

# CHAPTER I

## INTRODUCTION

### 1.1. Background

Apprenticeship serves as a vital platform for students to apply their ideas and knowledge through real-world activities, thereby enhancing their understanding beyond the classroom experience. This hands-on learning opportunity allows students to gain insights and skills not covered during their academic studies, fostering continuous personal and professional growth. At Bengkalis State Polytechnic, apprenticeship is a mandatory course that every student must complete as a crucial requirement for graduation.

Apprenticeship provides individuals with the invaluable opportunity the placement of a person in a real work environment to improve skills, work ethics, discipline and responsibility, which is an opportunity to apply the knowledge and skills they have. Bengkalis State Polytechnic requires students to take part in apprenticeships either in government agencies or private companies. Apprenticeships are a learning process by directly getting to know the scope of the real world of work, which aims to apply the knowledge that has been obtained in the lecture hall. That way, with apprenticeships, students can increase knowledge, skills, and experience in the real world of work.

In this case, the author carried out apprenticeship at Refinery Unit II Production Sungai Pakning PT. Kilang Pertamina International, which was carried out from January 20, 2025 to May 20, 2025. The author chose the place of implementation of apprenticeship in *Sungai Pakning* precisely at Refinery Unit II Production Sungai Pakning PT. Kilang Pertamina International which consists of 4 large parts CDU (Crude Distillation Unit), Boiler, ITY (Tank Yard Installation), Turbine or Power at Pertamina has 1 large part, namely CDU as an Oil Refinery, This refinery is the only oil company, at this Pertamina Refinery the processing capacity of the CDU unit at the Refinery Unit II Sungai Pakning refinery is 50 MBSD. The crude oil processed by the Refinery Unit II Sungai Pakning

refinery comes from Sumatra Light Crude (SLC), Lirik Crude Oil (LCO), Lalang Light Crude (LLC), Selat Panjang Crude (SPC).

In Refinery Unit II Production Sungai Pakning PT. Kilang Pertamina International processes several products, namely ADO (Automotive Diesel Oil) as a raw material for processing diesel engine oil, namely Solar and Dexlite, then the NAPHTHA product as a base material for gasoline, Peralite, Pertamina and so on, then KEROSENE or commonly known as kerosene, and there is also LSWR (Low Sulfur Waxy Residue) which is a raw material for BBM products.

Another statement that emphasizes the author choice to apprenticeship at Pertamina is that opportunity to gain hands-on experience specifically in the Administration Security department within one of Indonesia's largest and most strategic state-owned enterprises in the energy sector. Apprenticeship at PT. Kilang Pertamina International enables the author to directly engage with the administrative security operations, enhancing both their organizational and security management skills that are highly relevant to their field of study. Furthermore, Pertamina's well-established corporate environment, comprehensive training programs, and exposure to international markets provide invaluable professional development and networking opportunities.

## **1.2. Purposes of the Apprenticeship**

The objectives of the implementation of the apprenticeship are as follows:

1. To find out the job descriptions at PT Kilang Pertamina International Refinery Unit (RU) II Production Sungai Pakning
2. To find out the work systems and procedures at PT Kilang Pertamina International Refinery Unit (RU) II Production Sungai Pakning
3. To find out the place and time of the apprenticeship at PT Kilang Pertamina International Refinery Unit (RU) II Production Sungai Pakning
4. To find out the kind and description of the activity at PT Kilang Pertamina International Refinery Unit (RU) II Production Sungai Pakning
5. To find out the obstacles and solutions at PT Kilang Pertamina International Refinery Unit (RU) II Production Sungai Pakning

### **1.3 Significances of the Apprenticeship**

The implementation of the apprenticeship program in the Security Administration department provides various benefits for all parties involved. These benefits are categorized as follows:

#### **1.3.1 Significances for the Author**

The apprenticeship in Security Administration offers the following advantages to the apprenticeship:

1. Applying theoretical knowledge from academic studies to practical security administration tasks, enhancing both understanding and hands-on skills.
2. Developing essential hard skills such as permit management, security documentation, and access control procedures.
3. Improving soft skills including communication, attention to detail, problem-solving, and teamwork within a professional security environment.
4. Gaining valuable experience in managing security protocols and administrative processes in a major oil refinery, which strengthens the

#### **1.3.2 Significances for the Academic**

The apprenticeship program also benefits the academic institution by:

1. Providing real-world feedback that can be used to update and enrich the curriculum, ensuring it aligns with industry security administration practices.
2. Creating opportunities for research collaboration focused on security management and operational safety in industrial settings.
3. Strengthening partnerships between the educational institution and the oil and gas industry, which supports other academic and professional development programs.

### 1.3.3 Significances for the Company

The company also gained many benefits from organizing the Security Administration apprenticeship, such as:

1. Access to motivated and trainable potential future employees who understand the company's security protocols and culture.
2. Additional support in managing administrative tasks related to permits, badges, and documentation, which helps streamline daily operations.
3. Reinforcement of the company's commitment to human resource development and community engagement through apprenticeship programs.