

**The National Polytechnic Institute  
of  
Papua New Guinea**

**Department of  
Architecture, Building  
& Civil Engineering**

---

*Technical Training Certificate in Drafting*

For further information contact:

The Head of Architecture, Building & Civil Engineering Department  
The National Polytechnic Institute of PNG  
PO Box 4366 LAE,  
Morobe Province 411

Phone: (675) 472 2555 / 472 1508 / 472 7530 Ext 129/118

Fax: (675) 472 1025 or (675) 472 6693

Email: [npi\\_hodbc@datec.net.pg](mailto:npi_hodbc@datec.net.pg) / [polytec.acad.clerk@gmail.com](mailto:polytec.acad.clerk@gmail.com)

---

*“Enroll at National Polytechnic Institute of PNG for a brighter  
future”*

## TECHNICAL TRAINING COURSE in DRAFTING

### AIMS:

The aim of the course is to provide the aspiring students of Drafting course with sufficient knowledge and skills to commence in "Drafting office", requiring a minimum amount of basic supervision from his/her employer. The course is design to provide general draughting training in Architectural, Civil and Structural Engineering, Surveying and other Engineering discipline. It is envisaged that the students will adapt to any existing training schemes where these are in operation.

The course is purposely of a general nature as it is realised that the students may find employment in a wide range of specialised offices, thus the students should gain:

- Ability to interpret any drawing.
- Skills in lettering and line work accuracy.
- Sound knowledge of symbols and dimensioning of drawings.
- Sound knowledge of Time factor calculations.
- Skills in presentation of drawings.
- Sound knowledge of attitude and care of equipment.

### COURSE OUTLINE:

The Technical Training Certificate (TTC) course in Drafting is made up of nine (9) subjects in the first year and eight subjects in the second years. The course is a full time 80 weeks course that runs in two (2) years. The subject offered:

<u>Year One (1) SUBJECTS:</u>	<u>Hrs/Wk</u>	<u>Credit</u>
• Mathematics	4	8
• Physical Science	3	6
• Personal Development	3	6
• Environmental Science	4	8
• Intro. to Computing	4	8
• Technical Communication	2	4
• Technical Drawing	6	12
• Architectural Drafting 1	4	8
• Civil/Structural Drafting 1	3	6
• Survey Drafting 1	3	6
<i>Total</i>		
<u>Year Two (2) SUBJECTS:</u>	<u>Hrs/Wk</u>	<u>Credit</u>
• Applied Mathematics	4	8
• Applied Science.	3	6
• Small Business Mgt.	3	6
• Technical Communication	3	6

• Cad (Trade) Drawing	4	8
• Architectural Drafting	4	8
• Civil/Structural Drafting	3	6
• Survey Drafting	3	6

### ENTRY REQUIREMENTS:

The minimum entry requirement is grade 12 Certificate with **C grades in Maths and Physics and C grade average in English** and other science subjects or relevant trade certificates.

### COURSE DURATION:

The course is a two years full time attendance. Each year comprises of 40 weeks.

### Other Fulltime Courses offered by the Department

- Diploma in Architectural Drafting
- Diploma in Building
- Diploma in Civil Engineering

### Special Courses

The institution offers several specialist courses. These are advertised in the press. Fees and duration vary according to requirements.

### DRAFTING

The drafting course gives every aspiring draftsman and draftsman a challenging opportunity to directly involve in the designing, planning, construction and maintenance of Building, Civil and Structural Engineering, Electrical and Mechanical Engineering infrastructural works.

Drafting deals with the designing, planning, and construction of the physical infrastructure of any development. Where possible the course is developed on the basis of developing the student's skills in drafting practices for the production of professional technical drawings. The work of a draftsman or a draughtswomen revolves around professional drawing offices of major organizations as well as small and individually operated offices. Job satisfaction is high and achievements are tangible and rewarding.

### DRAFTING TECHNICIANS

Draftsmen and Draftswomen are the right-hand man or woman to a professional Architect, a Civil Engineer, a Structural Engineer or an Electrical or Mechanical Engineer who assist in the production of drawings for infrastructure works of all projects. In the drawing office, they are the leaders responsible for the overall effectiveness and efficiency of the production of drawings.

# A BRIEF HISTORY OF THE FIRST POLYTECHNIC INSTITUTE IN PAPUA NEW GUINEA

**T**HE National Polytechnic Institute of Papua New Guinea (*NPIPNG* or *Polytec PNG* for short) was officially launched on 2<sup>nd</sup> December 2009 with the Governor General, Sir Paulias Matane, making the official declaration and unveiling of the commemoration plaque.

\_\_\_\_\_ The National Polytechnic Institute was legally established in 2008 by the National Education Board acting under its authority as provided by Education Act 1983. On August 2008 a fact-finding team of five was sent to New Zealand to study the organizational structure set up, operation and management, and academic programs of selected polytechnics and institutes of technology. The team consists of acting TVET assistant secretary Mr. Jayasundra J. Banda, as team leader, the late principal—Mr. Mathew Piruruho, deputy principal—Mr. Lawrence Parry, and two department heads—Mr. Joselito Marcos and Mrs. Rosa Manua,

\_\_\_\_\_ Upon its return the team presented their findings and recommendations in a comprehensive report to the governing council. The report was well received by the governing council that created the Polytechnic Committee. The committee was tasked, in 2009, to carry out year-long activities—ranging from formulation of new vision and mission statements, strategic and management plans, policies and procedures on student affairs, governance and management, finance, and human resource development to academic matters among others—culminating into the official launching of the first polytechnic institute on the day before the 55<sup>th</sup> and last graduation rite of the former Lae Technical College.

\_\_\_\_\_ The National Department of Education established the National Polytechnic Institute as the first of four polytechnics envisioned to be created in each of the four regions of the country. The conversion from being a technical and a business college to a polytechnic institute was realized through the initiative of Technical Vocational Education and Training division, and was spearheaded by the college's governing council and administration together with its six academic departments.

\_\_\_\_\_ The former Lae Technical College was established in 1953 at the location where Busu High School is presently situated. In 1954, it was relocated to its present site with initially one administration block, two workshop units, one dining hall, and one toilet block.

\_\_\_\_\_ Various changes and improvements had taken place in the school in terms of infrastructure, academic programs, and personnel. Like any organizations, the college encountered a number of difficulties and problems but with the able assistance of the governing council, school authorities, stakeholders and the community, it has survived all the odds.

\_\_\_\_\_ With strong commitment from and undying faith of all stakeholders, it is envisioned that the institute will produce useful citizens equipped with life-long skills and knowledge that they can use in their quest for personal success and contribute to the progress and prosperity of this nation.

## MISSION STATEMENT

**WE** are a government educational institution committed to develop individuals in various life skills through quality and relevant educational programs that meet business, industry and community needs for sustainable national progress.

## VISION STATEMENT

**WE** are a prime institution for growth, excellence and prosperity through quality education and training.