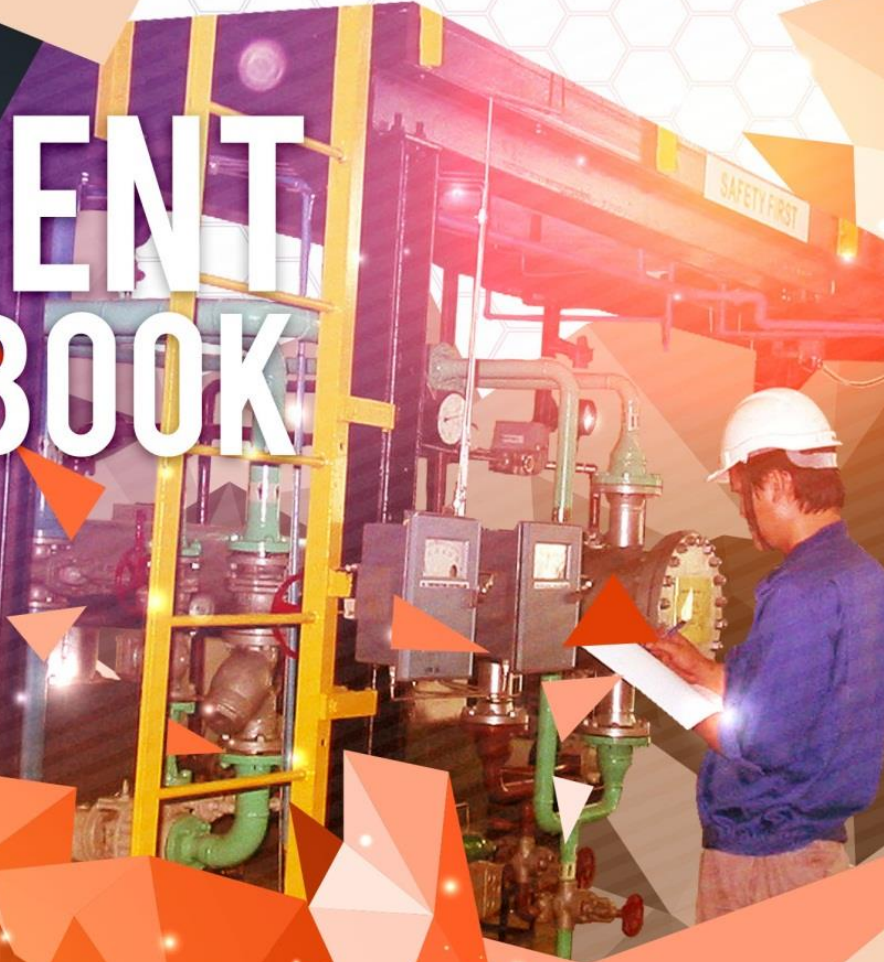




# STUDENT HANDBOOK



## **DEPARTMENT OF PETROCHEMICAL ENGINEERING**

*Diploma in Process Engineering  
(Petrochemical)*

**STUDENT HANDBOOK**  
**PETROCHEMICAL ENGINEERING**  
**DEPARTMENT**

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### **VISION of POLITEKNIK KUCHING SARAWAK**

To be the premier industry-led TVET institution by 2020.

### **MISSION of POLITEKNIK MALAYSIA**

1. To Provide access to quality and recognized TVET programme.
2. To Produce balanced, holistic and enterprising graduates through a dynamic and sustainable study programme.

## 1.0 INTRODUCTION

Department of Petrochemical Engineering (JKPK) was established in 1992. Earlier it was known as the Department of Petrochemical Technology (JTP). JKPK offers courses related to petroleum and petrochemical industries in Polytechnic Kuching Sarawak, in line with the rapid development of petroleum and petrochemical industries.

Previously, JKPK offered certificate programmes such as Certificate in Electrical Engineering (Petroleum), Certificate in Electronic Engineering (Petroleum), Certificate in Mechanical Engineering (Petroleum) and Certificate in Chemical and Process Engineering. However, in July 2010, the department offered only diploma programme and currently offers Diploma in Process Engineering (Petrochemical).

JKPK is led by the Head of Department, assisted by the Head of Programme, with academic staff as subordinates with various academic backgrounds mainly Electrical Engineering, Mechanical Engineering and Chemical Engineering; and lab assistants as supporting staffs.

## 2.0 PROGRAMME INFORMATION

In order to keep abreast with rapid technological advancements and evolving requirements in industries today, Department of Polytechnic Education (DPE) has worked collaboratively with the nation's key industry players in developing competency standard of Diploma in Process Engineering (Petrochemical) programme. This collaboration aims to equip students with up-to-date knowledge, relevant skills and attitudes to meet the global challenges and the requirements of the industries.

This is true especially in the process engineering specifically in petrochemical area where there is a rapid growth in demand for highly skilled and technically savvy workforce. Many industries require sophisticated technical workforce. One of the most important factors in gearing towards the growth of productivity is to have a qualified manpower in this area, allowing the industry to expand and remain competitive in the world market. In addressing these issues the Curriculum Development and Evaluation Division (CDED), DPE cooperates with the industries, Public Higher Learning Institutions and Private Higher Learning Institutions to develop competency standards of this program.

The competency standards integrates the Body of Knowledge recommended by the Engineering Accreditation Council (EAC), American Institute of Chemical Engineers (AIChE), Chemical Engineering Institute of Chemical Engineers (IChemE) UK, Engineering Council UK (ecUK), European Federation of Chemical Engineering (EFCE) and Accreditation Board for Engineering & Technology (ABET).

This initiative is an essential fundamental to the curriculum development of Diploma in Process Engineering (Petrochemical) program with the aim of producing competent and marketable graduates parallel to the needs of the industry.

## **2.1 Programme Synopsis**

This program provides the students with the knowledge and technical skills prior to working as a process technician in the petroleum and petrochemical industries, which covers the areas of plant operating, equipment servicing, troubleshooting and problem solving. The approach includes theoretical knowledge as well as hands-on experience in workshops, mini training plant and laboratories

## **2.2 Programme Educational Objectives (PEO)**

The Diploma in Process Engineering (Petrochemical) programme shall produce semi-professionals who are:

1. competent in knowledge and skills in the field of process engineering(petrochemical) according to industry requirements.
2. effective in communication and contribute effectively as a team member with the capability of being a leader.
3. ethically and socially responsible towards developing the community and the nation.
4. able to demonstrate entrepreneurship skills and recognize the need of lifelong learning for a successful career advancement and able to adapt themselves with new technological challenges in petrochemical fields

## **2.2 Programme Learning Outcome (PLO)**

Upon completion of the programme, graduates should be able to:

1. apply knowledge of mathematics, science, engineering fundamentals and social science to well-defined process engineering(petrochemical) procedures and practices with specialisation in petrochemical.
2. analyse well-defined process engineering(petrochemical) specializing in petrochemical problems with respect to operation and maintenance, including troubleshooting
3. conduct investigations and assist in the design of solutions for petrochemical specializing in process engineering systems

4. apply appropriate techniques, resources, and engineering tools to well-defined process engineering specializing in petrochemical activities, with an awareness of the limitations
5. demonstrate an awareness and consideration for societal, health, safety, legal and cultural issues and their consequent responsibilities
6. communicate effectively with the engineering community and society at large.
7. function effectively as an individual and as a member in diverse technical teams
8. demonstrate an understanding of professional ethics, responsibilities and norms of engineering practices
9. demonstrate an awareness of management and entrepreneurship
10. demonstrate an understanding of the impact of engineering practices, taking into account the needs for sustainable development
11. recognise the needs for professional development and to engage in independent and lifelong learning

### **2.3 Job Prospect**

This programme provides the knowledge and skills in process and petrochemical engineering field that can be applied to a broad range of careers in process and petrochemical engineering. The knowledge and skills that the students acquire from the programme will enable them to participate in the job market as:

- Assistant Engineer
- Process Technician
- Process Supervisor
- General Technician



## 2.4 Programme Structure

### PROGRAMME STRUCTURE FOR DIPLOMA IN PROCESS ENGINEERING (PETROCHEMICAL)

| COMPONENTS | COURSE CODE | COURSE | CONTACT HOURS |   |   | CREDIT |
|------------|-------------|--------|---------------|---|---|--------|
|            |             |        | L             | P | T |        |

| SEMESTER 1      |         |                               |           |   |   |           |
|-----------------|---------|-------------------------------|-----------|---|---|-----------|
| Compulsory      | DUB1012 | Pengajian Malaysia            | 1         | 0 | 2 | 2         |
|                 | DUE1012 | Communicative English 1       | 1         | 0 | 2 | 2         |
|                 | DRB1XX0 | Asas Unit Beruniform          | 0         | 2 | 0 | 0         |
| Common Core     | DUW1012 | `                             | 2         | 0 | 0 | 2         |
|                 | DBM1013 | Engineering Mathematics 1     | 2         | 2 | 0 | 3         |
|                 | DBS1012 | Engineering Science           | 2         | 1 | 0 | 2         |
| Discipline Core | DGP1013 | Electrical Technology         | 2         | 2 | 0 | 3         |
|                 | DGP1023 | Fundamentals of Chemistry     | 3         | 0 | 1 | 3         |
|                 | DGP1031 | Fundamentals of Chemistry Lab | 0         | 2 | 0 | 1         |
|                 |         | <b>TOTAL</b>                  | <b>25</b> |   |   | <b>18</b> |

| SEMESTER 2      |         |   |           |   |   |           |
|-----------------|---------|---|-----------|---|---|-----------|
| Compulsory      | DUA2012 | Sains, Teknologi dan Kejuruteraan Islam * | 1         | 0 | 2 | 2         |
|                 | DUB2012 | Nilai Masyarakat Malaysia **              | 1         | 0 | 2 | 2         |
|                 | DRS2XX1 | Sukan                                     | 0         | 2 | 0 | 1         |
|                 | DRB2XX1 | Unit Beruniform 1                         | 0         | 2 | 0 | 1         |
| Common Core     | DBM2013 | Engineering Mathematics 2                 | 2         | 0 | 2 | 3         |
| Discipline Core | DGP2043 | Thermodynamics                            | 3         | 0 | 1 | 3         |
|                 | DGP2053 | Fluid Mechanics                           | 3         | 0 | 1 | 3         |
|                 | DGP2062 | Piping & Instrumentation Diagram          | 2         | 0 | 0 | 2         |
|                 | DGP2072 | Process Plant Equipment                   | 2         | 0 | 0 | 2         |
|                 | DGP2081 | Process Plant Equipment Workshop          | 0         | 2 | 0 | 1         |
|                 |         | <b>TOTAL</b>                              | <b>23</b> |   |   | <b>17</b> |

| SEMESTER 3      |         |                                       |           |   |   |           |
|-----------------|---------|---------------------------------------|-----------|---|---|-----------|
| Compulsory      | DUE3012 | Communicative English 2               | 1         | 0 | 2 | 2         |
|                 | DRK3XX2 | Kelab/Persatuan                       | 0         | 4 | 0 | 2         |
|                 | DRB3XX2 | Unit Beruniform 2                     | 0         | 4 | 0 | 2         |
| Common Core     | DBM3013 | Engineering Mathematics 3             | 2         | 0 | 2 | 3         |
| Discipline Core | DGP3093 | Process Instrumentation & Control     | 3         | 0 | 0 | 3         |
|                 | DGP3101 | Process Instrumentation & Control Lab | 0         | 2 | 0 | 1         |
|                 | DGP3113 | Heat Transfer                         | 3         | 0 | 1 | 3         |
|                 | DGP3123 | Mass & Energy Balance                 | 3         | 0 | 1 | 3         |
|                 | DGP3131 | Prosess Engineering Lab 1             | 0         | 2 | 0 | 1         |
|                 |         | <b>TOTAL</b>                          | <b>26</b> |   |   | <b>18</b> |

| SEMESTER 4      |         |                                  |           |   |   |           |
|-----------------|---------|----------------------------------|-----------|---|---|-----------|
| Compulsory      | DUE5012 | Communicative English 3          | 1         | 0 | 2 | 2         |
| Discipline Core | DGP5141 | Computer Aided Design            | 0         | 2 | 0 | 1         |
|                 | DGP5151 | Project 1                        | 0         | 2 | 0 | 1         |
|                 | DGP5162 | Basic Environment Engineering    | 2         | 0 | 0 | 2         |
|                 | DGP5173 | Unit Operation                   | 3         | 0 | 0 | 3         |
|                 | DGP5183 | Utility Plant                    | 3         | 0 | 0 | 3         |
|                 | DGP5193 | Petrochemical Process Technology | 3         | 0 | 0 | 3         |
|                 | DGP5131 | Process Engineering Lab 2        | 0         | 2 | 0 | 1         |
|                 |         | <b>TOTAL</b>                     | <b>20</b> |   |   | <b>16</b> |

| SEMESTER 5      |         |                                    |           |   |   |           |
|-----------------|---------|------------------------------------|-----------|---|---|-----------|
| Compulsory      | DUA6022 | Komunikasi dan Penyiaran Islam     | 1         | 0 | 2 | 2         |
| Common Core     | DPB2012 | Entrepreneurship                   | 2         | 0 | 1 | 2         |
| Discipline Core | DGP6152 | Project 2                          | 0         | 4 | 0 | 2         |
|                 | DGP6131 | Process Engineering Lab 3          | 0         | 2 | 0 | 1         |
|                 | DGP6203 | Petrochemical Production Processes | 3         | 0 | 0 | 3         |
| Elective        |         | Elective***                        | 4         | 0 | 0 | 4         |
|                 | DGP6212 | Advanced Control Processes         | 2         | 0 | 0 | 2         |
|                 | DGP6222 | Basic Petroleum Technology         | 2         | 0 | 0 | 2         |
|                 | DGP6232 | Basic Industrial Management        | 2         | 0 | 0 | 2         |
|                 | DUA6012 | Integrasi Malaysia                 | 1         | 0 | 2 | 2         |
|                 | DBC2012 | Computer Application               | 1         | 2 | 0 | 2         |
| <b>TOTAL</b>    |         |                                    | <b>19</b> |   |   | <b>14</b> |

| SEMESTER 6   |          |                     |          |   |   |           |
|--------------|----------|---------------------|----------|---|---|-----------|
|              | DUT40110 | Industrial Training | 0        | 0 | 0 | 10        |
| <b>TOTAL</b> |          |                     | <b>0</b> |   |   | <b>10</b> |

|                        | Total Credit | %           |
|------------------------|--------------|-------------|
| i. Compulsory          | 15           | 16%         |
| ii. Common Core        | 15           | 16%         |
| iii. Discipline Core   | 49           | 53%         |
| iv. Elective           | 4            | 4%          |
| v. Industrial Training | 10           | 11%         |
| <b>TOTAL CREDIT</b>    | <b>93</b>    | <b>100%</b> |

|                          | Total | %  |
|--------------------------|-------|----|
| i. Lecture               | 60    | 52 |
| ii. Practical + Tutorial | 55    | 48 |
| iii. Contact Hours       | 115   | -  |

**Legend / Notes:**

**L** : Lecture, **P** : Practical/Lab, **T** : Tutorial, **C** : Credit

(The numbers indicated under L, P & T represent the contact hours per week, to be used as a guide for time table preparation).

For Cocurriculum,

Students are given the option of either choosing URB courses (6 credits) or a combination of URS and URK courses (3 credits).

\* For Muslim Students

\*\* For Non Muslim Students

\*\*\* Any Level 5 and Level 6 mechanical and mechatronics courses not listed above that can be offered by the respective polytechnic. For the list of elective courses, please refer to [www.cidos.edu.my](http://www.cidos.edu.my).

Students are required to take a minimum of four credits of elective courses.

**(FOLLOW PROGRAMME STANDARD)**

**2.5 Total Credit Hours : 93 credits**

### 3.0 COURSE DESCRIPTION

| CourseSynopsis  | Pre- Requisite |
|---|----------------|
| <p><b>DUB 1012 – PENGAJIAN MALAYSIA</b></p> <p>PENGAJIAN MALAYSIA memupuk penghayatan ke arah melahirkan generasi yang cintakan negara. Kursus ini juga dapat mendidik kelompok masyarakat yang mempunyai daya juang yang tinggi dan mampu menghadapi cabaran di peringkat antarabangsa. Kursus ini memberi penghayatan tentang sejarah dan politik, perlembagaan Malaysia, kemasyarakatan dan perpaduan, pembangunan negara dan isu-isu keprihatinan negara. Objektif kursus ini adalah untuk melahirkan warganegara yang setia dan cintakan negara, berwawasan serta bangga menjadi rakyat Malaysia.</p>  | None           |
| <p><b>DUE1012 COMMUNICATIVE ENGLISH</b></p> <p>COMMUNICATIVE ENGLISH focuses on developing students' speaking skills to enable them to communicate effectively and confidently in group discussions and in a variety of social interactions. It is designed to provide students with appropriate reading skills to comprehend a variety of texts. It is also aimed to equip students with effective presentation skills.</p>  | None           |
| <p><b>DUW1012 OCCUPATIONAL SAFETY AND HEALTH</b></p> <p>OCCUPATIONAL SAFETY AND HEALTH is course designed to impart understanding of the self-regulatory concepts and provisions under the Occupational Safety &amp; Health Act (OSHA). This course presents the responsibilities of employers and employees in implementing and complying with the safety procedures at work. This course provide and understanding of the key issues in OSH management, incident prevention, Emergency Preparedness and Response (EPR), fire safety, occupational first aid, Hazard Identification, Risk Assesment and Risk Control (HIRARC) and guide the students gradually into this multi-disciplinary science.</p> | None           |

|   |             |
|---|-------------|
| <p><b>DBM1013 ENGINEERING MATHEMATICS 1</b></p> <p>DBM1013 ENGINEERING MATHEMATICS 1 expose students to the basic algebra including perform partial fractions. This course also exposes the concept of trigonometry and the method to solve trigonometry problems by using basic identities, compound angle and double angle formulae. Students also will be introduced to the theory of complex number and matrices method to solve simultaneous equation. This course also introduces students to concept of vector and scalar.</p> | <p>None</p> |
| <p><b>DBS1012 ENGINEERING SCIENCE</b></p> <p>ENGINEERING SCIENCE is an applied science with theoretical concepts and practical learning sessions that can be applied in the engineering fields. This course focuses on the Physical Quantities, Measurement, Linear Motion, Force, Work, Energy, Power, Solid, Fluid, Temperature and Heat.</p>   | <p>None</p> |
| <p><b>DGP1013 ELECTRICAL TECHNOLOGY</b></p> <p>ELECTRICAL TECHNOLOGY exposes students to basic electrical circuit concepts, the application of electromagnetism in electrical machines and transformers. The course focuses on the different types of electrical circuits, the relationship between current and voltage including the resistance. It also provides the skills on the measuring the electrical quantities and constructing basic circuits and operation of electrical machines and transformers.</p>                   | <p>None</p> |
| <p><b>DGP1023 FUNDAMENTAL OF CHEMISTRY</b></p> <p>FUNDAMENTALS OF CHEMISTRY is a study of principles of general chemistry and organic chemistry including analysis of chemistry. Topics include structure of atom, periodic table, mole concept, acid-base concepts, chemical bonding, matter, chemical equilibrium, oxidation-reduction, carbon compounds. The importance of chemistry to many fields of science will be emphasized.</p>   | <p>None</p> |

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| <p><b>DGP1031 FUNDAMENTALS OF CHEMISTRY LAB</b></p> <p>APPLIED CHEMISTRY LAB will stress on the proper laboratory techniques, experimental procedure, the scientific method and problem-solving process skills as used in study of general chemistry. This course also help to the critical thinking skills, problem solving skills and data analysis skills of students through chemical experiments.</p>  | <p>None</p> |
| <p><b>DUA2012 SAINS, TEKNOLOGI DAN KEJURUTERAAN DALAM ISLAM</b></p> <p>SAINS, TEKNOLOGI DAN KEJURUTERAAN DALAM ISLAM memberi pengetahuan tentang konsep Islam sebagai al-Din dan seterusnya membincangkan konsep sains, teknologi dan kejuruteraan dalam Islam serta impaknya, pencapaiannya dalam tamadun Islam, prinsip serta peranan syariah dan etika Islam, peranan kaedah fiqh serta aplikasinya</p>  | <p>None</p> |
| <p><b>DUB2012 NILAI MASYARAKAT MALAYSIA</b></p> <p>NILAI MASYARAKAT MALAYSIA membincangkan aspek sejarah pembentukan masyarakat Malaysia, nilai-nilai agama serta adat resam dan budaya masyarakat majmuk. Selain itu, pelajar diberi kefahaman mengenai tanggungjawab individu dalam kehidupan dan cabaran-cabaran dalam membangunkan masyarakat Malaysia</p>  | <p>None</p> |
| <p><b>DBM 2013 ENGINEERING MATHEMATICS 2</b></p> <p>ENGINEERING MATHEMATICS 2 exposes students to the basic laws of exponents and logarithms. This course also introduces the basic rules of differentiation concept to solve problems that relate maximum, minimum and calculate the rates of changes. This course also discuss integration concept in order to strengthen student knowledge for solving area and volume bounded region problems. In addition, students also will learn application of both techniques of differentiation and integration.</p> | <p>None</p> |

|   |             |
|---|-------------|
| <p><b>DGP2043 THERMODYNAMICS</b></p> <p>THERMODYNAMICS gives exposure in fundamental of engineering such as in unit and dimension. This course emphasizes basic thermodynamics concepts such as non flow process, flow process, first law of thermodynamics, second law of thermodynamics, steam power cycles and chemical equilibrium. Students will be exposed with plant process. Student will also provide knowledge and understanding of theory, concept and application of principles to solve problems related to processes in thermodynamics.</p> | <p>None</p> |
| <p><b>DGP 2053 FLUID MECHANICS</b></p> <p>FLUID MECHANICS introduce and provide knowledge of the basic principles and concept of fluids mechanics with the application to practical engineering situations. This course will enable the students to learn about fluid properties, fluid static and fluid dynamics. This course also exposes the students to solve fluid mechanics problems in flow system, pipe system and dimensional analysis.</p>  | <p>None</p> |
| <p><b>DGP2062 PIPING AND INSTRUMENTATION DIAGRAM</b></p> <p>PIPING AND INSTRUMENTATION DIAGRAM (P&amp;ID) provides knowledge on sketches and sketching of symbols used in process flow diagram. This course also provides knowledge and skill practice in developing process networks in piping and instrumentation diagram.</p>  | <p>None</p> |
| <p><b>DGP 2072 PROCESS PLANT EQUIPMENT</b></p> <p>PROCESS PLANT EQUIPMENT provides knowledge on concepts and basic principles of plant static and rotary equipment. Emphasis of the course is on general uses and basic operating principles of static and rotary equipment such as valve, pipe, heat exchanger, pump, compressor, internal combustion engine and turbine. It also provides knowledge on the classifications, types and specific functions of their components.</p>   | <p>None</p> |



|  |  |
|--|--|
| <p><b>DGP2081 PROCESS PLANT EQUIPMENT WORKSHOP</b></p> <p>PROCESS PLANT EQUIPMENT WORKSHOP provides knowledge on concepts and basic principles of plant static and rotary equipment. Emphasis of the course is on general uses and basic operating principles of static and rotary equipment such as valve, pipe, heat exchanger, pump, compressor, internal combustion engine and turbine. It also provides knowledge on the classifications, types and specific functions of their components.</p>   | <p>None</p>                                      |
| <p><b>DUE3012 COMMUNICATIVE ENGLISH 2</b></p> <p>COMMUNICATIVE ENGLISH 2 emphasizes the skills required at the workplace to describe products or services as well as processes or procedures. It also focuses on the skills to give and respond to instructions. This course will also enable students to make and reply to enquiries and complaints.</p>  | <p>DUE 1012<br/>COMMUNICATIVE<br/>ENGLISH 1</p>  |
| <p><b>DBM 3013 ENGINEERING MATHEMATICS 3</b></p> <p>ENGINEERING MATHEMATICS 3 exposes students to the statistical and probability concepts and their applications in interpreting data. The course also introduces numerical methods concept to solve simultaneous equations by using Gaussian Elimination method, LU Decomposition using Doolittle and Crout methods, polynomial problems using Simple Fixed Point Iteration and Newton-Raphson methods. In addition, the course also discusses optimization problems by using Linear Programming. In order to strengthen the students in solving advanced engineering problems, Ordinary Differential Equation (ODE) is also included.</p> | <p>DBM2013<br/>ENGINEERING<br/>MATHEMATICS 2</p> |
| <p><b>DGP 3093 PROCESS INSTRUMENTATION &amp; CONTROL</b></p> <p>PROCESS INSTRUMENTATION AND CONTROL provides knowledge about measurement equipment used in the industry, understanding basic principle and the job lists of instruments. Exposure will include the basic theory, construction, operation and the usage of pneumatic equipment, control valve, transmitter, converter and controller. Students will understand the basic principle for control system and its usage according to petrochemical plant situation.</p>   | <p>DGP2062<br/>FLUID MECHANICS</p>               |

|   |   |
|---|---|
| <p><b>DGP 3101 PROCESS INSTRUMENTATION &amp; CONTROL LAB</b></p> <p>PROCESS INSTRUMENTATION AND CONTROL LAB provides knowledge integrated with technical skills for using measurement equipment used in the industry, understanding basic principle and the job lists of instruments. Exposure will include the basic theory, construction, operation and the usage of pneumatic equipment, control valve, transmitter, converter and controller. Students will handle the basic principle for control system and its usage according to petrochemical plant situation.</p> | <p>DGP2062<br/>FLUID MECHANICS</p>              |
| <p><b>DGP 3113 HEAT TRANSFER</b></p> <p>HEAT TRANSFER emphasize on the principles of the Heat Transfer in steady state by conduction, convection and radiation. Principles of steady-state and transient heat conduction in solid are investigated. Laminar and turbulent boundary layer flows are treated, as well as condensation and boiling phenomena, thermal radiation, and radiation heat transfer between surfaces. Students will be exposed to the procedure for general problem solving and its application on heat exchanger.</p>                                | <p>DGP2043<br/>THERMODYNAMICS</p>               |
| <p><b>DGP3123 MASS AND ENERGY BALANCES</b></p> <p>MASS AND ENERGY BALANCES is designed as an introduction to fundamentals of materials and energy balances. The emphasis is on understanding the principles of material and energy balances in chemical process systems. This course will develop the student's ability to formulate and solve material and energy balances problems for chemical process systems.</p>  | <p>DGP1023<br/>FUNDAMENTAL OF<br/>CHEMISTRY</p> |
| <p><b>DGP3131 PROCESS ENGINEERING LABORATORY 1</b></p> <p>PROCESS ENGINEERING LABORATORY 1 provides practical skills through simulation and workshop conducted based on concepts and theories learned in class. The emphasis of the module is to introduce students to process application in fluid mechanics and heat transfer.</p>  | <p>None</p>                                     |

|  |  |
|--|--|
| <p><b>DUE5012 COMMUNICATIVE ENGLISH 3</b></p> <p>COMMUNICATIVE ENGLISH 3 aims to develop the necessary skills in students to analyze and interpret graphs and charts from data collected as well as job hunting mechanics. Students will learn to present data through the use of graphs and charts. Students will learn the process of job hunting which includes job search strategies and making enquiries. They will also learn to write resumes and cover letters. The students will develop skills to introduce themselves, highlight their strength and abilities, present ideas, express opinions and respond appropriately during job interviews.</p> | <p>DUE3012<br/>COMMUNICATIVE<br/>ENGLISH 2</p> |
| <p><b>DGP5131 PROCESS ENGINEERING LABORATORY 2</b></p> <p>PROCESS ENGINEERING LABORATORY 2 provides practical skills through experiments conducted based on concepts and theories learned in class. The emphasis of the module is to practice step by step the start-up procedure of the chemical process equipment and analyse the data of the experiments.</p>   | <p>None</p>                                    |
| <p><b>DGP5141 COMPUTER AIDED DESIGN</b></p> <p>COMPUTER AIDED DESIGN introduces and provides knowledge to Computer Aided Design (CAD) software application in developing engineering drawing particularly in technical drawing. This course will enable students to explore the software from its graphical user interface to command features including data entry, draw, modify, display control, drawing aids, layer, block, insert, dimensioning, hatching and plotting.</p>   | <p>None</p>                                    |
| <p><b>DGP 5151 PROJECT 1</b></p> <p>PROJECT 1 provides knowledge on the implementation methods and project production based on the hardware or analysis from laboratory test or research data / information. This course provides exposure to the selection and initial project planning, preparation methods, presentation proposals and production projects. This course also prepare the knowledge and training skills to solve problems and decision making before going into the nature of employment in the future.</p>  | <p>None</p>                                    |

|  |             |
|--|-------------|
| <p><b>DGP5162 BASIC ENVIRONMENT ENGINEERING</b></p> <p>BASIC ENVIRONMENT ENGINEERING introduces a unique approach to the overall concept of environmental engineering, an approach that emphasizes the relationship between the principles observed in natural purification processes and those employed in engineering processes. The students will have an understanding of the principles of three major areas of environmental engineering</p>   | <p>None</p> |
| <p><b>DGP 5173 UNIT OPERATION</b></p> <p>UNIT OPERATION provides knowledge regarding the equipment or process unit as well as its function use in the industry. This course exposes the concepts and methods for the separation process of solids, liquids and gases. Therefore, it will emphasize in various unit operations, namely drying, crystallization, filtration, evaporation, distillation, absorption, adsorption and extraction. By completing the course, the student will understand the basic mechanisms of the unit operations in chemical engineering fields and will be able to make a selection of the most suitable unit to be used in a process depending on certain factors.</p> | <p>None</p> |
| <p><b>DGP5183 UTILITY PLANT</b></p> <p>UTILITY PLANT introduces and provides knowledge on different types of plant and its importance including various utility flow diagrams. It also exposes students to utility system and its function, the basic design, the philosophy of control and interlock including the main equipment, functions, mechanical characteristics and its operating procedures. This course also imparts general knowledge and exposes the students with common problems utility plant.</p>  | <p>None</p> |
| <p><b>DGP5193 PETROCHEMICAL PROCESS TECHNOLOGY</b></p> <p>PETROCHEMICAL PROCESS TECHNOLOGY provides exposure to the basic processes involved in oil and gas processing plant in relationship with petrochemical industry. This course also provides exposure to the various processing technology carried out in petrochemical plants. The students will be able to learn the processes involved in the production of petrochemical products and thus can complete process flow diagram.</p>   | <p>None</p> |

|  |             |
|--|-------------|
| <p><b>DUA6022 KOMUNIKASI DAN PENYIARAN ISLAM</b></p> <p>KOMUNIKASI DAN PENYIARAN ISLAM memfokuskan kepada penguasaan konsep, kemahiran komunikasi dan penyiaran islam bagi meningkatkan kefahaman pelajar secara holistik terhadap kursus ini.</p>   | <p>None</p> |
| <p><b>DPB 2012 ENTREPRENEURSHIP</b></p> <p>ENTRPRENEURSHIP focuses the principles and concept of entrepreneurship. This course concentrates on the systematic methods of getting business ideas. This course also prepares students on conducting online business using social media marketing. It also emphasizes a preparation of business plan and developing their entrepreneurial skills.</p>   | <p>None</p> |
| <p><b>DGP6131 PROCESS ENGINEERING LAB 3</b></p> <p>PROCESS ENGINEERING LABORATORY 3 provides practical skills through simulation and workshop conducted based on concepts and theories learned in class. The emphasis of the module is to practice step by step the start-up procedure of the drum-type steam utility boiler using simulation, analyzing the steam distribution system of a boiler unit and operate the cooling system using heat exchanger.</p> | <p>None</p> |
| <p><b>DGP6152 PROJECT 2</b></p> <p>PROJECT 2 is emphasis on the method of construction, testing, detection and project preparation planned in the previous semester. This course also trains students to prepare project reports accordance with the prescribed format and performing projects at the end of the semester.</p>   | <p>None</p> |
| <p><b>DGP6203 PETROCHEMICAL PRODUCTION PROCESSES</b></p> <p>PETROCHEMICAL PRODUCTION PROCESSES provides exposure to the basic processes involved in petrochemical processing plant. This course also provides exposure to the various processing technology carried out in petrochemical plants. The students will be able to learn the processes involved in the production of petrochemical products and thus can complete process flow diagram.</p>           | <p>None</p> |

|  |  |
|--|--|
| <p><b>DGP 6212 ADVANCED CONTROL PROCESSES</b></p> <p>ADVANCED CONTROL PROCESSES provides integrated knowledge of chemical engineering to identify, formulate and solve process control problems. Exposure to use modern computational techniques and tools for solving chemical process control problems. Students will understand the engineering principles underlying process dynamics and control applied in process plant especially petrochemical plant.</p> | <p>DGP3093<br/>PROCESS<br/>INSTRUMENTATION<br/>&amp; CONTROL</p> |
| <p><b>DGP6222 BASIC PETROLEUM TECHNOLOGY</b></p> <p>BASIC PETROLEUM TECHNOLOGY provides the knowledge on concepts and basic principles of petroleum and petrochemical industry. It emphasizes on the basic methods and techniques in petroleum and petrochemical industry covering the following items; introduction to petroleum production, basic plant operations, petrochemical plants and basic utility operations.</p>                                       | <p>None</p>  |
| <p><b>DGP6232 BASIC INDUSTRIAL MANAGEMENT</b></p> <p>BASIC INDUSTRIAL MANAGEMENT course will cover basic management principles and theories related to Industrial sector. Besides that it will also expose the students to the concept of management, project management, resource and time management, basic quality management and supervisory skills.</p>   | <p>None</p>  |

## **4.0 NON ACADEMIC DEPARTMENTS AND UNITS IN POLITEKNIK KUCHING SARAWAK**

### **4.1 Student Affairs Department (JHEPP)**

The Student Affairs Department (JHEPP) comprises of two units namely the Student Intake & Data Unit (IDU) and the Welfare & Discipline Unit (WDU). This department assists Politeknik Kuching Sarawak (PKS) in the processing of students' intakes as well as students' registrations, keeping and updating the students' records and monitoring their welfare.

The Student Intake & Data Unit (IDU) helps and facilitates the management of all applications for admission, registration and updating of students' records whereas the Welfare & Discipline Unit (WDU) is mainly concerned with the welfare of the students such as assisting students' application for financial aids, monitoring their discipline and obtaining study permit for students from other states. The department is managed by the Head of the Student Affairs Department assisted by the Student Intake & Data Unit Head, and the Welfare & Discipline Unit Head. Apart from that, there are three other officers entrusted to three units namely the Students' Registration unit the Scholarship unit and the Disciplinary unit.

#### **Aims**

This department strives to optimize the intakes with high quality students and to implement a more systematic Student Management System.

#### **Objectives / Roles**

The objectives of the Student Affairs Department are to ensure that the students' intake and registration process are smoothly implemented and at the same time this department will provide a more systematic management system in line with the aspiration of Politeknik Kuching Sarawak by;

- a. assisting the Polytechnic Management Sector (SP Poli) in handling the intake of new students.
- b. disseminating information regarding learning and educational opportunities at Polytechnics in the Ministry of Education nationwide.
- c. recording the statistics of students' intake and development.
- d. managing the students' welfare pertaining to procuring of sponsorship.
- e. providing information pertaining to students' welfare and performance.

### **Activities of the Student Affairs Department**

#### **a. Students' Intake**

- Disseminating information pertaining to admission for the first and second intakes.
- Receiving the BJT-BPP, the candidates' acceptance forms, and verifying the consistency of the information provided by the candidates.
- Mailing the relevant forms to the candidates for registration purposes.

#### **b. Registration**

- Coordinating and managing the registration of new and senior students.
- Managing the Orientation Week programme for the new students.
- Managing matters pertaining to courses, referrals and inter polytechnic transfers.

#### **c. Students' Records**

- Recording and updating students' records
- Updating the students' databases.
- Preparing and producing students' statistics.

#### **d. Study Permit**

- Assisting students from outside Sarawak to procure the documents.
- Collaborating with the Immigration Department in matters pertaining to application, issuance and renewal of necessary travel documents.



e. Sponsorship, Scholarship and Study Loans

- Collaborating with sponsors by providing relevant sponsorship information to students.
- Assisting students throughout the application processes.
- Facilitating the interview sessions conducted by the sponsors at PKS premise.
- Facilitating the signing of the “Sponsorship Agreement”

f. Students’ Discipline & Conduct

- Setting and implementing the rules and the code of conduct of PKS students.
- Overseeing and implementing the Act 174.
- Monitoring and enforcing discipline and the conduct of road users in PKS.

g. Students’ Welfare

- Helping students in getting medical attention.
- Helping students in attaining suitable accommodation.
- Assisting students who need assistance.

h. Students’ Insurance

- Helping students to acquire group insurance.
- Helping students to file claim(s) in case of accidents.

i. Committee for Students Representatives

- Monitoring the committee activities through the bureau advisors.
- Coordinating the Orientation Week programme for the new students.

*Note: For information pertaining to Officer-in-charge of the various activities stated above, kindly refer to the attached Organization Chart of Student Affairs Department.*

## **Services Provided by the Student Affairs Department (JHEPP)**

The Student Affairs Department provides services to all students. When seeking assistance at the service counter of Student Affairs Department, students are advised to comply with the dress code as prescribed in the polytechnic dress code rules and regulations. The Department uses student's registration number or student's matrix card number as a guide to track or extract student's information when dealing with the following services. The services provided by the department are as follows;

1. Inter Polytechnic Transfer
2. Change of Programme
3. Deferment of Study
4. Discontinuation of Study
5. Student Card
6. Student Personal file
7. Certification of Documents

## **Application Procedures for the Services provided by JHEPP**

### **1. Inter Polytechnic Transfer**

Successful candidates will be offered a place in one of the polytechnics in Malaysia and the decision of placement to that particular polytechnic as stated in the offer letter is **FINAL**. However there is allowance for appeal and candidates should abide to the following procedures:

- 1.1 For candidates who have not reported to the Polytechnic. Candidates need to write an official letter of appeal for a transfer to another Polytechnic. The letter should be addressed to the Student Intake Division, Department of Polytechnic Education, Putrajaya.
- 1.2 For candidates who have reported to the Polytechnic. Applications for a transfer to another polytechnic can be made between the fourteenth (14th) week to the sixteenth (16th) week of the academic session. The application must be endorsed by the Director of the polytechnic and the students' academic interests are to be taken into account. The result of the transfer will be made known by the eighteenth (18th) week of the academic session.

For critical cases, applications must be sent immediately and directly to the Student Intake Division, Department of Polytechnic Education, Putrajaya.

- 1.3 Cancellation of application for the Inter Polytechnic Transfer Students must submit their application of cancellation of interpolytechnic transfer directly to the Student Intake Division, Department of Polytechnic Education. However, the approval of the cancellation of transfer is under the jurisdictions of the abovementioned department. Students who are given a transfer to another polytechnic while undergoing their industrial training or during deferment of study can register with their new polytechnic during the coming semester. Students who are involved with police case must make sure that their transfer will not affect the police investigation.

## 2. Change of Programme

The course offered to student as stated in the letter of offer is **FINAL**. For students who wish to appeal for the change of programme, the following steps should be taken.

- 2.1 For students who have not yet registered with the Polytechnic All appeals for change of courses programme should be directed to the Student Intake Division, Department of Polytechnic Education, Department of Polytechnic Education.
- 2.2 For students who have registered with the polytechnic Application for change of programme can be submitted to the Director of the polytechnic within one (1) month from the date of the first registration. Applications can be submitted by students at any semester. Successful applicants will be placed in the first semester of the new programme

*Note: Upon approval, the student's matrix card for the previous programme should be returned to the Student Affairs Department.*

### **3. Change of Programme mode**

Only students who have enrolled for a full-time programme will be allowed to change their programme. They are only permitted to change to a part-time programme that is being offered in the same polytechnic. Application for change of programme should be addressed to the Director of Students In-take Division, Department of Polytechnic Education, through the Director of Polytechnic of the applicant.

*Note: Students' Matrix Card should be returned to the Student Affairs Department upon the approval by the Director of Students In-take Division, Department of Polytechnic Education.*

### **4. Deferral of Study**

4.1 For applicants who have not registered with the polytechnic. Applicants who wish to apply for postponement of study should write a letter of appeal to the Director of Students In-take Division, Department of Polytechnic Education. They can apply for readmission in the coming session / semester.

4.2 For applicants who have registered with the polytechnic and Senior Students Applicants who wish to apply for postponement of study should write to the Director of polytechnic for approval. However, application for deferral of study is only given to those who are on medical grounds. Upon approval, the current semester will not be taken into account or considered as waived.

*Note: The period of postponement of study should not exceed 2(two) semesters except on medical grounds.*

## **5. Discontinuation of study**

- 5.1 Students who wish to quit from polytechnic are required to fill in the **“Discontinuation Study Form”**. The duly completed form must be commented by the Academic Advisor, the Public Relations Officer, the Head of Industrial Training Unit and the Librarian before submitting to the JHEPP for verification. The Director of the polytechnic will make the final decision pertaining to the approval of the application.
- 5.2 An official letter for the result of the appeal will be sent to the applicant and copy to the following:
- Head of Academic Department students
  - Examinations Officer
  - Librarian
  - Head of Industrial Training Department
  - Head of Co-curriculum Sports Department
  - Student Personal File
- 5.3 The officer in-charge will have to update the student’s data in the database and student’s personal file.

## **6. Student Card**

JHEPP is responsible for preparing the Polytechnic student card. Students who have received their cards must acknowledge receipt.

## **7. Student Personal files**

The officer-in-charge of Student Personal file is PHEP (PD) and is responsible for the following;

7.1 Prepare and open new Student Personal File for every new student. Each file should include the following: -

- Reply for the Letter of Acceptance (BJT-BAP).
- A copy of SPM slip or Certificate / Result Slip of Overseas Academic and Letter of Declaration of National Accreditation Board (LAN) / Semester 4 Result Slip / Certificate or Results Slip for Skills Certificate / Result Slip or Certificate of Community Colleges.
- Copies of Certificate of Co-curriculum
- A copy of identity card or My Card
- A copy of the School Leaving Certificate
- Form BHEP1 to BHEP 6 completed and duly signed.

*Note: Copies of the above documents must be certified.*

7.2 Updating Student Personal File

7.3 Students are required to replace any missing, incomplete or damaged documents.

7.4 This file will be stamped with the words "for use in Polytechnic only" or used as "Crossed file".

## **8. Certification of Documents**

Officers who are eligible to certify the certificates and documents are as follows:

- Government Officer Management and Professional / Group A
- Judicial and Legal Officer, Chief Judge, Lawyer, Magistrate / Justice
- Peace and All Doctors Working in Central Government Health only.
- Principal / Headmaster
- Police Officer of the rank of ASP and above
- Staff of the Army rank of Captain and above

- Superintendent of Prisons, Fire Authority, the Superintendent of Customs
- MP / Senator
- Felda Manager or Felcra Manager
- Headman / Warden / Pemanca / Community Leaders (Sabah and Sarawak).

### **Office Opening Hours**

Monday to Thursday: 0800 - 1230 & 1400 - 1700

Friday: 0800 - 1130 & 1415 - 1700

Closed on Public holidays

## **4.2 Examination Unit**

### **Roles and Duties of Examination Unit:**

- a. Preparing Final Examination Timetable
- b. Distributing latest examination related information by means of notice boards and PKS website
- c. Handling Final Examination at the end of each semester
- d. Preparing the Invigilation Timetable for lecturers
- e. Managing the process of receiving and delivering examination papers
- f. Receiving the answer scripts and preparing them for moderation by appointed moderators or answer script markers
- g. Preparing examination results master sheets for endorsement purposes during the PKS Examination Committee Meeting.
- h. To be the Secretarial for the PKS Examination Committee Meeting
- i. To keep record of student examination marks
- j. To prepare certificates and awards for qualified students
- k. To prepare supporting documents pertaining to student's appealing letters to be used during the PKS Examination Appeal Meeting
- l. To play the role as Secretarial for the PKS Examination Appeal Meeting
- m. To act as the Certification Committee during PKS Convocation

### **Services for Students:**

- a. To provide the latest information regarding Final Examinations
- b. To receive and handle feedback from students/clients and respond within 14 days
- c. To reproduce lost or damaged certificates upon request
- d. To manage students Final Examination's appeal letters
- e. To dispatch student's certificates, exam related documents as well as gifts for those who are not able to attend the convocation
- f. To safe keep student's certificates which are either not received or cannot be contacted
- g. To prepare Letter of Confirmation for student who has just successfully completed their study
- h. To verify and endorsed Final Exam Result Slip for the purpose of application for Study Loan, Scholarship or admission to Polytechnic Hostel (KAMSIS)
- i. To prepare alternative Final Exam timetable for student in case of clashes in the original timetable
- j. To assist the Academic Departments in making a join decision should there be exam related cases.

### **Officers in Charge:**

|                         |  |
|-------------------------|--|
| Hyril Farithz Bin Ahmad | - Head of Examination Unit                     |
| Fatimah Binti Leman     | - Assessment Management Examination Officer    |
| Chen Hong Liung         | - Record and Certification examination Officer |
| Imelda Binti Biding     | - Assistant Administrative                     |
| Edwin Joseph Toh        | - Assistant Operation                          |

### **Workflow**

Student who has any enquiries pertaining to examination unit, or anything related with examination should first approach our Assistant Administrative Officer at the Examination Unit Counter which is located to the left of the main entrance of Examination Unit.



Enquiries that need further action or clarification will be forwarded to the appropriate officer(s). According to our policy, any enquiries received must be responded and action taken within twenty one (21) days. However, should the enquiries require further investigation such as involvement of other units or departments, then the handling process may exceed twenty one (21) days and students will be informed about it.

**Operating Hours:**

Monday to Thursday : 8.30 am – 12.30 pm, 2.00 pm – 4.30 pm

Friday : 8.30 am – 11.30 am, 2.30 pm – 4.30 pm

Closed on Public Holidays

### **4.3 Department of Sports, Co-Curriculum & Culture (JSKK)**

#### **4.3.1 Introduction**

The role of this department is to organize as well as to supervise all co-curricular and co-curriculum activities in Politeknik Kuching Sarawak (PKS). Its main objective is to enhance the soft skills of PKS students especially in areas of social interaction, leadership, discipline and levels of confidence.

The structure of JSKK, Politeknik Kuching Sarawak is as followed:

- i. Sports Unit
- ii. Co-curriculum Unit
- iii. Culture & Heritage Unit

JSKK is responsible for all matters related to sports, co-curriculum and culture in the polytechnic. This includes planning, organizing, implementing, coordinating, supervising and monitoring the overall activities of sports, cultural as well as managing the equipment. This department also ensures that all facilities are in tip-top conditions and at the same time provides quality and excellence services to all our customers.

JSKK also ensures that all sports activities, co-curriculum and culture are progressing according to schedule and complied with the Polytechnic Calendar. It is also actively involved with outside activities related to sports, culture and co-curriculum. Apart from that, JSKK always plans in advance to ensure that lecturers performing the following courses are given opportunity to equip themselves with the required knowledge and ample training to enable them to be qualified trainers in the areas of sports, co-curriculum and culture.

JSKK also manages the development and promotion of sports for students and staff. This department is also engaging experts from within and outside the Polytechnic in promoting sports training programs, co-curriculum and cultural activities.

#### **4.3.2 Sports Unit**

This unit is responsible for managing and coordinating all sports programs in polytechnics. Under this unit, there are several student sports clubs managed by lecturers who are very keen, committed and qualified as a coach in this field. Kejohanan Sukan Politeknik Kuching Sarawak or also known as KESUPKU is one of the internal activities which involved sports competition among the students between the academic departments. KESUPKU also gets the staff to get involved with the competition. The involvement and achievement in sports by Polytechnic Kuching Students is very encouraging.

Students are provided with the chances to join tournaments such as Sports Carnival organized by Majlis Sukan Politeknik Malaysia (MSPM), Kejohanan Sukan Jemputan from IPTA and IPTS, Kejohanan Sukan Jemputan from Sports Association and Organization. Students also can join sports tournament on a higher level which is Sukan Institusi Pengajian Tinggi (SUKIPT). SUKIPT is actually organized by Sports Department of Ministry of Higher Education, held once in two years' time since it was introduced for the first time in 2012. The students who are excellent in sports might have the chances to represent Sarawak in Sukan Malaysia (SUKMA) in which the practices would be handled by Majlis Sukan Negeri Sarawak.

### 4.3.3 Co-curriculum Unit

The Co-curriculum Unit is responsible for ensuring that all co-curricular programs can be implemented smoothly and effectively. All these modules will expose students to the various aspects of the basic skills of individuals as well as groups. Continuous assessment is made through the course in the form of student practical work and theory. Students would be given choices just like in Figure 5.3 for Co-curriculum Course. This course is actually compulsory for Semester 2 and Semester 3 students.

“Laluan 1” is a choice where it involves sports in semester 2 (1 credit) and club/society in semester 3 (2 credits). “Laluan 2” is a uniformed unit choice which starts in semester 1 (0 credit), semester 2 (1 credit), semester 3 (2 credits) and students can get a chance to get “pentauliahahan Pangkat” in this uniformed unit when they managed to get through the courses in semester 4 (0 credit) and semester 5 (0 credit). There are 4 uniformed units offered which are:

- i. Askar Wataniah
- ii. PLAS Tldm
- iii. Pispas
- iv. Relasis

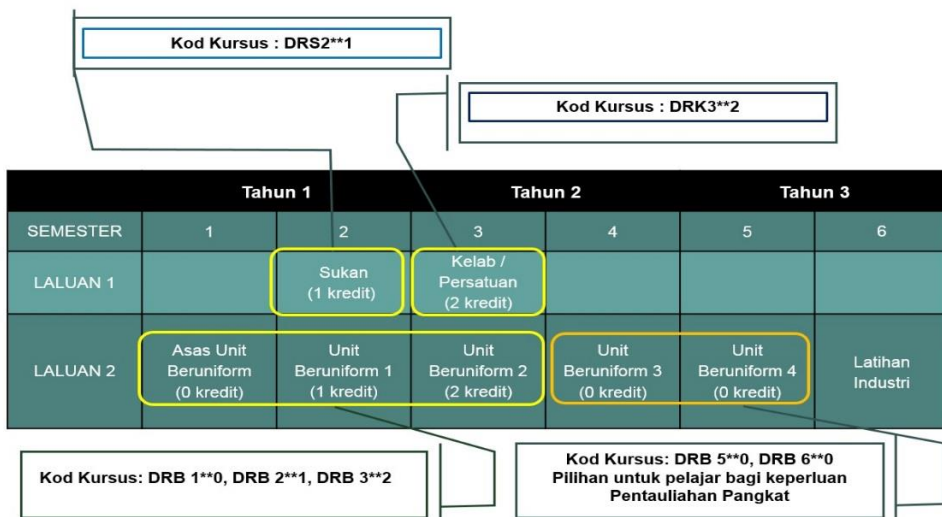


Figure 4.4 Pilihan Kursus Co-Curriculum

#### 4.3.4 Culture & Heritage Unit

Under this unit, there are several activities planned to be implemented and a number of activities organized by JSKK and lead by Culture Officer with a group of students from Kebudayaan dan Warisan (KEWARIS). Among the activities involved KEWARIS are Majlis Konvokesyen Politeknik Kuching Sarawak, Sambutan Hari Perayaan, as well as performances inside and outside of Politeknik Kuching Sarawak.

At the level of Politeknik Malaysia, Seketeriat Kebudayaan Politeknik Malaysia or SEKEW was established in 2016. The main purpose of SEKEW is to plan, coordinate and organize cultural events for polytechnics. SEKEW is also responsible in planning festivals, seminars, explorations and various courses on cultures to help the polytechnic students and staff develop their skills, knowledge and expertise in various areas. The council also acts as a resource centre to assist the polytechnics in various matters pertaining cultures towards achieving excellence in cultures and heritage.

#### 4.4 Industrial Liaison & Training Unit (UPLI)

The industrial training has played an important role in providing polytechnic students with opportunities for hands-on experience and exposes students to related workplace competencies demanded by the industries. This training provides exposure to students in term of technology literacy, effective communication, practice social skills and teamwork, policies, procedures and regulations, professional ethics and reporting. It also equips students with the real work experience, thus helping students to perform as novice workers.

The duration of each training session is one semester, that is, **approximately 20 weeks**. Students are required to undergo industrial training in their field of studies with participating organisations. Before the students are eligible for training, they have to fulfill all the following requirements as stated in part 5 of the *“Arahan-arahan Peperiksaan dan Kaedah Penilaian”* dated 12th February, 2009.

The placement of training venue will be made known to the students before the commencement of training. Students will be attached to an organisation based on

their respective fields of study. **During their internship**, they will be guided by supervisors appointed by the organization. Students are constantly advised to maintain a high level of discipline. **At the end of internship, students will be evaluated by organization supervisors based on their overall performance.**

In Kuching Polytechnics, the **Industrial Liaison & Training Unit (UPLI)** is situated at 1<sup>st</sup> floor of the Cisec's building that is next to the PKS library. This unit is headed by a unit head, two officers and an administration clerk that is responsible for managing students' industrial training affairs. Apart from that, this unit is assisted by lecturers from other academic department who will be the training coordinators to the students.

For further information pertaining to industrial training, students are welcomed to seek advice and assistance from any staff of the Industrial Training Unit.

## **4.5 LIBRARY**

### **4.5.1 PKS Library Services:**

- a. Loan Services
- b. Web OPAC (Online Public Access Catalog)&*Facebook*
- c. References and Information Search Services
- d. Media Services
- e. Interlibrary Loan
- f. User Education Service
- g. Repository *Dspace@Politeknik Kuching Sarawak*
- h. What's App

#### 4.5.2 Officer-in-charge:

- For general customer services such as returning of loan, requesting for reference and retrieval of information, users can seek the assistance of the Library assistants.
- For Media services, users too can request assistance from the Library assistants.

#### 4.5.3 Library service procedure:

- a. Loan services is provided to all registered users and they are eligible to borrow library materials. All loan items are computerised. Borrowers are responsible for returning books on or before the due date. Fine will be imposed for items that are overdue.
- b. Web OPAC is accessible to all users via internet. Users can visit the library website at [www.library.poliku.edu.my](http://www.library.poliku.edu.my) to check on any titles or materials that are available.
- c. The Reference and Information Search Service is available at the reference / loan counter. This service helps users to solve problems pertaining to library usage. It also provides guidance and information through the OPAC service.
- d. Users can also make enquiries by using phone, email or letter through the internet. The Media Service is located at first floor of library PKS. This service provides the usage of materials such as audio and video cassettes, compact discs, DVDs, multimedia CD-ROMS, slides, and diskette and internet service. Users should fill in the form first before using the media service. Internet usage is limited to 30 minutes per session.
- e. Interlibrary Loan is a service that applies resource-sharing concept with other libraries or resource centers. This service is the first point of call if

the material needed is not available in PKS collection. It is a cooperative service among libraries in Malaysia. Interloan includes acquiring of journal articles and loaning of books, etc. The delivery of the materials requested depends on their availability.

- f. The library has been providing User Education Service for new intake students PKS. They will be able to know how to search and retrieve documents of their interest. through this service.
  
- g. Dspace @ Polytechnic Kuching is a digital repository system that collects, stores, preserves and disseminates materials owned by/related to Politeknik Kuching, Sarawak (PKS) in digital form. Users will be able to have a quick access to the information in the system. Stored materials include PKS's archive, examination papers, research papers, conference papers and staff's publications.

#### 4.5.4 Operating Hours

##### Monday to Friday:

|                      |  |
|----------------------|--|
| During Semester      | 8.00 a.m-4.50 p.m                          |
| Inter Semester Break | 8.00 a.m – 1.00 p.m<br>2.00 p.m – 4.00 p.m |
| Closed               | Saturday, Sunday and Public Holidays       |

## **4.6 Psychology and Career Unit (UPK)**

### **Services Offered**

#### **1. Counselling Session**

*For Individual or Group counselling pertaining to the following:*

- Career
- Communication
- Academic
- Relationship
- Emotion etc.

#### **2. Psychology Test**

*For staff and students:*

- Personality
- Interest and Career
- Attitude (anger management, time management, financial management)

#### **3. Career Guidance**

Operating Career Consultation Clinic which includes career path, resume writing, and interview techniques

#### **4. Academic Advisor Clinic**

Assisting students in academic matters.



## 5. Motivation and Learning Clinic

Providing motivation and counselling services to students who find difficulties in their studies.

- Coordination of *Pembimbing Rakan Siswa Politeknik* Programmes

### Procedures of UPK

PKS students are welcome to seek services from any Psychology Officers during office hours by first making an appointment at the UPK office. Referral cases from the following parties will be given appointments too.

- Referrals from Academic Advisors
- Referrals from the coordinator of Consultation and Counselling
- Referrals from PKS *Pembimbing Rakan Siswa*

There are currently 3 Psychology Officers (Registered Counselor) attached to the unit.

### OPERATION HOURS

#### Monday to Thursday:

8.00am to 1.00 pm

2.00pm to 5.00 pm

#### Friday:

8.00am to 11.30am

2.30pm to 5.00pm

#### Saturday:

*By appointment only*

#### 4.7 Hostel (“KAMSIS DESA SERAPI”)



Politeknik Kuching Sarawak provides students' hostels which is known as “**Kamsis Desa Serapi**”. These hostels are situated beneath the beautiful mountain known as “Gunung Serapi”. These hostels - “Kamsis Desa Serapi” can accommodate about 2258 students. Out of this, 1200 places are allocated for girls and 1058 places are reserved for boys. Currently 6 blocks of the boys hostels are serviceable. Current capacity for the boys' hostels & the girls' hostels are shown in the table below.

| The Boys' Hostels |             | The Girls' Hostels |             |
|-------------------|-------------|--------------------|-------------|
| Block             | Capacity    | Block              | Capacity    |
| A                 | 232         | A                  | 624         |
| B                 | 232         | B                  | 576         |
| C                 | 232         |                    |             |
| D                 | 190         |                    |             |
| E                 | 86          |                    |             |
| F                 | 86          |                    |             |
| <b>Total</b>      | <b>1058</b> | <b>Total</b>       | <b>1200</b> |

The student hostel's room is based on twin-sharing basis. Each room is equipped with the following facilities such as two single beds, two study tables, two student cabinets, two mattresses, two chairs and two shelved cabinets. The hostels are equipped with the following amenities. There is a television room, a study room, a recreation room, a pray room, few water dispensers and pantries. There is also a multi-purpose common room for students and a meeting room for the student's bodies known as "**Jawatankuasa Perwakilan Pelajar (JPP)**" and "**Jawatankuasa Pelajar Kamsis (JPK)**"

Apart from that, the polytechnic information technology centre provides free Wi-Fi services for all students in the hostels. These services will be updated to meet the capacity of the students from time to time. Besides, the polytechnic cooperative "Koperasi - PKS" also provides a cyber café, washing machines as well as smart machine.

Within hostel campus, there is a cafeteria operating from 6.30 am to 11.00 pm daily. There is a canteen which provides services from 7.00 am to 5.00 pm (weekdays only) and a "G-Mart" providing basic necessities for the students.

### **Hostel Supervisor's Duties**

- a. To assist students who require medical attention and treatment to a clinic or hospital.
- b. To manage the student's application for hostel accommodation.
- c. To manage the student's check in and checkout process.
- d. To provide approval for student's application for the required hostel facilities.

### **Hostel Supervisor's Office Hours**

Monday – Thursday: 8.00 am – 12.45 pm

Friday: 2.15 pm – 5.00 pm

*(Except weekend, public holiday and semester break)*

### **Warden's Duties**

- a. To assist students who require medical attention and treatment to a clinic or hospital.
- b. To oversee student's discipline, safety and health.
- c. To provide emergency treatment where able necessary.

#### **4.8 Asrama 805, Politeknik Kuching Sarawak ,8TH Mile Matang Road**

Asrama 805, also referred to as Residence 805, is an off-campus hostel of Politeknik Kuching Sarawak. It is located at 8<sup>th</sup> Mile of Matang Road. The hostel is approximately 15 minutes from Politeknik Kuching Sarawak.

Asrama 805 started its operation in June 2016. Currently, the hostel has 256 rooms. All rooms are provided with basic facilities such as beds with mattresses, study tables, chairs, ceiling fan and wardrobe.

##### **Facilities :**

- Car park
- Shuttle services
- Supermarket
- Café (halal)
- Laundry services (24 hours)
- Security (24 hours)
- Finger print door access
- Separate building for male and female hostel
- Supervision by hostel warden
- Shared bathroom
- Students are advised to bring bedsheet, pillow, pillowcase and blanket

##### **Charges (per person, per semester) :**

- Single room – RM85
- Double room (with window) – RM 85
- Double room (without window) – RM75
- Quadruple room (with window) – (RM85)
- Quadruple room (without window) – (RM75)

\*All price show excluding GST 6%

##### **Contact :**

Mr. Robert [ 014-3993685 ]      Miss Fiona [ 016-8903275 ]

Email : [asrama805kopoliku@gmail.com](mailto:asrama805kopoliku@gmail.com)

## 4.9 Information & Communication Technology Unit (UICT)

### a. PKS-WIFI

PKS provides free Wi-Fi services for students within the campus namely as **PKS-WIFI**. PKS-WIFI is an open WIFI and the student can accessed the wifi using the username & password which had been registered by the network team at UICT.

The wifi coverage are expected mostly at the lecture room area not including all the boy & girl hostels. But they can used Sunner wifi kiosks which is very cheap to subscribe to use per hour.

### Officer in Charge

If there be any problems accessing the PKS-WIFI service, student may contact the officer in charge at ICT Unit. We will provide reference services and solve your problem related this matter.

|   | <b>Name</b>     | <b>Extension</b> |
|---|-----------------|------------------|
| 1 | Miss Gracie Soo | 155              |
| 2 | Mr Jamirin Asoi | 310              |

## 6.0 Clinic

PKS Clinic is under KAMSIS Unit and it is situated in the middle of the male hostel building. It has started to operate since 1<sup>st</sup> August 2013 and it gives the facilities of basic medical treatment for all of PKS members especially the students. It is managed by one Medical Assistant, helped by one pekerja sambilan harian (PSH). However, starting from April 2015, the position had been managed under JHEP.

The existence of this clinic is a need since its distance from the other health care centres is quite far from one another.

| No. | Health Care Centre              | Distance | Operation Hour |
|-----|---------------------------------|----------|----------------|
| 1.  | Hospital Umum Sarawak (A&E)     | 23 KM    | 24 hours       |
| 2.  | Klinik Kesihatan Telaga Air     | 10 KM    | 8 am – 5 pm    |
| 3.  | Klinik 1 Malaysia Taman Malihah | 15 KM    | 9 am – 9 pm    |
| 4.  | Poliklinik Jalan Masjid         | 23 KM    | 8 am – 5 pm    |
| 5.  | Klinik 1 Malaysia Matang        | 16 KM    | 9 am – 9 pm    |
| 6.  | Klinik Kesihatan Petrajaya      | 20 KM    | 8 am – 5 pm    |

The total number of students who are staying at the hostel every semester is more than 2000 and this Polytechnic needs to have a certified officer to handle all the medical issues and treatments. Apart from that, the existence of this clinic can actually lessen the work done in hospitals and other health care centres since it helps with all the mild cases. It also can decide whether those cases are in need of reference to the next level or not.

### **Objective**

To help by giving basic medical treatment to all the community members so that they can do their daily works productively.

It can be achieved by preparing services that will accommodate the steps to avoid, treat as well as basic recovery.

### **Vision**

Quality health generates quality education

### **Mission**

To provide medical services with quality, care and concerned.

### **Services**

To give early medical treatment in emergency cases and non-emergency cases.

## Operation Hour:

| Day                                | Operation Hour        |                       |
|------------------------------------|-----------------------|-----------------------|
| Monday-Thursday                    | 8.00 a.m.– 1.00 p.m.  | 2.00 p.m. – 5.00 p.m. |
| Friday                             | 8.00 a.m.– 11.45 a.m. | 2.15 p.m. – 5.00 p.m. |
| Saturday, Sunday & Public Holidays | Close                 |                       |

Emergency Cases– 24 hours (on-call)

PKS Clinic provides outside-patient-treatment to the students, staffs, and the family members who are entitled to get the treatment. For the part-timed workers, the treatment is for themselves only.

### Medical Services

- Outside-patient-treatment to adults only.
- Early medical treatment to emergency cases and accidents.
- Reference cases to medical clinics and Sarawak General Hospital (if necessary)
- Observation Room
- Medical treatment fee is free for students and staffs of Politeknik Kuching Sarawak only.

### General Medical Services

- One-to-one counselling service while treatment is given.
- Displaying related posters at the Health Corner near to the clinic.
- Health talk (the speakers would be invited)



## **Urgent Treatment**

- Injuries from accidents
- Breathing problem like asthma/panic attack etc.
- Intolerable pain such as stomach ache
- Unconsciousness like fainted for more than 10-15 minutes.
- Epilepsy
- Massive bleeding due to any reasons.

## **Examples of Non-Emergency Case**

- Cough and fever
- Skin problems – scabies, lice infection
- Non-serious ache on the body.
- Sprained ankles
- Sore throat
- Headache
- Small wound or bruise
- Daily dressing
- Non-serious insects bites
- Contagious diseases
- Bleeding faeces
- Tolerable pain when urinate
- Ulcer
- No appetite

## **Out-of-control Cases (emergency)**

Early treatment would be given by me and if in need of reference, it would be:

- Office hour : Clinic/ hostel warden
- After office hour: Warden on duty
- Usually, these cases would be sent to Klinik Kesihatan Telaga Air, Klinik Kesihatan Batu Kawa, Klinik Kesihatan Petrajaya, Klinik Kesihatan Jalan Masjid or Sarawak General Hospital.

## **Getting Treatment Ethics**

1. Students have to bring their matrix card or identity card (I.C.) to get the confirmation whether they are PKS students or not.

2. For non-emergency cases, please get the treatment during office hour only.
3. For emergency cases (after office hour), please do contact the warden on duty first before heading to the PKS Clinic.
4. Please follow the attire acknowledged by Politeknik.
5. Female students who are in need of treatment need to be accompanied by at least another one female student and a female warden (in case of after office hour).
6. Only Medical Assistant can prescribe medicines to the patients.
7. "Surat Pengecualian Kuliah" would only be given after the check-ups are done by the Medical Assistant and any request for the letter is not allowed. Only those who are in need of it, will get it.

**Exception Letter:**

1. Exception letter would only be given after it is confirmed that the patients are not fit to go to class.
2. Any request for the letter is not allowed.
3. The letter would only be issued at the time when the patients come to get the treatment.
4. The letter is not going to be issued after the working hours (office hour) which is (Monday-Friday) after 5 p.m., Saturday, Sunday and Public Holidays.
5. This letter needs to be approved by the lecturers, Academic Advisors or the Head of Departments.
6. This letter can only be given to the same student 3 times and it must not exceed 15 days in total or both of them in one semester.