on paper

6.3 Demonstrate the behaviour of ink on different materials

6.4 Demonstrate the formation of image on different materials

7.0 Assessment Procedures:

Students will have continuous assessment throughout the semester on practical and written test.

7.1 Course Work:

Project	-	30%
Assignment	-	30%
Test	-	40%
Total Course Work	-	100%
7.1 Final Exam	-	100%

Total Semester	-	200
7.3 Spreadsheet mark	-	100 (200/2)

8.0 Learning and Teaching Strategies:

Students will have:

- Lectures
- Practical Lab/Workshop
- Self-directed learning
- Research

9.0 Teaching and Learning Resources

9.1 Prescribe Textbooks:

- *Printing Science- PIRA*
- *Chemistry and Physics text book*
- *Photography textbook*

9.2 Teaching Apparatus:

- OHP,
- Charts,
- white & blackboard,
- Library,
- Lectures, Tutorial assistance and
- Photocopier,
- Multi-media etc

UNIT TITLE	:	SCREEN PRINTING
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Level	:	4
Code	:	PRT 405
Stage	:	3
Credits Points	:	5

1.0 Purpose:

The purpose of this unit is to:

- 1.2 Stimulate student’s imagination through designing and printing of a variety of materials and to develop an awareness of patterns both natural and man-made
- 1.3 Provide basic knowledge and skills in printing

2.0 Entry Requirements:

Students must successfully completed Foundation

3.0 Learning Hours:

Lectures	:	24 hours
Practical	:	48 hours
Total Contact	:	72 hours
Self-directed Learning	:	84 hours

3.2 Six months industrial attachment prior to graduation.

4.0 Content:

Students will learn the following areas:

- 4.1 Tools, equipment, materials and chemicals
- 4.2 Colors
- 4.3 Paper stencil
- 4.4 Film stencil
- 4.5 Multi-color prints
- 4.6 Photographic Stencils
- 4.7 Stencils from rubbings

5.0 Learning Outcomes:

Upon successful completion of this unit students should be able to:

- 5.1 Express themselves more effectively using variety of patterns and designs
- 5.2 Identify more techniques necessary for basic types of screen printing
- 5.3 Design and present more varieties of prints on a variety of surfaces

6.0 Assessment Criteria for Learning Outcome:

Students will:

6.1 Demonstrate the ability to on the effectiveness of patterns and designs they create

6.2 Demonstrate their ability using other techniques in screen printing

6.3 Demonstrate their work in a more variety ways on different surfaces

7.0 Assessment Procedures:

Students will have continuous assessment throughout the semester on practical and written test.

7.1 Have no formal examination is given to the students on this unit.

7.0 Students will continuously be assessed throughout the semester based on the following:

- | | | |
|---|----------|-------------|
| • Four (4) major projects (each carries 15%) | - | 60% |
| • Visual Diary filled with artwork | - | 10% |
| • Six exercise to be done throughout the semester | - | 30% |
| Total | - | 100% |

- | | | |
|----------------|---|------|
| 7.3 Final Exam | - | 100% |
| Final Mark | - | 100% |

8.0 Learning and Teaching Strategies:

Students will have:

- Lectures
- Practical Lab/Workshop
- Demonstration
- Tutorial presentation
- Visit to studio

9.0 Teaching and Learning Resources

9.1 Prescribe Textbooks:

- *Printing Industry- Strauss*
- *Graphic Arts Text Book*

9.2 TEAHING APPARATUS:

- OHP,
- Charts,
- White & blackboard,
- Library,
- Lecturers, Tutorial

7.0 CURRICULUM VITAE OF TEACHING STAFF

Full-time Staff:

EMP No.	NAME	TEACHING UNIT	QUALIFICATION	INSTITUTION ATTENDED	POSITION
E0177	Nemani Nabalarua	Press and Print Finishing	T/C in Printing Cert in G/design, Bachelor of Education IDTT, GCTT, Cert IV in Workshop Training & Assessment	FIT University of Newcastle. USP FNU	Lecturer II HOD
E0178	Mesake Kolikeyirase a	Graphic Pre press Desktop Publishing	Dip. in Graphic Pre-press Cert IV in Workshop Training & Assessment. TC in Printing	Watford (UK) FIT University of Newcastle	Lecturer II
E1846	Sanjay Vijay Kumar	Trade Calculation	Certificate in Graphic Pre-press, DTT graduating in December 2013	FIT, FNU	Technician

