POLITEKNIK MALAYSIA

TUANKU SYED SIRAJUDDIN

STUDENT HANDBOOK

MECHANICAL ENGINEERING DEPARTMENT

FOURTH EDITION
2025

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1.0 INTRODUCTION

Politeknik Tuanku Syed Sirajuddin is a comprehensive, learner centered higher education institution that serves its local and regional learners and their communities through high-quality and flexible education and training. It is aimed to develop student's employability skills to meet the needs of a more dynamic economy, which values innovation and productivity. Programs include a global perspective that will enable graduates to make a valuable contribution to the wider society as it changes in response to regional and international competition and demand.

PTSS programs include a variety of Outcome-Based Education teaching approaches, adding value to PTSS teaching and learning which cater to students seeking a quality polytechnic education and training.

The PTSS Student Handbook provides students with information on many facets of college life such as policies, procedures, and services. It is written for every student enrolled in one or more courses at PTSS.

This Handbook is aimed to guide students through the various procedural steps that lead to a Diploma study. It also provides graduate program descriptions, the requirements needed to obtain a graduate Diploma, and a clear outline of the procedural steps that students need to follow. Students are also provided with information on matters related to general administration such as student services and facilities, campus disciplinary measures, student organizations and other relevant matters.

This book serves as a preliminary guide and does not purport to completely address every policy, procedure and regulation. In addition, no claim is made that this document covers all the rules and regulations in effect now at PTSS. Students must refer to the relevant PTSS Department programs and services publications and other Departments and Units Policies for further information.

2.0 VISION & MISSION POLYTECHNIC

VISION

To become an excellent TVET institution

MISSION

To provide wide access to quality and recognised TVET programmes

To empower communities through lifelong learning

To develop holistic, entrepreneurial and balanced graduates

To capitalise on smart partnership with stakeholders

3.0 MECHANICAL ENGINEERING DEPARTMENT

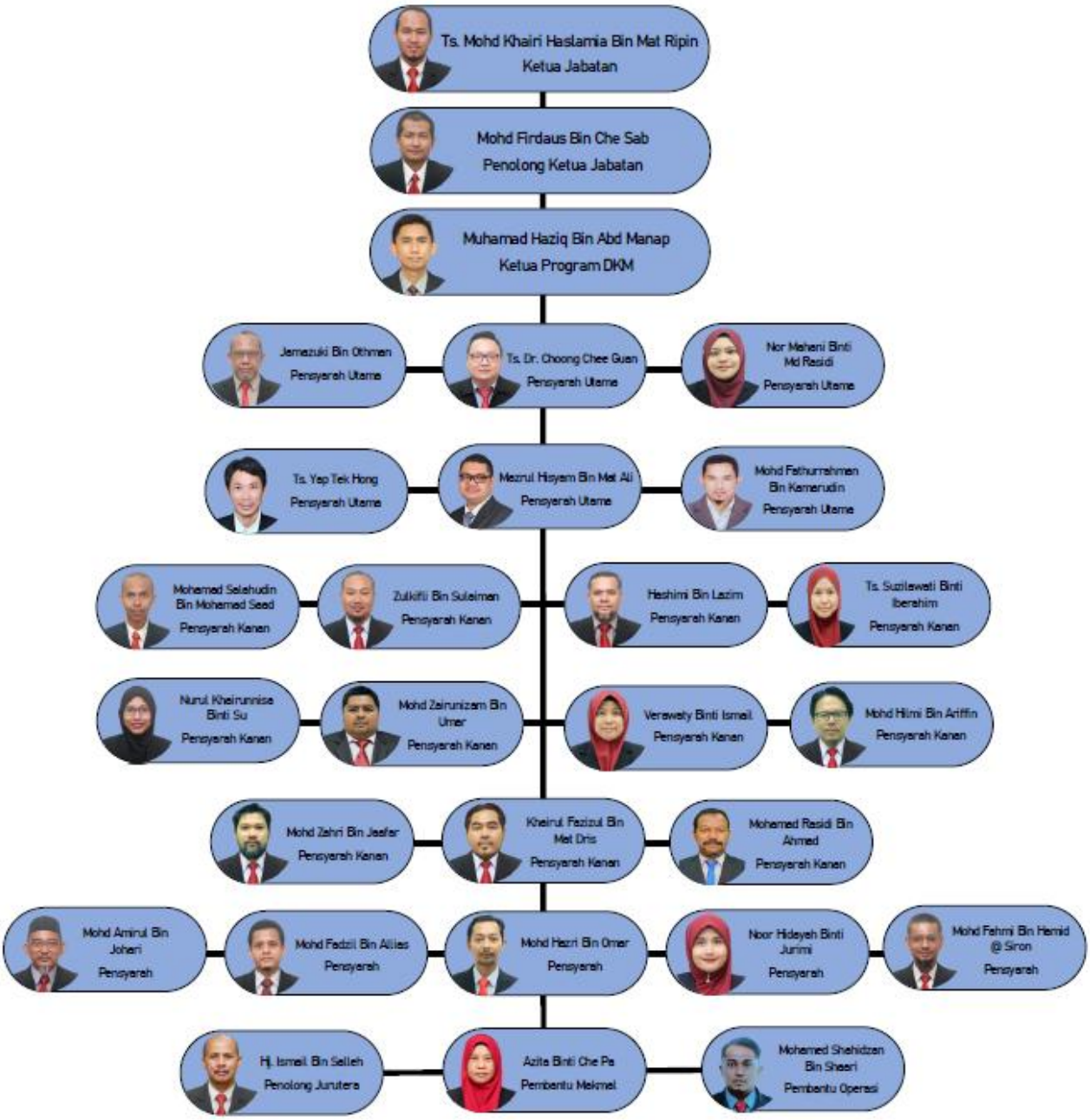
3.1 DEPARTMENT ORGANISATION CHART

POLITEKNIK MALAYSIA
TUANKU SYED SIRAJUDDIN

KEMENTERIAN PENDIDIKAN TINGGI
JABATAN PENDIDIKAN POLITEKNIK DAN KOLEJ KOMUNITI

JABATAN KEJURUTERAAN MEKANIKAL PTSS

CARTA ORGANISASI
JABATAN KEJURUTERAAN MEKANIKAL



3.2 MECHANICAL ENGINEERING DEPARTMENT LECTURERS

NO	NAME	DESIGNATION	CONTACT NO (04 988 6200)	EMAIL (@ptss.edu.my)
1	Ts. Mohd Khairi Haslamia bin Mat Ripin	Head of Department	6288	mkhairi
2	Muhamad Haziq bin Abd Manap	Deputy Head of Department	6289	haziq
3	Ts. Dr. Choong Chee Guan	Head of Program (DKM)	6284	dr.choong
4	Jamazuki bin Othman	Principal Lecturer	6284	jamazuki
5	Mazrul Hisyam bin Mat Ali	Principal Lecturer	6285	mazrul
6	Mohd Fathurrahman bin Kamarudin	Principal Lecturer	6285	fathurrahman
7	Nor Mahani binti Md Rasidi	Principal Lecturer	6285	normahanimr
8	Ts. Yap Tek Hong	Principal Lecturer	6384	yap
9	Hashimi bin Lazim	Lecturer	1111	hashimi
10	Khairul Fazizul bin Mat Dris	Lecturer	6284	fazizul
11	Mohamad Rasidi bin Ahmad	Lecturer	6284	rasidi.ahmad
12	Mohamad Salahudin bin Mohamad Saad	Lecturer	6284	salahudin
13	Mohd Amirul bin Johari	Lecturer	1111	mohdamirul
14	Mohd Fadzil bin Allias	Lecturer	6285	fadzilallias
15	Mohd Fahmi bin Hamid @ Siron	Lecturer	1906	fahmihamid
16	Mohd Firdaus bin Che Sab	Lecturer	6284	firdauschesab
17	Mohd Hazri bin Omar	Lecturer	6285	mohdhazri
18	Mohd Hilmi bin Ariffin	Lecturer	6285	hilmi
19	Mohd Zahri bin Jaafar	Lecturer	6284	zahri
20	Mohd Zairunizam bin Umar	Lecturer	6284	zairunizam
21	Noor Hidayah binti Jurimi	Lecturer	6284	noorhidayah
22	Nurul Khairunnisa binti Su	Lecturer	6284	khairunnisa.su
23	Ts. Suzilawati binti Iberahim	Lecturer	6287	suzilawatii
24	Verawaty binti Ismail	Lecturer	6284	verawaty
25	Zulkifli bin Sulaiman	Lecturer	6287	zulsulaiman
26	Ismail bin Salleh	Assistant Engineer	1111	ismailsalleh
27	Azita binti Che Pa	Laboratory Assistant	1891	azitachepa
28	Mohamed Shahidzan bin Shaari	Office Assistant	1111	shahidzan

3.3 DIPLOMA IN MECHANICAL ENGINEERING

3.3.1 PROGRAM INFORMATION

INTRODUCTION

The New Industrial Master Plan 2030 (NIMP 2030) targets to build Malaysia's industrial capacity and resilience for long-term and sustainable growth. NIMP 2030 is designed to drive Malaysia's trajectory as a global leader in industrial development, extend the domestic linkages to create wealth across the nation as well as strengthen its position in the global value chain. Three key global trends are; first is leverage mature industrial infrastructure with good connectivity, strategic location and reputation. Second, step up efforts to develop high-skilled talent and enhance TVET programmes. Third, to create new growth opportunities in green manufacturing, electric vehicles, and carbon capture, utilisation, and storage (CCUS). NIMP 2030 missions have been formulated to drive industry transformation at a large scale: to advance economic complexity, to tech up for a digitally vibrant nation, to push for net zero, to safeguard economic security and inclusivity.

The Twelfth Malaysia Plan (12MP) policy improving the educational ecosystem and technical and vocational training (TVET) to develop talent available time the front will be known as the driver changes to meet demand industry better. Industry 4.0 refers to the intelligent networking of machines and processes using information and communication technology (ICT). Industry 4.0 transforms manufacturing processes from product design to fabrication, operation, and maintenance. It fosters automation and data exchange in manufacturing technologies and processes through physical-cyber systems. Industry 4.0, a subset of the 4IR, focuses on the manufacturing sector, whereas 4IR encompasses almost every industry and all aspects of human life.

Diploma in Mechanical Engineering for polytechnic is developed to give balance emphasis on theoretical and practical aspects. Thus, to keep abreast with rapid demand in TVET sector, Department of Polytechnic and Community College Education (DPCCE) progressively

collaborates with major industry players in the country in developing the curriculum. The Diploma in Mechanical Engineering programme will take six semesters to complete, five academic semesters at their respective polytechnics and one semester of industrial training at relevant industries during the final semester. This programme complies with the Malaysian Qualifications Agency (MQA) and Board of Engineer Malaysia (BEM) /Engineering Technology Accreditation Council (ETAC).

3.3.2 SYPNOSIS

The Diploma in Mechanical Engineering programme is designed to produce holistic graduates that have knowledge and competent skills in the field of mechanical engineering to fulfil the demand of workers in engineering sector. The programme structure focuses on the area of Solid Mechanics, Statics & Dynamics, Thermodynamics, Fluid Mechanics, Materials, Mechanical Design, Workshop Practices, Manufacturing, Instrumentation & Control, Mechanical Maintenance, Electrical & Electronic Technology and Computer Programming.

3.3.3 JOB PROSPECT

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

a. Assistant Engineer
b. Technical Assistant
c. Assistant Service Manager
d. Service Advisor
e. Supervisor
f. Technician
g. Technical Instructor or Lecturer
h. Technical Sales Executive / Engineer

i. Draughter / Designer
j. Adjuster
k. Product Demonstrater
l. Fitter
m. Machinist
n. Entrepreneur

3.3.4 PROGRAMME AIM

The programme believes that every individual has potential, and the programme aims to develop adaptable and responsible Senior Assistant Engineers to support government aspiration to increase workforce in engineering related field.

3.3.5 PROGRAMME EDUCATIONAL OBJECTIVES (PEO)

Within a few years after completing Diploma in Mechanical Engineering, graduates are able to:

PEO1: proficient with industry-relevant knowledge and skills in mechanical engineering field

PEO2: engaging on lifelong and continuous learning to enhance knowledge and skills

PEO3: acquire with entrepreneurial skills and mind set in the real working environment

PEO4: establish links with society and players in the industry

3.3.6 PROGRAMME LEARNING OUTCOMES (PLO)

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

PLO1 : Apply knowledge of applied mathematics, applied science, computer and engineering fundamentals and an engineering specialisation as specified in DK1 to DK4 respectively to wide practical procedures and practices in area of mechanical engineering.

PLO2 : Identify and analyse well-defined engineering problems reaching substantiated conclusions using codified methods of analysis specific to mechanical engineering field (DK1 to DK4).

PLO3 : Design solutions for well-defined technical problems and assist with the design of systems, components or processes to meet specified needs with appropriate consideration for public health and safety as well as, cultural, societal and environmental considerations in area of mechanical engineering (DK5).

PLO4 : Conduct investigations of well-defined problems; locate and search relevant codes and catalogues, conduct standard tests and measurements (DK8).

PLO5 : Apply appropriate techniques, resources, and modern engineering computing and IT tools to well-defined engineering problems, with an awareness of the limitations (DK2 and DK6).

PLO6 : Consider sustainable development impacts* to: society, the economy, sustainability, health and safety, legal frameworks, and the environment, in solving well- defined engineering problems (DK1, DK5 and DK7).

PLO7 : Understand and commit to professional ethics and responsibilities and norms of technician practice and including compliance with national and international laws. Demonstrate an understanding of the need for diversity and inclusion (DK9).

PLO8 : Function effectively as an individual, and as a member in diverse and inclusive teams in multi-disciplinary, face-to-face, remote and distributed settings (DK9).

PLO9 : Communicate effectively and inclusively on well-defined engineering activities with the engineering community and with society at large, by being able to comprehend the work of others, document their own work, and give and receive clear instructions.

PLO10 : Demonstrate awareness of engineering management principles as a member or leader in a technical team and to manage projects in multidisciplinary environments.

PLO11 : Recognise the need for, and have the ability for i) independent and life long learning and ii) critical thinking in the face of specialised technical knowledge (DK8).

*Represented by the 17 UN Sustainable Development Goals (UN-SDG).

Notes:

DK 1 **:** A descriptive, formula-based understanding of the natural sciences applicable in a sub-discipline and awareness of directly relevant social sciences.

DK 2 : Procedural mathematics, numerical analysis, statistics applicable in a subdiscipline.

DK 3 : A coherent procedural formulation of engineering fundamentals required in an accepted sub-discipline.

DK 4 : Engineering specialist knowledge that provides the body of knowledge for an accepted sub-discipline.

DK 5 : Knowledge that supports engineering design and operations based on the techniques and procedures of a practice area.

DK 6 : Codified practical engineering knowledge in recognized practice area.

DK 7 : Knowledge of issues and approaches in engineering technician practice, such as public safety and sustainable development.

DK 8 : Engagement with the current technological literature of the practice area.

DK 9 : Knowledge of professional ethics, responsibilities, and norms of engineering practice. Awareness of the need for diversity by reason of ethnicity, gender, age, physical ability etc. with mutual understanding and respect, and of inclusive attitudes.

DK: Knowledge Profile

Dublin Knowledge refers to the Knowledge Profile as listed in the Manual of Engineering Technician Education Programme Accreditation Standard (ETAC) for diploma programmes.

3.3.7 SYPNOSIS AND COURSE LEARNING OUTCOME

SEMESTER	COURSE	SYPNOSIS	COURSE LEARNING OUTCOME (CLO)
1	DJJ10223 ENGINEERING DRAWING	**ENGINEERING DRAWING** course provides the students with the fundamentals of technical drawings and the application Computer Aided Design (CAD) software. For technical drawing, it emphasizes the practical knowledge of drawing instruments and drawing techniques while for CAD the student will learn to navigate and use the software to create 2D drawing design in engineering. Students shall be able to demonstrate competency in using some standard available features of technical drawing and CAD application to create and manipulate objects or elements in engineering drawing. **Credit Value: 3** **Prerequisite: None**	CLO1: Apply the fundamentals of engineering drawing and features of CAD software. (C3, PLO1) CLO2: Construct the 2D CAD drawing according to the engineering drawing standards. (P3, PLO5) CLO3: Propose a project presentation with following engineering norms and practices in engineering drawing. (A3, PLO7)
1	DJJ10232 MECHANICAL WORKSHOP PRACTICE 1	**MECHANICAL WORKSHOP PRACTICE 1** exposes the students to welding, machining and fitting which involve the use of arc and gas welding machine, lathe machine, drilling machine, grinding, hand tools, marking out tools, measuring and testing tools. Students are also taught to emphasize on safety procedures and cleanliness in the workshop. **Credit Value: 2** **Prerequisite: None**	CLO1: Measure finished product using appropriate measurement instruments. (P3, PLO5) CLO2: Perform fitting, welding and machining works according to Standard Operational Procedure (SOP). (P4, PLO5) CLO3: Demonstrate an understanding of sustainable development impacts, environment and norms of engineering practices according to the workshop safety and health regulation. (A3, PLO6)

1	**DJJ10243 WORKSHOP TECHNOLOGY**	**WORKSHOP TECHNOLOGY** provides exposure and knowledge in using hand tools, machine operation such as drilling, lathe, milling and computer numerical control. It also covers on gear measurement and inspection welding process in oxy acetylene, Shielded Metal Arc Welding (SMAW), Gas Tungsten Arc Welding (GTAW) and Gas Metal Arc Welding (GMAW). **Credit Value: 3** **Prerequisite: None**	CLO1: Apply the knowledge of basic mechanical components and equipment, hand tools and measuring equipment in workshop technology. (C3, PLO1) CLO2: Apply standard practice in operating mechanical tools and component. (C3, PLO7) CLO3: Demonstrate continuous learning and information management skills to complete assigned task. (A3, PLO11)
2	**DJJ20232 MECHANICAL WORKSHOP PRACTICE 2**	**MECHANICAL WORKSHOP PRACTICE 2** exposes the students to TIG and MIG welding, foundry and machining works. Safety procedure practice and teamwork ability are emphasized throughout this course. **Credit Value: 2** **Prerequisite: DJJ10232**	CLO1: Follow appropriate safety and practical procedure for welding, foundry and lathe machining. (P3, PLO5) CLO2: Perform welding, foundry and lathe machining according to safety and Standard Operating Procedure (SOP). (P4, PLO5) CLO3: Display the ability to work as individual and as a member in diverse technical teams. (A3, PLO8)
2	**DJJ20263 ELECTRICAL AND ELECTRONIC TECHNOLOGY**	**ELECTRICAL AND ELECTRONIC TECHNOLOGY** exposes students to the basic electrical circuit concept and electronic components, the application of electromagnetism in electrical machines, transformers and usage of renewable energy. The course focuses on the different types of electrical circuit, the relationship between current and voltage including the resistance and function of electronic components. This course also exposes the students to the demonstration of experiments in Electrical and Electronic Technology. **Credit Value: 3** **Prerequisite: None**	CLO1: Apply fundamental knowledge in electricity, electronic, electromagnetisms and electrostatics in motor and generator control systems to solve related problems in electrical technology. (C3, PLO1) CLO2: Organize appropriate experiments in groups according to Standard Operating Procedure. (P4, PLO5) CLO3: Demonstrate continuous learning and information management skills while engaging in independent acquisition of new knowledge and skills in laboratory report. (A3, PLO11)

2	**DJJ20273 FLUID MECHANICS**	**FLUID MECHANICS** is designed to provide students with the knowledge related to the fundamentals of fluid mechanics. It emphasized on the principles related to the fluid properties and behavior in static and dynamic condition. This course also covers the principle and application of fluid mechanics laboratory techniques including preparation and analysis of fluid properties, Reynold Numbers, Bernoulli Theorem and losses in pipeline system. **Credit Value: 3** **Prerequisite: None**	CLO1: Explain various fluid properties to solve the problems in fluids mechanics. (C2, PLO1) CLO2: Apply fundamental knowledge of fluid mechanics in mechanical engineering applications (C3, PLO1) CLO3: Organize appropriate experiments in groups according to the standard operating procedure. (P4, PLO5)
2	**DJJ20282 COMPUTER AIDED DESIGN**	**COMPUTER AIDED DESIGN** exposes students to the fundamentals and principles of 3D drawing using 3D CAD software. Students are also equipped with various methods of creating a solid model using extrude, revolve, swept, assembly, simulation, an animation and details drawing. Hands-on exercises drawing of mechanical engineering will also be covered in this course. **Credit Value: 2** **Prerequisite: DJJ10223**	CLO1: Apply CAD commands in order to produce engineering drawing. (C3, PLO1) CLO2: Construct 3D drawing of Mechanical Components according Drawing Standards. (P3, PLO5) CLO3: Demonstrate a presentation with following technical standard Communication. (A3, PLO9)
3	**DJJ30293 THERMODYNAMICS**	**THERMODYNAMICS** provides knowledge and application of fundamentals concepts to solve problems related to thermodynamics. It emphasizes analyzing the non-flow process, flow process, heat engine, reversed heat engine and vapor power cycle. This course also exposes the students to the demonstration of experiments by using real equipment. **Credit Value: 3** **Prerequisite: None**	CLO1: Apply the fundamentals concept and properties of pure substances in thermodynamics. (C3, PLO1) CLO2: Analyze the thermodynamics systems using the laws of thermodynamics. (C4, PLO2) CLO3: Organize appropriately experiments according to the Standard Operating Procedures. (P4, PLO5)

3	**DJJ30302 MECHANICAL WORKSHOP PRACTICE 3**	**MECHANICAL WORKSHOP PRACTICE 3** course allows students to operate machine tools, extend their experiences in indexing, precision grinding, CADCAM Software, CNC machine and able to work in a clean and safe workshop environment. **Credit Value: 2** **Prerequisite: DJJ20252**	CLO1: Perform high precision machining processes for the surface or cylindrical grinding machine and indexing in milling machine. (P4, PLO5) CLO2: Construct programs for CNC or EDM machining process using ISO codes and any related CADCAM Software. (P5, PLO5) CLO3: Demonstrate awareness of safety procedures in the workshop and create secured environment in an organization while doing practical work. (A3, PLO6)
3	**DJJ30313 ENGINEERING MECHANICS**	**ENGINEERING MECHANICS** focuses on theoretical knowledge in statics and dynamics. This course provides the students with fundamental understanding of forces and equilibrium, resultants, equilibrium of a particle and structural analysis. This course also covers kinematics and kinetics of particles and exposes the students to the demonstration of experiments in Engineering Mechanics. **Credit Value: 3** **Prerequisite: None**	CLO1: Solve problems related to static and dynamics based on the concepts and principle of engineering mechanics. (C3, PLO 1) CLO2: Analyze engineering related problems based on fundamentals of static and dynamics (C4, PLO 2) CLO3: Organize appropriately experiment in groups according Standard Operation Procedure. (P4, PLO 5)
3	**DJJ30323 STRENGTH OF MATERIALS**	STRENGTH OF MATERIALS provides knowledge on concepts and calculation of forces on materials, thermal stress, shear force and bending moment, bending stress, shear stress and torsion in shafts. It also deals with the experiments conducted on tensile test, bending moment, shearing force and torsion and deflection. **Credit Value: 3** **Prerequisite: None**	CLO1: Apply the concepts of strength of materials to solve related problems. (C3, PLO1) CLO2: Analyze problems correctly related to strength of materials. (C4, PLO4) CLO3: Organize appropriately experiment in group according to Standard Operation Procedures. (P4, PLO5)

3	**DJJ30332 ENGINEERING AND SOCIETY**	**ENGINEERING AND SOCIETY** focuses on the introduction to professional ethics, theory and philosophy of ethics, values in professional ethics, engineering bylaws and standards, issues in professional ethics and sustainability. It also relates towards IR 4.0 introduction and green engineering. **Credit Value: 2** **Prerequisite: None**	CLO1: Implement the roles of engineering profession towards the developing of society and the challenge of globalization with professional ethic. (C3, PLO7) CLO2: Determine the importance of engineering management, professional bodies, sustainability and green technology aspect in the engineering profession. (C4, PLO6) CLO3: Explain the issues of sustainability and green technology in engineering practice. (A3, PLO9)
4	**DJJ40343 MATERIAL SCIENCE AND ENGINEERING**	**MATERIALS SCIENCE AND ENGINEERING** course is an introduction to students to learn the fundamentals of materials science and engineering (structure, properties, design and performance). The key step in engineering process is selection of materials for the applications. In the course, students will learn about different classifications of materials, atomic structure and bonding, materials properties, phase diagram and processes involved to produce a final product. This includes advanced techniques in metal fabrications such as powder metallurgy and 3D printing technology. Students will also learn to analyze the materials failure in the structure, applications and environments. Laboratory work will be used to perform the testing techniques employed by materials engineers to determine the properties and evaluate the materials tested. In order to cater for Industry 4.0 technology, students will be given case study and examples based on the current trends in materials and applications. **Credit Value: 3** **Prerequisite: None**	CLO1: Apply the knowledge of materials science in engineering applications. (C3, PLO1) CLO2: Perform the appropriate material testing according to operating procedure. (P4, PLO5) CLO3: Work individually and collaboratively in group to complete the assigned tasks. (A3, PLO8)

4	**DJJ40363** **MECHANICS OF MACHINES**	**MECHANICS OF MACHINES** exposes the students with knowledge and designed to provide students with the knowledge on techniques and concepts of mechanics of machines and analyzing problems related to hoists, simple harmonic motion, velocity and acceleration diagram, and belt drive. This course also exposes the students to demonstrations of experiments in Mechanics of Machines by using real equipment. **Credit Value: 3** **Prerequisite: DJJ30323**	CLO1: Apply the fundamentals of mechanics of machines to solve related problems in the theoretical and graphical aspects. (C3, PLO1) CLO2: Analyze problems related to the mechanics of machines in relation to the theoretical aspects. (C4, PLO2) CLO3: Perform experiments in groups according to the Standard Operating Procedures. (P4, PLO5)
4	**DJJ40373** **PNEUMATIC AND HYDRAULICS**	**PNEUMATIC AND HYDRAULICS** provides knowledge and understanding to the importance of pneumatics and hydraulics circuits, equipment, and design along with its usage in the industry. **Credit Value: 3** **Prerequisite: None**	CLO1: Apply the basic concept and function of pneumatics and hydraulics system. (C3, PLO1) CLO2: Evaluate the pneumatic, electro-pneumatic and hydraulic circuit according to assigned tasks. (C5, PLO3) CLO3: Perform experiment on pneumatic, electro-pneumatic and hydraulic circuit during practical session. (P4, PLO5)
4	**DJJ40383** **ENGINEERING DESIGN**	**ENGINEERING DESIGN** course offers a comprehensive coverage of basic concept engineering design. Student will learn the fundamental concepts for designing process, designing consideration, ergonomic, materials selection and emphasizes on mathematical analysis for simple components designs in engineering. It also provides knowledge on reverse engineering and practical on 3D printing. **Credit Value: 3** **Prerequisite: DJJ20282**	CLO1: Apply the concept of design process, stress analysis and mechanical joint in an engineering product. (C3, PLO1) CLO2: Analyze engineering design process on project design while considering design, ergonomic factors and material selection. (C4, PLO3) CLO3: Perform project design concept in 3D printing. (P4, PLO5) CLO4: Demonstrate project design concept that considers safety and health issues. (A3, PLO6)

4	**DJJ40392 PROJECT 1**	**PROJECT 1** provides students with solid foundation on knowledge and skills in formulating project proposal preparation, writing and presentation. **Credit Value: 2** **Prerequisite: None**	CLO1: Identify engineering problems in mechanical engineering fields. (C4, PLO2) CLO2: Analyze the sustainable development impacts in engineering problem. (C4, PLO6) CLO3: Demonstrate engineering management in a technical team. (A3, PLO10)
5	**DJJ50403 PROJECT 2**	**PROJECT 2** is a continuation of Project 1 focusing on project planning, development, project report and presentation. This course introduces the students with abilities and skills in conducting project planning, development and management based on their project design. It also provides the students with practical product, report writing and presentation skills. The project will be implemented in a group and each group will work on a project under lecturer(s) supervision. Project title will be based on specialization and students will be assessed individually. **Credit Value: 3** **Prerequisite: DJJ 40392**	CLO1: Organize project outcomes in progress report based on standard Format. (P4, PLO10) CLO2: Construct design solutions to meet specified needs of the project with appropriate consideration. (P5, PLO3) CLO3: Analyze the project results and write the project report to achieve proposed objectives. (C4, PLO4) CLO4: Explain the project work and defend project outcomes effectively with good communication skills. (A4, PLO9)
5	**DJJ50422 MAINTENANCE ENGINEERING AND MANAGEMENT**	**MAINTENANCE ENGINEERING AND MANAGEMENT** covers topic such as maintenance organization, maintenance strategies system, system approach to maintenance, maintenance planning and scheduling and computerized maintenance management system (CMMS). **Credit Value: 2** **Prerequisite: None**	CLO1: Apply the concepts of maintenance organization and strategies to solve related problem. (C3, PLO1) CLO2: Analyze maintenance strategies and system approach while adhere to legal, ethical and professional guidelines. (C4, PLO6) CLO3: Organize project management and finance by group in actual workplace related to maintenance management. (A3, PLO10)

5	**DJJ50413 TROUBLESHOOTING AND MAINTENANCE FOR MECHANICAL COMPONENTS**	**TROUBLESHOOTING AND MAINTENANCE FOR MECHANICAL COMPONENTS** course covers necessary mechanical components needed in Industries. The topics include maintenance and troubleshooting principles and procedures, power transmission, bearing and pump. This course provides knowledge and skills on maintenance and troubleshooting lubrication, bearing, power transmission and pump. **Credit Value: 3** **Prerequisite: None**	CLO1: Analyze the concept of mechanical components to solve related problems. (C4, PLO2) CLO2: Organize appropriately experiments in groups according to Standard Operating Procedure. (P4, PLO4) CLO3: Perform the troubleshooting on mechanical components failure and damage. (P4, PLO11)

ELECTIVE			
SEMESTER	**COURSE**	**SYPNOSIS**	**COURSE LEARNING OUTCOME (CLO)**
4	**DJJ40442 INDUSTRIAL MANAGEMENT**	**INDUSTRIAL MANAGEMENT** provides students with a strong fundamental understanding of industrial management prospects and production system planning such as inventory, scheduling, production system operation, facilities, plan location, layout and line balancing. This course also provides knowledge in quality control, and human resource management. **Credit Value: 2** **Prerequisite: None**	CLO1: Apply the basic concept of industrial management system to solve related problem. (C3, PLO2) CLO2: Analyze problems related to industrial management. (C4, PLO7) CLO3: Demonstrate communication skill in group to explain plant location and layout. (A3, PLO9)

4	**DJF52092 QUALITY CONTROL**	**QUALITY CONTROL** provides knowledge on basic principle and concept of quality including statistical method in controlling products quality or services. This course also emphasizes on the application of control chart and quality control tools and explains the quality improvement technique. **Credit Value: 2** **Prerequisite: None**	CLO1: Apply the basic quality principles, management system and tools related to manufacturing industry. (C3, PLO1) CLO2: Analyze manufacturing process and its issues using the quality tools and technique for process improvement in quality. (C4, PLO2) CLO3: Demonstrate ability to work in a team to solve quality problem in manufacturing. (A3, PLO8)
4	**DJJ40352 COMPUTER PROGRAMMING**	**COMPUTER PROGRAMMING** course introduces program design and development. Students will learn to design, code, debug, test, and document well-structured programs based on technical and engineering problem. Topic covered software development principle, programming language basic, data types, input and output operation, the use of selection, loops, arrays, internet of things and Arduino in industries. **Credit Value: 2** **Prerequisite: DJJ20282**	CLO1: Apply C Programming commands to solve given problem using an appropriate data type. (C3, PLO1) CLO2: Constructs a high-level programming language in solving variety engineering and scientific problems. (P4, PLO3) CLO3: Demonstrate a solution for assigned project based on programming which relates to current or upcoming technologies and peripherals. (A3, PLO11)

3.3.8 PROGRAMME STRUCTURE

COURSE TYPE	COURSE CODE	COURSE NAME	CONTACT HOURS				CREDIT VALUE
			L	P	T	O	
SEMESTER 1							
Compulsory	DUE10062	Technical English 1	1	0	2	0	2
	MPU24031	Sukan	0	2	0	0	1
	MPU24041	Kelab / Persatuan 1					
	MPU24XX1	Unit Beruniform 1					
Common Core	DUW10042	Occupational, Safety and Health for Engineering	2	0	0	0	2
	DBM10163	Engineering Mathematics 1	2	0	2	0	3
	DBS10042	Engineering Science	2	1	0	0	2
Discipline Core	DJJ10223	Engineering Drawing	1	3	0	0	3
	DJJ10232	Mechanical Workshop Practice 1	0	4	0	0	2
	DJJ10243	Workshop Technology	3	0	0	0	3
TOTAL			**25**				**18**
SEMESTER 2							
Compulsory	MPU21072	Penghayatan Etika dan Peradaban	1	0	2	0	2
	MPU24051	Sukan 2	0	2	0	0	1
	MPU24061	Kelab / Persatuan 2					
	MPU24XX1	Unit Beruniform 2					
	MPU22071	Kursus Integriti Dan Anti Rasuah	0	0	2	0	1
Common Core	DBM20173	Engineering Mathematics 2	2	0	2	0	3
Discipline Core	DJJ20252	Mechanical Workshop Practice 2	0	4	0	0	2
	DJJ20263	Electrical and Electronic Technology	2	1	1	0	3
	DJJ20273	Fluid Mechanics	2	1	1	0	3
	DJJ20282	Computer Aided Design	1	2	0	0	2
TOTAL			**26**				**17**

SEMESTER 3							
Compulsory	DUE30072	Technical English 2	1	0	2	0	2
Common Core	DBM30183	Engineering Mathematics 3	2	0	2	0	3
	DJJ30332	Engineering and Society	2	0	0	0	2
Discipline Core	DJJ30302	Mechanical Workshop Practice 3	0	4	0	0	2
	DJJ30313	Engineering Mechanics	2	1	1	0	3
	DJJ30323	Strength of Materials	2	1	1	0	3
	DJJ30293	Thermodynamics	2	1	1	0	3
		TOTAL	**25**				**18**
SEMESTER 4							
Discipline Core	DJJ40343	Material Science and Engineering	2	1	1	0	3
	DJJ40373	Pneumatic & Hydraulics	2	1	1	0	3
	DJJ40383	Engineering Design	2	1	1	0	3
	DJJ40363	Mechanics of Machines	2	1	1	0	3
	DJF40392	Project 1	2	0	0	0	2
Elective	DXXXXXX	Elective					2
		TOTAL	**18**				**16**
SEMESTER 5							
Compulsory	MPU23182	Sains Teknologi dan Kejuruteraan Islam*	1	0	2	0	2
	MPU23172	Nilai Masyarakat Malaysia**					
	DUE50082	Technical English 3	1	0	2	0	2
Common Core	DUU10072	Entrepreneurship	1	2	0	0	2
Discipline Core	DJJ50403	Project 2	1	3	0	0	3
	DJJ50413	Troubleshooting and Maintenance for Mechanical Components	2	1	1	0	3
	DJJ50422	Maintenance Engineering and Management	2	0	0	0	2
		TOTAL	**19**				**14**
SEMESTER 6							
Industrial Training	DUT600910	Engineering Industrial Training	0	0	0	0	10
		TOTAL	**0**				**10**
		TOTAL CREDIT VALUE					**93**

* For Muslim Students

**For Non-Muslim Students

NO	COURSE CODE	COURSE NAME	CONTACT HOURS				CREDIT VALUE
			L	P	T	O	
ELECTIVE COURSES							
1	DJJ40432	Engineering Plant Technology	2	0	0	0	2
2	DJJ40442	Industrial Management	2	0	0	0	2
3	DJJ40462	Railway Track System	2	0	0	0	2
4	DJJ40452	Instrumentation and Control	2	0	0	0	2
5	DJJ40472	Renewable and Sustainable Energy	2	2	0	0	2
6	DJM40232	Programmable Logic Control	1	2	0	0	2
7	DJJ40352	Computer Programming	1	1	0	0	2
8	DJF52092	Quality Control	2	0	0	0	2
9	DJA 20132	Automotive Workshop Practice 1	0	4	0	0	2
10	DJV20062	Automation Practice	0	4	0	0	2
11	DJL30092	Plant Engineering Practice 1	0	4	0	0	2
12	DJB20082	Materials Workshop Practice	0	4	0	0	2
13	DJP40132	Packaging Workshop Practice 2	0	4	0	0	2
14	DIX30132	Textile Workshop Practice 1	0	4	0	0	2
15	DGM50272	Static and Rotating Equipment Workshop Practice	0	4	0	0	2
16	DJT30132	Automation & Robotic in Agriculture	1	3	0	0	2
17	DJU20112	Basic Air Conditioning and Refrigeration Workshop	0	4	0	0	2
18	DJD20092	Product Design	1	3	0	0	2
19	DJF32052	Manufacturing Workshop Practice 2	0	4	0	0	2
20	DJ120132	Automotive Technology Practice	0	4	0	0	2
21	DJC40142	Plastic Workshop Practice 2	0	4	0	0	2
FREE ELECTIVES							
1	DUD10012	Design Thinking	1	0	0	1	2

3.4 LABORATARY FACILITIES IN MECHANICAL ENGINEERING DEPARTMENT

NO	LABORATORY	LABORATORY SUPERVISOR
1	CADCAM Laboratory (*Makmal CADCAM*)	MOHD HAZRI BIN OMAR
2	Mechanics of Machines Laboratory (*Makmal Mekanik Mesin*)	MOHD ZAIRUNIZAM BIN UMAR
3	Control Laboratory (*Makmal Kawalan*)	KHAIRUL FAZIZUL BIN MAT DRIS
4	Metallurgy Laboratory (*Makmal Metalurgi*)	NURUL KHAIRUNNISA BINTI SU
5	Metrology Laboratory (*Makmal Metrologi*)	VERAWATY BINTI ISMAIL
6	Material Testing Laboratory (*Makmal Ujian Bahan*)	MOHD FIRDAUS BIN CHE SAB
7	Electrical Technology Laboratory (*Makmal Teknologi Elektrik*)	NOOR HIDAYAH BINTI JURIMI
8	Foundry Workshop (*Bengkel Foundri*)	YAP TEK HONG
9	Machine Workshop/Fitting (*Bengkel Mesin/Gegas*)	MOHD FADZIL BIN ALLIAS
10	Welding Workshop (*Bengkel Kimpalan*)	MOHD HILMI BIN ARIFFIN HASHIMI BIN LAZIM
11	ITL Laboratory (*Makmal ITL*)	MOHD ZAHRI BIN JAAFAR
12	Plant Laboratory (*Makmal Loji*)	MOHD AMIRUL JOHARI
13	AK 1 (CAD) Laboratory (*Makmal AK 1 CAD*)	MOHD FAHMI HAMID@SIRON
14	Project Workshop (*Bengkel Projek*)	MOHAMAD SALAHUDIN MOHAMAD SAAD
15	Galeri Projek (*Project Gallery*)	YAP TEK HONG
16	Hydraulic and Pneumatic Laboratory (*Makmal Pneumatik & Hidraulik*)	MOHD AMIRUL JOHARI

3.5 HIGHER ACADEMIC PATHWAY

Mechanical Engineering students from Politeknik Tuanku Syed Sirajuddin are provided with the knowledge and skills that can be applied to a broad range of careers in Mechanical Engineering Field. The knowledge and skills that the students acquire from the programme will enable them to participate in the job market effectively. For those who want to further their education in Mechanical Engineering, Malaysian Technical University Network (MTUN) is such a good opportunity as a TVET institution which can offer a range of benefits that contribute significantly to both individual careers and broader societal development. Here is the list of MTUN universities which offer Bachelor in Mechanical Engineering:

3.5.1 UNIVERSITI MALAYSIA PERLIS (UniMAP)

- Address : Jabatan Pendaftar, Universiti Malaysia Perlis, Aras 1, Bangunan Canselori, Kampus Alam Unimap Pauh Putra, 02600 Arau, Perlis.
- Telephone No : 04-9414224
- Emel : pendaftar@unimap.edu.my
- Web : www.unimap.edu.my

3.5.2 UNIVERSITI TUN HUSSEIN ONN MALAYSIA (UTHM)

- Address : Timbalan Pendaftar Kanan, Pejabat Pengurusan Akademik, Universiti Tun Hussein Onn Malaysia 86400 Parit Raja, Batu Pahat Johor.
- Telephone No : 07-4537681 / 7655 / 7687 /7689 / 7694
- Fax No : 07-4536085
- Emel : pa@uthm.edu.my
- Web : www.uthm.edu.my

3.5.3 UNIVERSITI TEKNIKAL MALAYSIA MELAKA (UTeM)

- Address : Bahagian Pengurusan Akademik, Universiti Teknikal Malaysia Melaka, Karung Berkunci 1752, Pejabat Pos Durian Tunggal, 76109 Durian Tunggal, Melaka.
- Telephone No : 06-3316086/ 6078/ 6077/ 6073/ 6076
- Fax No : 06-3316079
- Emel : bpa@utem.edu.my
- Web : www.utem.edu.my

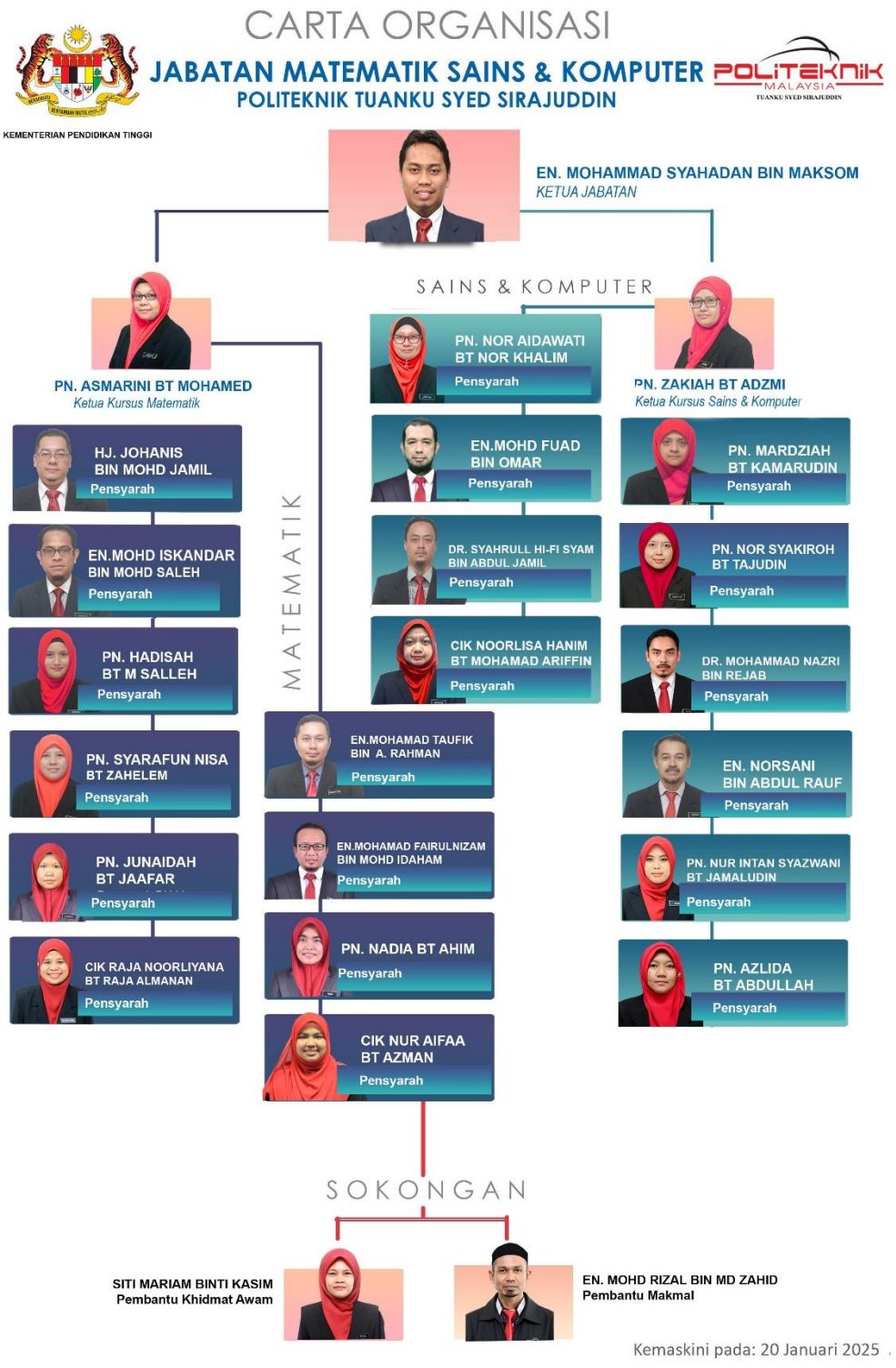
3.5.4 UNIVERSITI MALAYSIA PAHANG (UMP)

- Address : Bahagian Pengurusan Akademik, Kompleks Perkhidmatan Siswa, Universiti Malaysia Pahang, Karung Berkunci 112, 2500 Kuantan, Pahang Darul Makmur.
- Telephone No : 09-5492550 / 2557
- Fax No : 09-5492555
- Web : www.ump.edu.my

4.0 SUPPORTING DEPARTMENTS AND UNITS

4.1 MATHEMATICS, SCIENCE AND COMPUTER DEPARTMENT

4.1.1 DEPARTMENT ORGANIZATION CHART



4.1.2 MATHEMATICS, SCIENCE AND COMPUTER DEPARTMENT LECTURERS

NO	NAME	DESIGNATION	CONTACT NO (04 988 6200)	EMAIL (@ptss.edu.my)
1	Mohammad Syahadan bin Maksom	Head of Department	6399	syahadan
2	Asmarini binti Mohamed	Head of Mathematics Course	1376	asmarini
3	Zakiah binti Adzmi	Head of Science and Computer Course	1377	zakiah
4	Nor Aidawati binti Nor Khalim	Principal Lecturer	6395	aidawati
5	Mardziah binti Kamarudin	Principal Lecturer	6392	mardziah
6	Azlida binti Abdullah	Lecturer	6395	azlida
7	Hadisah binti M Salleh	Lecturer	6395	hadisah
8	Johanis bin Mohd Jamil	Lecturer	6356	johanis
9	Junaidah binti Jaafar	Lecturer	6395	junaidahjaafar
10	Mohamad Fairulnizam bin Mohd Idaham	Lecturer	6395	fairulnizam
11	Mohamad Taufik bin A Rahman	Lecturer	6395	taufik
12	Mohd Fuad bin Omar	Lecturer	6395	mohdfuad
13	Mohd Iskandar bin Mohd Saleh	Lecturer	6395	iskandar
14	Dr. Muhammad Nazri bin Rejab	Lecturer	6395	nazrirejab
15	Nadia binti Ahim	Lecturer	6395	nadia.ahim
16	Noorlisa Hanim binti Mohamad Ariffin	Lecturer	6395	noorlisa
17	Nor Syakiroh binti Tajudin	Lecturer	6395	norsyakiroh
18	Norsani bin Abdul Rauf	Lecturer	6393	norsani
19	Nur Aifaa binti Azman	Lecturer	6395	aifaa
20	Nur Intan Syazwani binti Jamaludin	Lecturer	6395	nurintansyazwani
21	Raja Noorliyana binti Raja Almanan	Lecturer	6395	rajanoorliyana
22	Dr. Syahrull Hi-Fi Syam bin Ahmad Jamil	Lecturer	6395	syahrull
23	Syarafun Nisa binti Zahelem	Lecturer	6395	syarafun
24	Mohd Rizal bin Md Zahid	Laboratory Assistant	6392	rizalzahid
25	Siti Mariam binti Kasim	Office Assistant	6395	sitimariam

4.1.3 SYPNOSIS AND COURSE LEARNING OUTCOME

SEMESTER	COURSE	SYPNOSIS	COURSE LEARNING OUTCOME (CLO)
1	DNM10163 ENGINEERING MATHEMATICS 1	**ENGINEERING MATHEMATICS 1** exposes students to basic algebra including resolving partial fractions. This course also covers the concept of trigonometry and the method to solve trigonometry problems by using basic identities, compound angle and double angle formulae. Students will be introduced to the theory of complex numbers and the concept of vector and scalar. Students will explore advanced matrices involving a 3x3 matrix. **Credit Value: 3** **Prerequisite: None**	CLO1: use mathematical statement to describe relationship between various physical phenomena. (C3, PLO1) CLO2: show mathematical solutions using appropriate techniques in mathematics. (C3, PLO2) CLO3: use mathematical expression in describing real engineering problems precisely, concisely and logically. (A3, PLO8)
1	DUW10042 OCCUPATIONAL SAFETY AND HEALTH FOR ENGINEERING	**OCCUPATIONAL SAFETY AND HEALTH FOR ENGINEERING** course is designed to impart understanding of the self-regulatory concepts and provisions under the Occupational Safety & Health Act (OSHA) in Malaysia. This course presents the responsibilities of workers in implementing and complying with the safety procedures at work. Understanding of notifications of accidents, dangerous occurrences, poisoning and diseases and liability for offences will be imparted to students. This course will also provide an understanding of the key issues in OSH Management, Incident Prevention, Hazard Identification Risk Control and Risk Assessment (HIRARC), Fire Safety and First Aid, Workplace Environment and Ergonomics and guide the students gradually into this multi-disciplinary science **Credit Value: 2** **Prerequisite: None**	CLO1: explain briefly occupational safety and health (OSH) procedures, regulation and its compliance in Malaysia (C2, PLO1) CLO2: describe hazards, risks and safe work practices in order to maintain health and safe work environment (A3, PLO4) CLO3: justify the factor that can lead to accident in workplace (A3, PLO6)

1	**DBS10042 ENGINEERING SCIENCE**	**ENGINEERING SCIENCE** course introduces the physical concepts required in engineering disciplines. Students will learn the knowledge of fundamental physics in order to identify and solve engineering physics problems. Students will be able to perform experiments and activities to mastery physics concepts. **Credit Value: 2** **Prerequisite: None**	CLO1: use basic physics concept to solve engineering physics problems. (C3, PLO1) CLO2: use knowledge of fundamental physics in real engineering activities accurately. (A3, PLO6) CLO3: perform appropriate activities related to physics concept. (P3, PLO4)
2	**DBM20173 ENGINEERING MATHEMATICS 2**	**ENGINEERING MATHEMATICS 2** exposes students to the basic laws of indices and logarithms. This course introduces the basic rules of differentiation concepts to solve problems that relate to maximum, and minimum and calculate the rates of changes. This course discusses integration concepts in order to strengthen students' knowledge for solving area and volume-bounded region problems. In addition, students will learn the application of both techniques of differentiation and integration. **Credit Value: 3** **Prerequisite: ENGINEERING MATHEMATICS 1**	CLO1: explain the relationship between various physical phenomena in algebra and calculus. (C3, PLO1) CLO2: solve mathematics using appropriate and relevant fundamentals calculus techniques. (C3, PLO2) CLO3: use mathematics language to express mathematics ideas and arguments precisely, concisely and logically in calculus (A3, PLO8)
3	**DBM30183 ENGINEERING MATHEMATICS 3**	**ENGINEERING MATHEMATICS 3** exposes students to statistical and probability concepts and their applications in interpreting data. The course also introduces the numerical methods concept to solve simultaneous equations by using the Gaussian Elimination method, LU Decomposition using Doolittle and Crout methods, polynomial problems using Simple Fixed-Point Iteration and Newton-Raphson methods. To strengthen the students in solving engineering problems, Ordinary Differential Equation (ODE) is also included. In addition, the course also discusses optimization problems by using Linear Programming. It is designed to build students' teamwork and problems solving skills. **Credit Value: 3** **Prerequisite: ENGINEERING MATHEMATICS 2**	CLO1: demonstrate mathematical concepts, formulate methods of solutions and select appropriate techniques for solving routine mathematics problems. (C3, PLO1) CLO2: apply mathematical methods and concepts to solve engineering problems. (C3, PLO2) CLO3: express mathematics ideas clearly by using correct mathematical terminology and proper mathematical notation. (A3, PLO8)

3	**DJJ30332 ENGINEERING AND SOCIETY**	**ENGINEERING AND SOCIETY** focuses on the introduction to professional ethics, theory and philosophy of ethics, values in professional ethics, engineering bylaws and standards, issues in professional ethics and sustainability. It also relates towards IR 4.0 introduction and green engineering. **Credit Value: 2** **Prerequisite: None**	CLO1: implement the roles of engineering profession towards the developing of society and the challenge of globalization with professional ethic. (C3, PLO 7) CLO2: determine the importance of engineering management, professional bodies, sustainability and green technology aspect in the engineering profession. (C4, PLO 6) CLO3: explain the issues of sustainability and green technology in engineering practice. (A3, PLO 9)
5	**DUU10072 ENTREPRENEURSHIP**	**ENTREPRENEURSHIP** focuses on the fundamentals and concept of entrepreneurship in order to inculcate the value and interest in students to choose entrepreneurship as a career. This course can help students to initiate creative and innovative entrepreneurial ideas. It also emphasizes on online and offline business learning in line with the changing needs of current market. **Credit Value: 2** **Prerequisite: None**	CLO1: demonstrate application on entrepreneurship concept, competencies, importance and social responsibilities of entrepreneurship. (A3, PLO9) CLO2: propose sustainable business idea using Business Model Canvas (BMC) for entrepreneurial project. (A3, PLO10) CLO3: organize online business using various cyber social tools. (P5, PLO3)

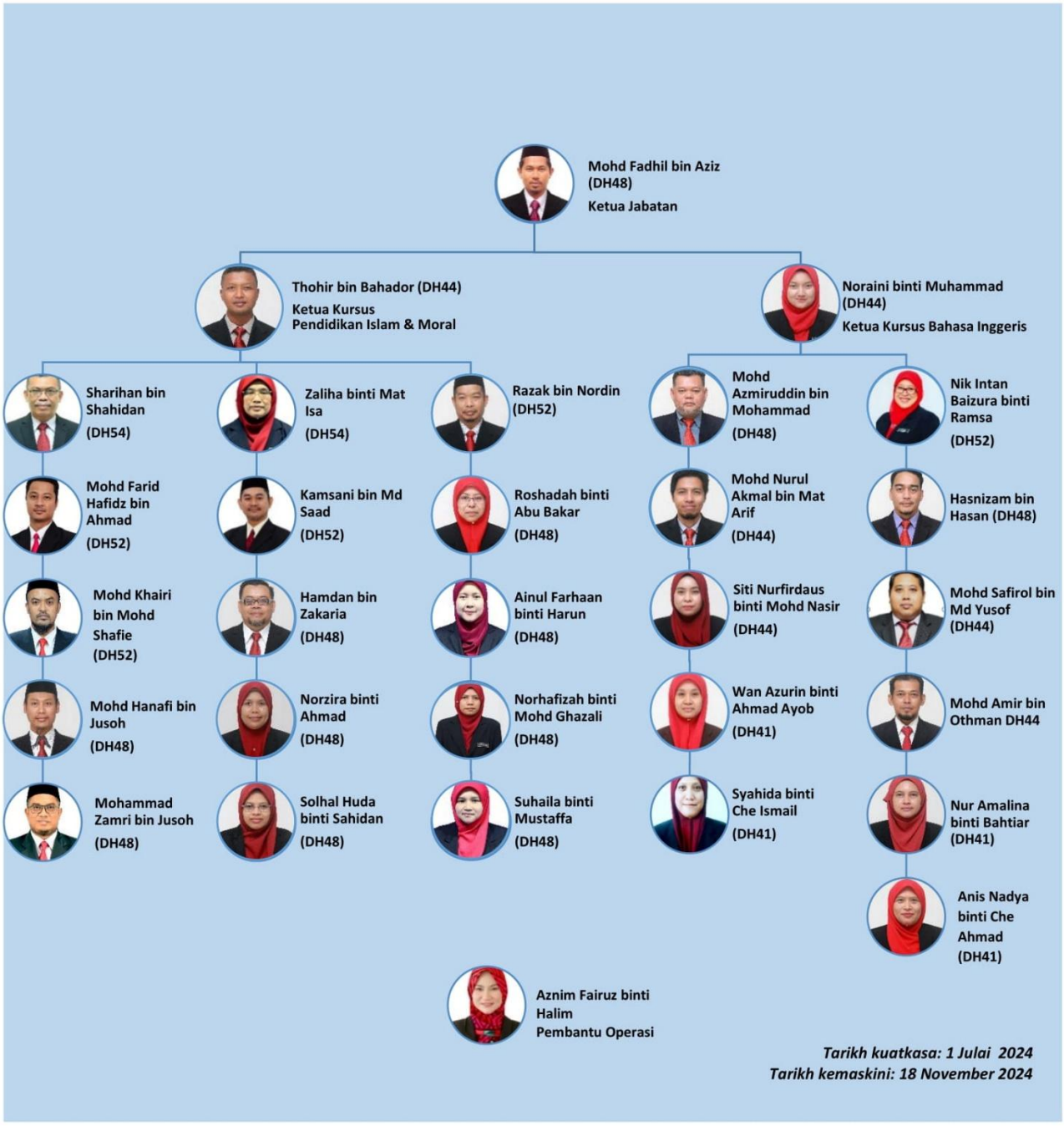
4.1.4 LABORATARY FACILITIES IN MATHEMATICS, SCIENCE AND COMPUTER DEPARTMENT

NO	LABORATORY	LABORATORY SUPERVISOR
1	CAD LABORATORY 1 (CAD 1)	SHAHRULL HI-FI SYAM BIN AHMAD JAMIL
2	MAKMAL SAINS KEJURUTERAAN	ZAKIAH BINTI ADZMI

4.2 GENERAL STUDIES DEPARTMENT

4.2.1 DEPARTMENT ORGANIZATION CHART

CARTA ORGANISASI
JABATAN PENGAJIAN AM
POLITEKNIK TUANKU SYED SIRAJUDDIN PAUH PUTRA, ARAU PERLIS



4.2.2 GENERAL STUDIES DEPARTMENT LECTURERS

NO	NAME	DESIGNATION	CONTACT NO (04 988 6200)	EMAIL (@ptss.edu.my)
1	Mohd Fadhil bin Aziz	Head of Department	1653	mfadhilaziz
2	Thohir bin Bahador	Head of Islamic and Moral Education Course	6272	thohir
3	Noraini binti Muhammad	Head of English Course	6277	norainimuhammad
4	Kamsani bin Md Saad	Principal Lecturer	1666	kamsani
5	Mohd Farid Hafidz bin Ahmad	Principal Lecturer	1666	faridhafidz
6	Mohd Khairi bin Shafie	Principal Lecturer	1666	mohdkhairi
7	Nik Intan Baizura binti Ramsa	Principal Lecturer	6273	baizuraramsa
8	Razak bin Nordin	Principal Lecturer	6277	razaknordin
9	Roshadah binti Abu Bakar	Principal Lecturer	1657	roshadah
10	Sharihan bin Shahidan	Principal Lecturer	6272	sharihan.shahidan
11	Zaliha binti Mat Isa	Principal Lecturer	6273	zaliha
12	Ainul Farhaan binti Harun	Lecturer	6273	ainulfarhaan
13	Anis Nadya binti Che Ahmad	Lecturer	6273	anisnadya
14	Hamdan bin Zakaria	Lecturer	6274	hamdanzakaria
15	Hasnizam bin Hasan	Lecturer	6274	hasnizam
16	Mohammad Zamri bin Jusoh	Lecturer	6274	zamrijusoh
17	Mohd Amir bin Othman	Lecturer	1666	mohdamir
18	Mohd Azmiruddin bin Mohammad	Lecturer	6272	azmiruddin
19	Mohd Hanafi bin Jusoh	Lecturer	6274	mohdhanafi
20	Mohd Nurul Akmal bin Mat Ariff	Lecturer	6272	mohdnurulakmal
21	Mohd Safirol bin Md Yusof	Lecturer	6272	safirol
22	Norhafizah binti Mohd Ghazali	Lecturer	1657	norhafizahmg
23	Norzira binti Ahmad	Lecturer	1657	norzira
24	Nur Amalina binti Bahtiar	Lecturer	1657	amalinabahtiar
25	Nur Zatihanani binti Zuraini	Lecturer	1657	zatihanani
26	Siti Nurfirdaus binti Mohd Nasir	Lecturer	1657	sitinurfirdaus
27	Solhal Huda binti Sahidan	Lecturer	6273	solhalhuda
28	Suhaila binti Mustaffa	Lecturer	1652	suhailamustaffa
29	Syahida binti Che Ismail	Lecturer	6273	syahida.cheismail
30	Wan Azurin binti Ahmad Ayob	Lecturer	6273	azurin
31	Aznim Fairuz binti Halim	Office Assistant	6200	aznimfairuz

4.2.3 SYPNOSIS AND COURSE LEARNING OUTCOME

SEMESTER	COURSE	SYPNOSIS	COURSE LEARNING OUTCOME (CLO)
1	DUE10062 TECHNICAL ENGLISH 1	**TECHNICAL ENGLISH 1** is designed to provide technical students the language input and skills required in technical workplace communication. This course aims to prepare students to use language skills to achieve B2 level which is becoming independent language users. Students will be exposed to skills required for effective participation in group discussions contextualized in workplace safety and health issues. The course also includes input and presentation skills on how to use the language appropriately in describing, comparing, and contrasting objects/ products relevant to students' respective engineering disciplines. The course will enable students to make verbal and written enquiries related to objects/ products for workplace use. The course is also designed to assist students in achieving at least level B1 of Common European Framework of Reference (CEFR). **Credit Value: 2** **Prerequisite: None**	CLO1: discuss work-related topic using effective communication skills by responding to workplace safety and hazards relevant to engineering technician practice. (A2, PLO11) CLO2: explain the features and characteristics of objects/ products used in a well-defined technical activity. (A3, PLO9) CLO3: share effective communication skills in making and responding to enquiries related to a well-defined engineering activities. (A3, PLO9)
2	MPU21072 PENGHAYATAN ETIKA DAN PERADABAN	**PENGHAYATAN ETIKA DAN PERADABAN** ini menjelaskan tentang konsep etika daripada perspektif peradaban yang berbeza. Ia bertujuan bagi mengenal pasti sistem, tahap perkembangan, kemajuan dan kebudayaan merentas bangsa dalam mengukuhkan kesepaduan sosial. Selain itu, perbincangan dan perbahasan berkaitan isu-isu kontemporari dalam aspek ekonomi, politik, sosial, budaya dan alam sekitar daripada perspektif etika dan peradaban dapat melahirkan pelajar yang bermoral dan profesional. Penerapan amalan pendidikan berimpak tinggi (HIEPS) yang bersesuaian digunakan dalam penyampaian kursus ini. **Credit Value: 2** **Prerequisite: None**	CLO1: Membentangkan konsep etika dan peradaban dalam kepelbagaian tamadun. (A2, CLS3B) CLO2: Menerangkan proses pemerkasaan kesepaduan sosial merentas bangsa di Malaysia. (A2, CLS5) CLO3: Mencadangkan sikap yang positif terhadap isu dan cabaran kontemporari dari perspektif etika dan peradaban. (A3, CLS3F)

2	**MPU22071 KURSUS INTEGRITI DAN ANTIRASUAH**	**KURSUS INTEGRITI DAN ANTIRASUAH (KIAR)** merangkumi konsep asas tentang nilai integriti, bentuk perbuatan rasuah dan salah guna kuasa dalam kehidupan seharian serta dalam organisasi dan langkah-langkah pencegahan rasuah. **Credit Value: 1** **Prerequisite: None**	CLO1: Membincangkan hubungan nilai integriti dan antirasuah dengan isu semasa. (A2, CLS5) CLO2: Menilai bentuk pelakuan rasuah dan salah guna kuasa dalam aktiviti seharian dan organisasi. (A3, CLS3F)
3	**DUE30072 TECHNICAL ENGLISH 2**	**TECHNICAL ENGLISH 2** equips technical students with the required language skills to communicate effectively at the workplace mainly in describing process and procedures as well as giving instructions. It is also designed to develop students' skills in conducting and participating in meetings and responding appropriately to complaints related to specific situations. This content structure reflects the stated course learning outcomes to be achieved by the students in order to develop their interpersonal & communication skills. It will enable them to independently participate in technical discussion in work-context. This course also aims to prepare students to use language skills to achieve B2 of CEFR level. **Credit Value: 2** **Prerequisite: None**	CLO1: Practice effective oral presentation skills in the context of process, procedure and instruction in workplace situations using appropriate language. (A2, PLO9) CLO2: Demonstrate effective communication and social skills in conducting and participating in meetings in workplace situations. (A3, PLO9) CLO3: Propose appropriate response(s) to complaints related to workplace situations. (A3, PLO11)
5	**MPU23172 NILAI MASYARAKAT MALAYSIA**	**NILAI MASYARAKAT MALAYSIA** disediakan untuk membincangkan aspek sejarah pembentukan masyarakat, nilai-nilai agama, adat resam dan budaya masyarakat di Malaysia. Selain itu, pelajar dapat mempelajari tentang tanggungjawab sebagai individu dan nilai perpaduan dalam kehidupan di samping cabaran- cabaran dalam membentuk masyarakat Malaysia yang bersatupadu dan penyayang. **Credit Value: 2** **Prerequisite: None**	CLO1: Membincangkan sejarah dan nilai dalam pembentukan masyarakat di Malaysia. (A2, CLS3B) CLO2: Menerangkan etika dan profesionalisme terhadap konsep perpaduan bagi meningkatkan semangat patriotisme masyarakat Malaysia. (A3, CLS5) CLO 3: Menghubungkait minda ingin tahu dengan cabaran-cabaran dalam membentuk masyarakat Malaysia. (A4, CLS3F)

5	**DUE50082 TECHNICAL ENGLISH 3**	**TECHNICAL ENGLISH** aims to prepare students to use language skills (listening, reading, speaking and writing) to achieve B2 level in Common European Framework of Reference (CEFR) which is becoming independent language users. It covers skills which are needed by students focusing on self-assessment, job-search strategies, writing and explaining technical text (s) on wide range of technical subjects. Students will be able to select jobs or positions which match their qualifications, retrieve relevant information regarding the positions available and request for a job interview. This course also aims to prepare students with skills to write effective resumes with accompanying cover letters. The second part of this course is divided into three stages which focuses on students' abilities to study different types of technical text (s), plan and prepare clear and detailed technical text (s) and explain the content of technical text (s) using effective presentation skills. **Credit Value: 2** **Prerequisite: None**	CLO1: Prepare appropriate types of oral and written communication modes that meet employer's requirements. (A4, PLO9) CLO2: Demonstrate effective language-based skills in interpersonal communication, ethics and workplace related contexts. (A3, PLO11) CLO3: Organize texts on a wide range of technical subjects to pass information as well as to give reasons in support of or against particular points of views. (A4, PLO9)
5	**MPU23182 SAINS TEKNOLOGI DAN KEJURUTERAAN DALAM ISLAM**	**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. **Credit Value: 2** **Prerequisite: None**	CLO1: Melaksanakan amalan Islam dengan betul dalam dupan seharian. (A2, CLS3B) CLO 2: Menerangkan etika dan profesionalisme berkaitan sains teknologi dan kejuruteraan dalam Islam. (A3, CLS5) CLO 3: Menghubungkait minda ingin tahu dengan prinsip syariah, etika dan kaedah fiqh dalam bidang sains, teknologi dan kejuruteraan menurut perspektif Islam. (A4, CLS3F)

4.2.4 LABORATARY FACILITIES IN GENERAL STUDIES DEPARTMENT

NO	LABORATORY	LABORATORY SUPERVISOR
1	MAKMAL BAHASA 1	MOHD AMIR BIN OTHMAN
2	MAKMAL BAHASA 2	MOHD AMIR BIN OTHMAN
3	MAKMAL BAHASA 3	MOHD AMIR BIN OTHMAN

4.3 SPORTS, CO-CURICULUM, CULTURE AND HERITAGE DEPARTMENT

The involvement in co-curriculum creates opportunities for students to develop their talents and interests. To achieve these, require commitment, innovation and creativity from both educators and students. It also includes outdoor activities such as sports, uniform units, clubs and societies. The activities should consist of elements that support the physical, emotional, spiritual and intellectual aspects in line with the National Philosophy of Education.

The Sports Unit is responsible for:

- managing sports activities inside and outside PTSS compound
- planning and ensuring sports activities are carried out accordingly
- monitoring and keeping record of PTSS athletes
- managing and maintaining the sports facilities
- developing individuality in spiritual, physical and intellectual

4.3.1 DEPARTMENT ORGANIZATION CHART

4.3.2 SPORTS, CO-CURICULUM, CULTURE AND HERITAGE DEPARTMENT LECTURERS

NO	NAME	DESIGNATION	CONTACT NO (04 988 6200)	EMAIL (@ptss.edu.my)
1	Johanis bin Mohd Jamil	Head of Department	6356	johanis
2	(Kosong)	Youth and Sports Officer	6340	-
3	Asmeer Fadlee bin Nor Azahar	Office Assistant	6344	asmeer.fadlee

4.3.3 SYPNOSIS AND COURSE LEARNING OUTCOME

SEMESTER	COURSE	SYPNOSIS	COURSE LEARNING OUTCOME (CLO)
1	MPU24031 SUKAN 1	**SUKAN 1** adalah aktiviti yang mengandungi latihan kemahiran berguna secara rekreasi dan peraturan-peraturan tertentu dalam mengejar kecemerlangan bagi penguasaan pengetahuan dan kemahiran khusus secara holistik. Ia bertujuan bagi mengukuhkan pembentukan kemahiran insaniah pelajar yang positif. **Credit Value: 1** **Prerequisite: None**	CLO1: Mempamerkan kemahiran khusus bagi sukan berkaitan. (P2, CLS3A) CLO2: Menunjukkan kepimpinan dan kerja berpasukan berdasarkan penguasaan kemahiran dan amalan positif. (A3, CLS3F)

1	**MPU24041 KELAB-PERSATUAN 1**	**KELAB/PERSATUAN 1** memfokuskan kepada penguasaan pengetahuan dan kemahiran khusus secara holistik bagi mengukuhkan pembentukan kemahiran insaniah pelajar yang positif. **Credit Value: 1** **Prerequisite: None**	CLO1: Mempamerkan kemahiran khusus bagi kelab/ persatuan berkaitan. (P2, CLS3A) CLO2: Menunjukkan kepimpinan dan kerja berpasukan berdasarkan penguasaan kemahiran dan amalan positif. (A3, CLS3F)
1	**MPU24111 ASKAR WATANIAH 1**	**ASKAR WATANIAH 1** memfokuskan kepada penguasaan pengetahuan dan kemahiran khusus secara holistik bagi mengukuhkan pembentukan kemahiran insaniah pelajar yang positif **Credit Value: 1** **Prerequisite: None**	CLO1: Mempamerkan kemahiran khusus bagi kursus berkaitan. (P2, CLS3A) CLO2: Menunjukkan kepimpinan dan kerja berpasukan berdasarkan penguasaan kemahiran dan amalan positif. (A3, CLS3F)
1	**MPU24121 PLASTLDM 1**	**PASUKAN LATIHAN ANGGOTA SIMPANAN TENTERA LAUT DIRAJA MALAYSIA (PLASTLDM) 1** memfokuskan kepada penguasaan pengetahuan dan kemahiran khusus secara holistik bagi mengukuhkan pembentukan kemahiran insaniah pelajar yang positif **Credit Value: 1** **Prerequisite: None**	CLO1: Mempamerkan kemahiran khusus bagi kursus berkaitan. (P2, CLS3A) CLO2: Menunjukkan kepimpinan dan kerja berpasukan berdasarkan penguasaan kemahiran dan amalan positif. (A3, CLS3F)
1	**MPU24151 PISPA 1**	**PASUKAN INSTITUSI PERTAHANAN AWAM (PISPA) 1** memfokuskan kepada penguasaan pengetahuan dan kemahiran khusus secara holistik bagi mengukuhkan pembentukan kemahiran insaniah pelajar yang positif **Credit Value: 1** **Prerequisite: None**	CLO1: Mempamerkan kemahiran khusus bagi kursus berkaitan. (P2, CLS3A) CLO2: Menunjukkan kepimpinan dan kerja berpasukan berdasarkan penguasaan kemahiran dan amalan positif. (A3, CLS3F)
1	**MPU24161 PENGAKAP KELANA 1**	**PENGAKAP KELANA 1** memfokuskan kepada penguasaan pengetahuan dan kemahiran khusus secara holistik bagi mengukuhkan pembentukan kemahiran insaniah pelajar yang positif **Credit Value: 1** **Prerequisite: None**	CLO1: Mempamerkan kemahiran khusus bagi kursus berkaitan. (P2, CLS3A) CLO2: Menunjukkan kepimpinan dan kerja berpasukan berdasarkan penguasaan kemahiran dan amalan positif. (A3, CLS3F)

1	**MPU24191 RELASIS 1**	**BRIGED RELASIS 1** memfokuskan kepada penguasaan pengetahuan dan kemahiran khusus secara holistik kepada pengenalan asas Jabatan Sukarelawan Malaysia (RELA) serta penerangan mengenai tugas dan tanggungjawab kepimpinan dalam RELA serta memberikan pendedahan mengenai tugas, peranan dan bidang kuasa RELA bagi mengukuhkan pembentukan kemahiran insaniah pelajar yang positif. **Credit Value: 1** **Prerequisite: None**	CLO1: Mempamerkan kemahiran khusus bagi kursus berkaitan. (P2, CLS3A) CLO2: Menunjukkan kepimpinan dan kerja berpasukan berdasarkan penguasaan kemahiran dan amalan positif. (A3, CLS3F)
1	**MPU24201 PANDU PUTERI 1**	**PANDU PUTERI 1** memfokuskan kepada penguasaan pengetahuan dan kemahiran khusus secara holistik bagi mengukuhkan pembentukan kemahiran insaniah pelajar yang positif **Credit Value: 1** **Prerequisite: None**	CLO1: Mempamerkan kemahiran khusus bagi kursus berkaitan. (P2, CLS3A) CLO2: Menunjukkan kepimpinan dan kerja berpasukan berdasarkan penguasaan kemahiran dan amalan positif. (A3, CLS3F)
1	**MPU24211 BRIGED BOMBA 1**	**BRIGED BOMBA 1** memfokuskan kepada penguasaan pengetahuan dan kemahiran khusus secara holistik kepada pengenalan asas Jabatan Bomba dan Penyelamat Malaysia (JBPM) serta memberikan pendedahan mengenai kemahiran, tugas, peranan dan bidang kuasa JBPM bagi mengukuhkan pembentukan kemahiran insaniah pelajar yang positif. **Credit Value: 1** **Prerequisite: None**	CLO1: Mempamerkan kemahiran khusus bagi kursus berkaitan. (P2, CLS3A) CLO2: Menunjukkan kepimpinan dan kerja berpasukan berdasarkan penguasaan kemahiran dan amalan positif. (A3, CLS3F)
2	**MPU24051 SUKAN 2**	**SUKAN 2** adalah aktiviti yang mengandungi latihan kemahiran berguna secara rekreasi dan peraturan-peraturan tertentu dalam mengejar kecemerlangan bagi penguasaan pengetahuan dan kemahiran khusus secara holistik. Ia bertujuan bagi mengukuhkan pembentukan kemahiran insaniah pelajar yang positif. **Credit Value: 1** **Prerequisite: MPU24031 SUKAN 1**	CLO1: Mempamerkan kemahiran khusus bagi sukan berkaitan. (P2, CLS3A) CLO2: Menunjukkan kepimpinan dan kerja berpasukan berdasarkan penguasaan kemahiran dan amalan positif. (A3, CLS3F)

2	**MPU24061 KELAB-PERSATUAN 2**	**KELAB/PERSATUAN 2** memfokuskan kepada penguasaan pengetahuan dan kemahiran khusus secara holistik bagi mengukuhkan pembentukan kemahiran insaniah pelajar yang positif. **Credit Value: 1** **Prerequisite: MPU24041 – KELAB/ PERSATUAN 1**	CLO1: Mempamerkan kemahiran khusus bagi kelab/ persatuan berkaitan. (P2, CLS3A) CLO2: Menunjukkan kepimpinan dan kerja berpasukan berdasarkan penguasaan kemahiran dan amalan positif. (A3, CLS3F)
2	**MPU24221 ASKAR WATANIAH 2**	**ASKAR WATANIAH 2** memfokuskan kepada penguasaan pengetahuan dan kemahiran khusus secara holistik bagi mengukuhkan pembentukan kemahiran insaniah pelajar yang positif **Credit Value: 1** **Prerequisite: MPU24111 ASKAR WATANIAH 1**	CLO1: Mempamerkan kemahiran khusus bagi kursus berkaitan. (P2, CLS3A) CLO2: Menunjukkan kepimpinan dan kerja berpasukan berdasarkan penguasaan kemahiran dan amalan positif. (A3, CLS3F)
2	**MPU24231 PLASTLDM 2**	**PASUKAN LATIHAN ANGGOTA SIMPANAN TENTERA LAUT DIRAJA MALAYSIA (PLASTLDM) 2** memfokuskan kepada penguasaan pengetahuan dan kemahiran khusus secara holistik bagi mengukuhkan pembentukan kemahiran insaniah pelajar yang positif **Credit Value: 1** **Prerequisite: MPU24121 PLASTLDM 1**	CLO1: Mempamerkan kemahiran khusus bagi kursus berkaitan. (P2, CLS3A) CLO2: Menunjukkan kepimpinan dan kerja berpasukan berdasarkan penguasaan kemahiran dan amalan positif. (A3, CLS3F)
2	**MPU24261 PISPA 2**	**PASUKAN INSTITUSI PERTAHANAN AWAM (PISPA) 2** memfokuskan kepada penguasaan pengetahuan dan kemahiran khusus secara holistik bagi mengukuhkan pembentukan kemahiran insaniah pelajar yang positif **Credit Value: 1** **Prerequisite: MPU24151 PISPA 1**	CLO1: Mempamerkan kemahiran khusus bagi kursus berkaitan. (P2, CLS3A) CLO2: Menunjukkan kepimpinan dan kerja berpasukan berdasarkan penguasaan kemahiran dan amalan positif. (A3, CLS3F)
2	**MPU24271 PENGAKAP KELANA 2**	**PENGAKAP KELANA 2** memfokuskan kepada penguasaan pengetahuan dan kemahiran khusus secara holistik bagi mengukuhkan pembentukan kemahiran insaniah pelajar yang positif **Credit Value: 1** **Prerequisite: MPU24161 PENGAKAP KELANA 1**	CLO1: Mempamerkan kemahiran khusus bagi kursus berkaitan. (P2, CLS3A) CLO2: Menunjukkan kepimpinan dan kerja berpasukan berdasarkan penguasaan kemahiran dan amalan positif. (A3, CLS3F)

2	**MPU24301 RELASIS 2**	**BRIGED RELASIS 2** memfokuskan kepada penguasaan pengetahuan dan kemahiran khusus secara holistik kepada asas Ilmu Kemahiran Medan, Pertahanan Diri,tugas, peranan Crisis Management Team (CMT) serta menerangan jenis dan kegunaan senjata api RELA serta memberi pendedahan kepada Kawalan Kehormatan Pasukan RELA (KKPR), Kawad Transformasi RELA (KTR) dan Kawad Senjata bagi mengukuhkan pembentukan kemahiran insaniah pelajar yang positif. **Credit Value: 1** **Prerequisite: MPU24191**	CLO1: Mempamerkan kemahiran khusus bagi kursus berkaitan. (P2, CLS3A) CLO2: Menunjukkan kepimpinan dan kerja berpasukan berdasarkan penguasaan kemahiran dan amalan positif. (A3, CLS3F)
2	**MPU24311 PANDU PUTERI 2**	**PANDU PUTERI 2** memfokuskan kepada penguasaan pengetahuan dan kemahiran khusus secara holistik bagi mengukuhkan pembentukan kemahiran insaniah pelajar yang positif **Credit Value: 1** **Prerequisite: MPU24201 PANDU PUTERI 1**	CLO1: Mempamerkan kemahiran khusus bagi kursus berkaitan. (P2, CLS3A) CLO2: Menunjukkan kepimpinan dan kerja berpasukan berdasarkan penguasaan kemahiran dan amalan positif. (A3, CLS3F)
2	**MPU24321 BRIGED BOMBA 2**	**BRIGED BOMBA 1** memfokuskan kepada penguasaan pengetahuan dan kemahiran khusus secara holistik kepada pengenalan asas Jabatan Bomba dan Penyelamat Malaysia (JBPM) serta memberikan pendedahan mengenai kemahiran, tugas, peranan dan bidang kuasa JBPM bagi mengukuhkan pembentukan kemahiran insaniah pelajar yang positif. **Credit Value: 1** **Prerequisite: MPU24211 BRIDGED BOMBA 1**	CLO1: Mempamerkan kemahiran khusus bagi kursus berkaitan. (P2, CLS3A) CLO2: Menunjukkan kepimpinan dan kerja berpasukan berdasarkan penguasaan kemahiran dan amalan positif. (A3, CLS3F)

5.0 SUPPORTING SERVICES

5.1 STUDENT AFFAIRS DEPARTMENT

Our role is to contribute to the mission of Politeknik Tuanku Syed Sirajuddin (PTSS) by partnering with other academic and administrative units to provide professional, creative, accessible, and high-quality services. To fulfill this role, Student Affairs Department seeks to create an environment that is caring and positive for students; practice champion cultural sensitivity and inclusiveness; provide coordinated services to ensure the student-focused and technologically up to date; and respond positively to change.

Our vision is to eliminate barriers and create opportunities that enable all students to experience success. Our actions are guided by these values:

- the well-being of all students
- innovation in problem solving
- the positive affirmation of student achievement
- professionalism and ethical behavior
- cooperative and collaborative efforts that include enthusiasm, respect, and humor

To accomplish our mission, Student Affairs Department has established the following goals:

- increase retention and completion rates of students
- develop capacity to deliver services to all campus sites
- institute data-driven analysis for planning and decision-making
- improve attitudes toward and participation in student activities and services
- increase new student enrollment at class, overall and in specified programs

The Student Affairs Department is responsible for managing:

- student admission and registration
- scholarships
- residential college
- discipline and student behavior
- registration of students' vehicle

- student's activities through club / society
- alumni
- Student Representatives Committee (MPP)
- student insurance

5.1.1 DEPARTMENT ORGANISATION CHART

5.1.2 STUDENT AFFAIRS DEPARTMENT CONTACT PERSONNEL

NO	NAME	DESIGNATION	CONTACT NO (04 988 6200)	EMAIL (@ptss.edu.my)
1	Mahirah binti Rafie	Head of Department	6202	mahirah
2	Syazwani binti Sobri	Intake and Data Officer	6204	syazwani
3	Norfadliyah binti Abdul Hamid	Student Affairs Officer (Welfare & Discipline)	6203	norfadliyah
4	Sitti Aisyah binti Kadir	Student Affairs Officer (Welfare)	6209	sittiaisyah
5	Rosnaniwati binti Che Abdullah	Administrative Assistant	6206	rosnaniwati
6	Nurul Hayati binti Muda	Administrative Assistant	6207	hayatimuda
7	Mohamad Hairi bin Othman	Operation Assistant	1049	mohamadhairi

5.2 EXAMINATION UNIT

Every Polytechnic under the Ministry of Higher Education responsible for providing guidance on learning, assessment, control and conduct of the examination. Conferment of Certificate and Diploma to each student is subject to approval and confirmation of Board of Examination and Certificate / Diploma Polytechnic after students have passed all examinations and meet all the requirements of the course. Polytechnic Examination Unit is the unit where responsible for planning, managing and implementing all activities related to student assessment based on the guidelines and evaluation set.

5.2.1 EXAMINATION UNIT ORGANISATION CHART

5.2.2 EXAMINATION UNIT CONTACT PERSONNEL

NO	NAME	DESIGNATION	CONTACT NO (04 988 6200)	EMAIL (@ptss.edu.my)
1	Mohd Khairudin bin Saidina Omar	Head of Unit	6388	khairudin
2	Nurzahira binti Ahmad Zabidi	Examinations Officer (Records and Certification)	1030	nurzahira
3	Norhaida binti Hussain	Examinations Officer (Management and Evaluation)	1037	norhaida
4	Noor Salina binti Ismail	Operation Assistant	1033	noorsalina

5.3 LIBRARY UNIT

The library provides quality and up-to-date information to everyone in terms of managing and providing access to information resources. Taking the role as a centre of knowledge, the library acts as a catalyst and assists in the teaching and learning and research in the process of producing creative and innovative semi-professional.

The Library Unit is also an instrument in inculcating the reading culture among PTSS and the local communities through an ongoing reading campaign. Among the many objectives of the library unit are:

- to acquire relevant and current information for reference
- to manage a collection of information using a standard system for easy access.
- to provide quality information service and cultivate interest in reading
- to support the organization's objectives in teaching, learning and research.

5.3.1 LIBRARY UNIT ORGANISATION CHART

5.3.2 LIBRARY UNIT CONTACT PERSONNEL

NO	NAME	DESIGNATION	CONTACT NO (04 988 6200)	EMAIL (@ptss.edu.my)
1	Norhamiza binti Mohamad Hanopiah	Librarian	6377	norhamiza
2	Mohamad Fadhli bin Mustafa	Assistant Librarian	6378	mfadhlimustafa
3	Mazita binti Rahman	Assistant Librarian	1672	mazitarahman
4	Nor Hafiza binti Zakaria	Assistant Librarian	1672	hafizazakaria
5	Nur Anis Shaheerah binti Jasak	Assistant Librarian	1672	anisshaheerah
6	Nur Dalila binti Azhari	Assistant Librarian	1672	dalilaazhari
7	Nur Salizah Ng Abdullah	Assistant Librarian	1672	nursalizah

5.4 LIAISON & INDUSTRIAL TRAINING UNIT

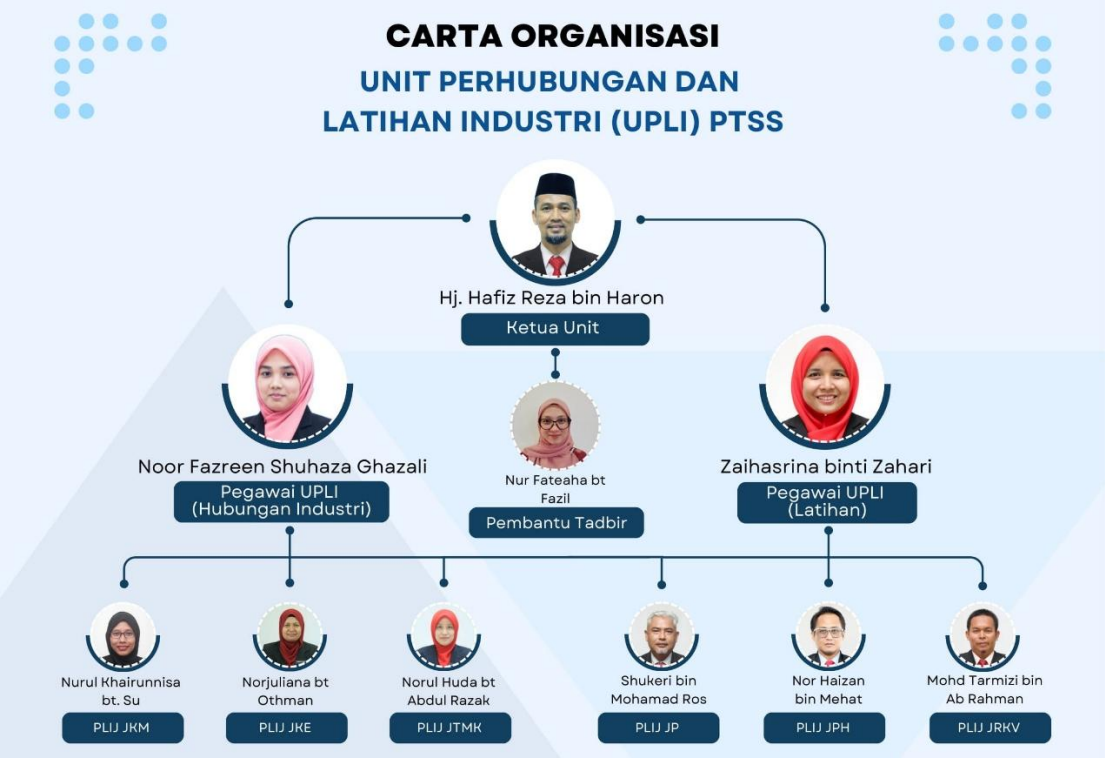
The Liaison & Industrial Training Unit (UPLI) is responsible for managing students' industrial training affairs. Students will be assigned to a particular organization during their training period based on their respective fields of study.

The placement process is finalised before training commences. Students are constantly advised to maintain a high level of discipline. They should abide by the rules and regulations of both the polytechnic and organization. Organizations are advised to consult the polytechnic immediately if there are any disciplinary problems.

The objectives of this programme can be summarized as follows:

- to foster a positive character and traits among students
- to develop better communication skills
- to practise good work ethics and conform to rules and regulations
- to expose students to the working environment
- to produce daily report on the training

5.4.1 LIASON & INDUSTRIAL TRAINING UNIT ORGANISATION CHART



5.4.2 LIAISON & INDUSTRIAL TRAINING UNIT CONTACT PERSONNEL

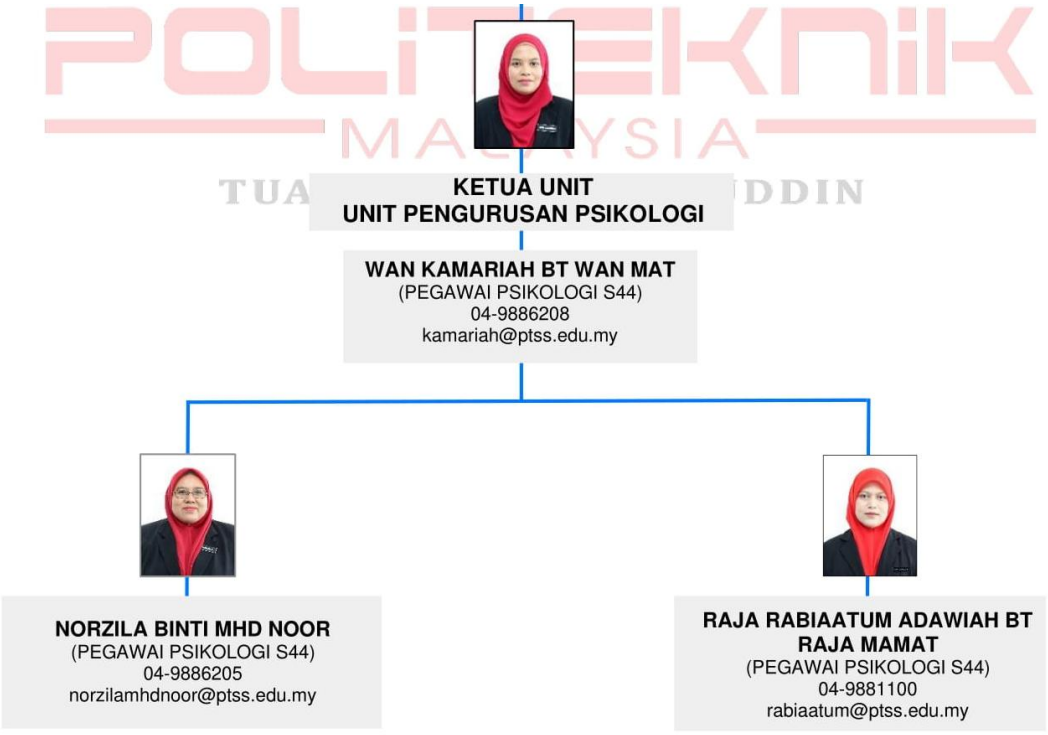
NO	NAME	DESIGNATION	CONTACT NO (04 988 6200)	EMAIL (@ptss.edu.my)
1	Hafiz Reza bin Haron	Head of Unit	6244	hafizreza
2	Noor Fazreen Shuhaza binti Ghazali	Liaison & Industrial Training Officer (Industrial Relations)	1021	noorfazreen
3	Zaihasrina binti Zahari	Liaison & Industrial Training Officer (Training)	1020	zaihasrina
4	Nur Fateaha binti Fazil	Operation Assistant	6243	nurfateaha
5	Nurul Khairunnisa binti Su	Liaison & Industrial Training Officer of Mechanical Department	6284	khairunnisa.su
6	Norjuliana binti Othman	Liaison & Industrial Training Officer of Electrical Department	1836	norjuliana
7	Shukeri bin Mohamad Ros	Liaison & Industrial Training Officer of Business Department	6252	shukeri
8	Mohd Tarmizi bin Ab Rahman	Liaison & Industrial Training Officer of Art and Visual Design Department	6365	mohdtarmizi
9	Nor Haizan bin Mehat	Liaison & Industrial Training Officer of Hospitality Department	6264	norhaizan
10	Norul Huda binti Abdul Razak	Liaison & Industrial Training Officer of Information Technology Department	6296	norul

5.5 PSYCHOLOGY MANAGEMENT UNIT

The Psychology Management Unit works on implementing the Human Capital Development program based on psychological approaches which include aspects of development, prevention, rehabilitation and intervention. In addition, this unit also provides counselling and professional guidance to ensure semi-professional work force is well balanced mentally and physically. The Psychology Management Unit is responsible for:

- raising self-awareness and surroundings
- highlighting ones' potential
- developing multi skills
- promoting studies opportunities
- assessing student's interests, personality, values and skills, and helps them to explore career options

5.5.1 PSYCHOLOGY MANAGEMENT UNIT ORGANISATION CHART



5.5.2 PSYCHOLOGY MANAGEMENT UNIT CONTACT PERSONNEL

NO	NAME	DESIGNATION	CONTACT NO (04 988 6200)	EMAIL (@ptss.edu.my)
1	Wan Kamariah binti Wan Mat	Head of Unit	6208	kamariah
2	Norzila binti Mhd Noor	Psychology Officer	6205	norzila
3	Raja Rabiaatum Adawiah binti Raja Mamat	Psychology Officer	1100	rabiaatum

5.6 INSTRUCTIONAL DEVELOPMENT AND MULTIMEDIA UNIT

The Instructional Development and Multimedia Unit (UIDM) is one of the support unit for Academic and Administration in PTSS. The main functions are:

- Advising and guiding in Instructional Development for the purpose of Learning and Teaching.
- Provide sufficient skill and Audio Visual equipment for any activities (on
- campus/outside of campus) based on frequent application.
- Supervise in-term of skill and facilities/equipment for any activities by
- students/lecturers.
- UIDM as Audio Visual Committee for any major events on campus such as
- Convocation, Students Registration Day, major celebrations and assembly.
- Documentation Record any events on/off campus through video and photo for the
- purpose of archives.
- As committee for Design & Printing for most of the major events on campus.

5.6.1 INSTRUCTIONAL DEVELOPMENT AND MULTIMEDIA UNIT ORGANISATION CHART

5.6.2 INSTRUCTIONAL DEVELOPMENT AND MULTIMEDIA UNIT CONTACT PERSONNEL

NO	NAME	DESIGNATION	CONTACT NO (04 988 6200)	EMAIL (@ptss.edu.my)
1	Mohamad Naaim bin Md Zain	Head of Unit	6380	mohamadnaaim
2	Mohd Razlan bin Abdul Rahim	Multimedia & Resources Officer	6380	mohd.razlan
3	Ahmad Norhaizam bin Ahmad Rosli	Photographer	6304	norhaizam
4	Muhamad Fadzwan bin Amir Roslan	Designer	6368	fadzwan
5	Syed Shafirul bin Wan Idrus	Designer	6368	shafirul
6	Muhammad Husaini bin Harun	Juruaudio Visual	1690	husaini

5.7 INFORMATION TECHNOLOGY AND DATA CENTRE

The Information Technology and Data Center (ITDC) is one of the support unit for Academic and Administration in PTSS that provides ICT services for management, teaching and learning activities.

Among the scope of duties and responsibilities of ITDC are:

- Management of Campus Network System
- Management of ICT Equipment Maintenance
- Management of Polytechnic Information Management System (SPMP)
- Management of Staff Attendance System (Net-AIMS)
- Management of ICT Helpdesk System (UTMK2U)
- Management of PTSS Official Website
- Management of Staff Official Email (MyGovUC)
- Management of Server Room
- Management of ICT Asset
- Management of ICT Procurement
- Management of Government Public Key Infrastructure (GPKI)
- Management of Video Conference
- Management of ICT Projects
- Management of Technical Support for Other Systems

5.7.1 INFORMATION TECHNOLOGY AND DATA CENTER ORGANISATION CHART

5.7.2 INFORMATION TECHNOLOGY DATA CENTRE CONTACT PERSONNEL

NO	NAME	DESIGNATION	CONTACT NO (04 988 6200)	EMAIL (@ptss.edu.my)
1	Yuslina binti Salleh	Head of Unit	6348	yuslinasalleh
2	Nor Hafizah binti Khadzir	Information Technology Officer	6346	norhafizah
3	Suria binti Shaari	Information Technology Officer	6349	suria
4	Saifulazmi bin Tayib	Information Technology Officer	6345	saifulazmi
5	Azlina binti Mohd Dzuki	Assistant Information Technology Officer	1502	azlina.md
6	Sasnidar binti Yusri	Assistant Information Technology Officer	1501	sasnidar
7	Mohamad Khalis bin Mohamad Khairi	Assistant Information Technology Officer	6347	khalis
8	Mohamad Razali bin Mohamad Ismail	Assistant Information Technology Officer	1504	razali
9	Muhamad Kamalhamdy bin Kamaludin	Assistant Information Technology Officer	1507	kamal
10	Mohamad Khairul Fazmi bin Jamaludin	Assistant Information Technology Officer	1503	fazmi
11	Nurul Fara binti Noor Azman Raman	Assistant Information Technology Officer	1508	fara
12	Ridzuan bin Yaakob	Assistant Information Technology Officer	1508	ridzuan
13	Zuraidah binti Ghazali	Assistant Information Technology Officer	6348	zuraidahghazali
14	Mohd Rifaiz bin Mohd Razali	Computer Technician	6348	rifaiz

5.8 RESIDENTIAL COLLEGE

The uniquely modern PTSS hostel can easily accommodate a total of 3600 students. Students in semester one has the opportunity to enjoy the facilities provided on campus in addition to a comfortable and conducive living environment. Students are placed in the hostel to instil good learning habit, moral values, integration and friendship among students of different race, religion and culture.

5.8.1 RESIDENTIAL COLLEGE CONTACT PERSONNEL

NO	NAME	DESIGNATION	CONTACT NO (04 988 6200)	EMAIL (@ptss.edu.my)
1	Mazrul Hisyam bin Mat Ali	Head of Unit	6285	mazrul
2	Syafiq bin Salleh	Medical Assistant	6359	syafiq
3	Mohamad Yazair bin Ab Manan	Assistant Engineer	1771	yazair
4	Shaidi bin Ramli	Administrative Assistant	1771	shaidi
5	Azhar bin Ali	Administrative Assistant	1771	azharali
6	Sufatihah binti Mah Hassan	Technical Assistant	1772	sufatihah