



JKE STUDENT'S STUDY GUIDE

ELECTRICAL ENGINEERING DEPARTMENT
POLYTECHNIC SULTAN SALAHUDDIN ABDUL AZIZ SHAH

Version: 23/4/2019_effective_Session1:2021/2022



About

Politeknik Sultan Salahuddin Abdul Aziz Shah (PSA) previously known as Politeknik Shah Alam is the eighth polytechnic in the country. It was established in 1997. Known as "Politeknik Super Active" amongst peers, PSA is the first polytechnic to be awarded the MS ISO 9002:1994 certification from SIRIM in 1999, barely two years after its inception. On 25 February 2010, PSA was honoured and given recognition as a Premier Polytechnic. There are six academic departments, namely; Mechanical Engineering, Civil Engineering, Electrical Engineering, Commerce, Mathematics, Science & Computer Department and General Studies Department. In all the departments, lessons are conducted by qualified academicians and trained professionals. Currently PSA offers 2 Degree Programmes, 12 Diploma Programmes and 1 Certificate Programme.

Vision

"To be the Leading-Edge TVET Institution"

Mission

1. To provide wide access to quality and recognized TVET programmes.
2. To develop holistic, entrepreneurial and balanced graduates.
3. To capitalize on smart partnership with stakeholders.
4. To empower communities through lifelong learning.

Motto

"PSA: The Preferred Polytechnic"

Tagline

Great Future @ PSA

Passionate. Synergize. Agile

Why PSA

High Quality Education of International Standards

Closely monitored by the Ministry of Higher Education Malaysia and protected through quality control authorities and appropriate legislation such as Education Act 1996 and Malaysian Qualification Agency (MQA)

Premiere Polytechnic Status

PSA is a premiere polytechnic which upholds the mission of being the preferred learning institution in the region.

Affordable Course Fees

Tuition fees are subsidized by the government

Wide Range of Study Options

Many choices of technical courses and programmes at diploma level to suit any individuals' preference.

Home-Grown Degree Programmes

Degree programmes which offer a cost-effective route for quality education and qualifications.

Qualified Staff

Competent staff with relevant qualifications especially in the technical fields speaks volume of the teaching capabilities.

Wide Usage of the English Language

English as a medium of instruction in classrooms to gear the students up for job requirements and be industry-ready.

Balanced Theories and Practical Hands-On Learning Process

Theories and practical aspects of learning are taught side by side so that students learn and pick up the skills swiftly to become better learners. As such, learning is always fun filled and lively.

Better Employment Opportunities

The technical skills acquired at PSA will tremendously boost the students' employment opportunities in the industrial sector as more companies are looking for qualified skilled workers.

Racial and Religious Diversity

Student population from states all over the country and of different races and religions promote social interaction that would enrich the students' life experience.

Basic Facilities

Hypermarkets, Shah Alam Stadium, Melawati Stadium and FAMA Sunday market are within walking distance. For moviegoers and bowling enthusiasts, a nearby eco-mall provides an ideal location for fun and thrills students can look forward to.

Advanced Highway Connection

Easily accessible to important highways- Guthrie Corridor Highway (GCE), New Kelang Valley Expressway (NKVE) and Federal Highway.

Strategic Location

Located at the center of Shah Alam industrial hub, one of the most important and biggest industrial communities in the nation that offers sound industrial training and job opportunities.

Peaceful and Serene Township

Shah Alam, popularly known as Bandar Anggerik offers the best of living conditions with its conducive, well-planned township and beautiful landscape for better living.

Reliable Public Transport Services

The campus is located in close vicinity to the KTM commuter train station, bus station, Selangor Free bus service as well as taxi for students' convenience and comfort.

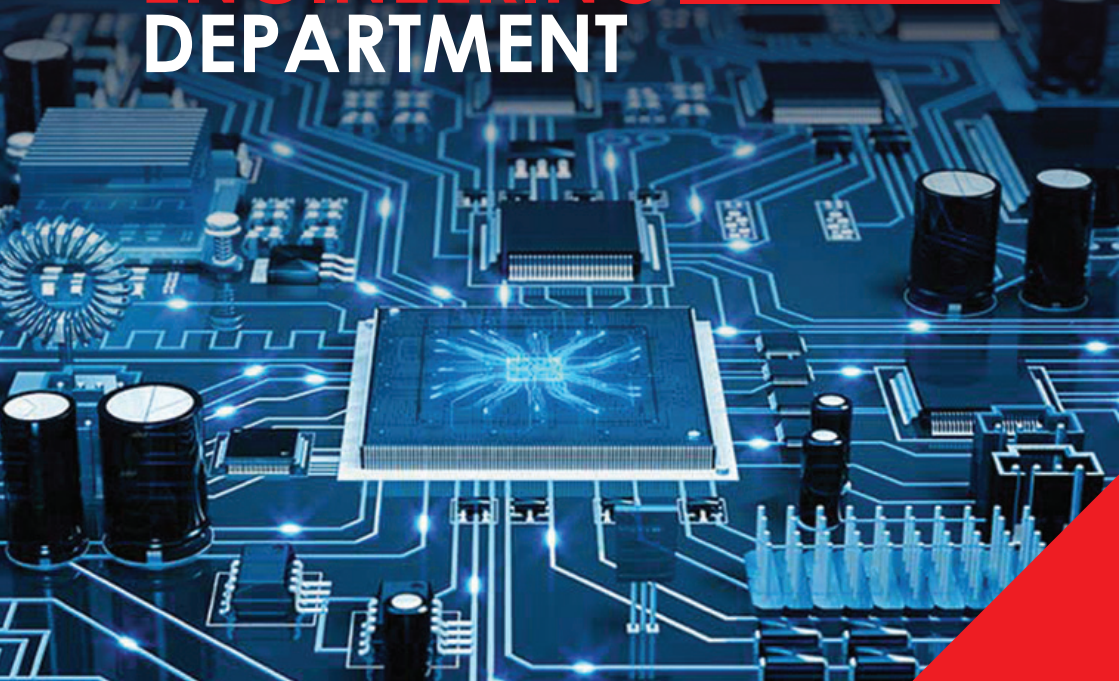
Ideal Suburban Lifestyle

The suburbs provide ideal living conditions where students can find affordable apartments and linked houses for rent. There are also a vast array of shops, shopping malls, eateries, ATM machines, clinics, and petrol stations.

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DIPLOMA PROGRAMMES **ELECTRICAL** **ENGINEERING** DEPARTMENT



- ▶ **DIPLOMA IN ELECTRONIC ENGINEERING (MEDICAL)**
- ▶ **DIPLOMA IN ELECTRONIC ENGINEERING (COMMUNICATION)**
- ▶ **DIPLOMA IN ELECTRONIC ENGINEERING (CONTROL)**

Educational Goal

To produce holistic and competent TVET graduates capable of contributing to the nation development

Programme Aims

This programme believes that all individuals have potential to be a resourceful and adaptable technician to support the nation aspiration in providing engineering talent.

Programme Educational Objectives (PEO)

The engineering programme should produce balanced TVET graduates who are:

PEO1 : Practicing technician in electrical engineering related field.

PEO2 : Contributing to society with professional ethic and responsibilities.

PEO3 : Engaging in enterprising activities that apply engineering knowledge and technical skills

PEO4 : Demonstrate positive character, entrepreneurship skills and lifelong learning skills for career advancement

Programme Learning Outcomes (PLO)

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

- PLO1 : Apply knowledge of applied mathematics, applied science, engineering fundamentals and an engineering specialisation as specified in DK1 to DK4 respectively to wide practical procedures and practices
- PLO2 : Identify and analyse well-defined engineering problems reaching substantiated conclusions using codified methods of analysis specific to their field of activity (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, cultural, societal, and environmental considerations (DK5)
- PLO4 : Conduct investigations of well-defined problems; locate and search relevant codes and catalogues, conduct standard tests and measurements
- PLO5 : Apply appropriate techniques, resources, and modern engineering and IT tools to well-defined engineering problems, with an awareness of the limitations (DK6)
- PLO6 : Demonstrate knowledge of the societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to engineering technician practice and solutions to well-defined engineering problems (DK7)
- PLO7 : Understand and evaluate the sustainability and impact of engineering technician work in the solution of well-defined engineering problems in societal and environmental contexts (DK7)
- PLO8 : Understand and commit to professional ethics and responsibilities and norms of technician practice
- PLO9 : Function effectively as an individual, and as a member in diverse technical teams
- PLO10 : Communicate effectively 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
- PLO11 : Demonstrate knowledge and understanding of engineering management principles and apply these to one's own work, as a member or leader in a technical team and to manage projects in multidisciplinary environments
- PLO12 : Recognise the need for, and have the ability to engage in independent updating in the context of specialised technical knowledge

Notes :

DK 1 : A descriptive, formula-based understanding of the natural sciences applicable in a sub-discipline.

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 based on the techniques and procedures of a practice area.

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

DK 7 : Knowledge of issues and approaches in engineering technician practice: ethics, financial, cultural, environmental and sustainability impacts.

Diploma in Electronic Engineering (Medical)

Synopsis

Electrical Engineering (Medical) Diploma programme is designed to cover a broad discipline in the field of electronic engineering with specialization in medical electronics. The programme covers basic mathematics, electrical and electronic engineering, computers and programming, communication systems, semiconductor devices, wiring and installation and computer aided design. Areas of specialization are anatomy and physiology, medical practice, practical systems, medical signal measurement, medical instrumentation and medical imaging.

Medical care has advanced significantly to meet the changing medical needs today. With rapid changes in electronic diagnostic technology, more engineers and technicians in the field of medical and engineering are needed. Graduates are expected to work in the field of medical technology and electronic engineering. The Ministry of Education's Diploma in Electrical Engineering (Medical) Programme has equipped graduates with specialized technical skills in the field.



Career Prospects

This program offers knowledge and skills in medical electronics engineering that can be widely applied in various careers.

Graduates from this program are equipped to enter the job market in positions such as:

- ❖ Biomedical Engineering Technician
- ❖ Biomedical Equipment Technician
- ❖ Electronics Technician
- ❖ Technical Assistant
- ❖ Assistant Engineer
- ❖ Sales Consultant
- ❖ Training Staff

Entry Requirements

SPM Graduates.

- ❖ Malaysian citizens.
- ❖ Must have SPM or an equivalent qualification.
- ❖ Must have passed Malay Language.
- ❖ Must have passed History (for SPM 2013 and onwards).
- ❖ Must have passed English.
- ❖ Must have at least THREE (3) credits in the following subjects:

Mathematics

ONE (1) Science/Technical/Vocational subject

ONE (1) additional subject of choice

Candidates should not have any visual impairments (blindness, color blindness), hearing impairments, physical disabilities, or learning difficulties that might hinder practical work.

Graduates other than SPM

APEL Graduates

- ❖ Malaysian citizens.
- ❖ Must hold an APEL (Accreditation of Prior Experiential Learning)
- ❖ Certificate from MQA for admission to a diploma program (Level 4).
- ❖ Must have relevant work experience in the field.

Graduates other than SPM

- ❖ Malaysian citizens.
- ❖ You must have a Certificate recognized by MQA or the Malaysian Skills Certificate (SKM) Level 3 in a relevant field;
OR
- ❖ Have an APEL (Accreditation of Prior Experiential Learning) Certificate from MQA for admission to a diploma program (Level 4) and possess relevant work experience in the field.
- ❖ Candidates should not have any visual impairments (blindness, color blindness), hearing impairments, physical disabilities, or learning difficulties that might hinder practical work.

- ❖ Polytechnic Certificate Level 3, KKM

Certificate in Electrical & Electronics Engineering
Certificate in Electrical Engineering (Control)
Certificate in Electrical Engineering (Computer)
Certificate in Electrical Engineering (Power)
Certificate in Electrical Engineering (Communication)
Certificate in Electrical Engineering (Medical)
Certificate in Electrical Engineering (Petroleum)
Certificate in Electronics Engineering (Control)
Certificate in Electronics Engineering (Petroleum)

- ❖ Community College Certificate Level 3, KKM

Certificate in Electrical Technology
Certificate in Mobile Device Technology
Certificate in Telecommunications Technology

PROGRAMME STRUCTURE

Diploma in Electronic Engineering (Medical)

CLASSIFICATION	COURSE CODE	COURSE NAME	CONTACT HOURS				CREDIT VALUES	PREREQUISITE
			L	P	T	O		
SEMESTER 1								
COMPULSORY	DUE10012	COMMUNICATIVE ENGLISH 1	1	0	2	0	2	
	MPU24XX1	SUKAN UNIT BERUNIFORM 1	0	2	0	0	1	
COMMON CORE	DUW10022	OCCUPATIONAL, SAFETY AND HEALTH FOR ENGINEERING	2	0	0	0	2	
	DBM10013	ENGINEERING MATHEMATICS 1	2	0	2	0	3	
	DBS10012	ENGINEERING SCIENCE	2	1	0	0	2	
DISCIPLINE CORE	DET10013	ELECTRICAL TECHNOLOGY	2	2	0	0	3	
	DET10022	ELECTRICAL WIRING	1	3	0	0	2	
	DEE10013	MEASUREMENT DEVICES	2	2	0	0	3	
TOTAL			26				18	
SEMESTER 2								
COMPULSORY	MPU21032	PENGHAYATAN ETIKA DAN PERADABAN	1	0	2	0	2	
	MPU24XX1	KELAB/PERSATUAN UNIT BERUNIFORM 2	0	2	0	0	1	
COMMON CORE	DBM20023	ENGINEERING MATHEMATICS 2	2	0	2	0	3	DBM10013
DISCIPLINE CORE	DET20033	ELECTRICAL CIRCUITS	2	2	0	0	3	DET10013
	DEE20023	SEMICONDUCTOR DEVICES	2	2	0	0	3	
	DEE20033	DIGITAL ELECTRONICS	2	2	0	0	3	
	DEC20012	PROGRAMMING FUNDAMENTALS	1	2	0	0	2	
TOTAL			24				17	
SEMESTER 3								
COMPULSORY	DUE30022	COMMUNICATIVE ENGLISH 2	1	0	2	0	2	
COMMON CORE	DBM30043	ELECTRICAL ENGINEERING MATHEMATICS	2	0	2	0	3	DBM20023
DISCIPLINE CORE	DEE30043	ELECTRONIC CIRCUITS	2	2	0	0	3	
	DEE30052	ELECTRONIC EQUIPMENT REPAIR	1	3	0	0	2	DEE20023
	DEE30071	ELECTRONIC COMPUTER AIDED DESIGN	0	2	0	0	1	
	DEP30013	COMMUNICATION SYSTEM FUNDAMENTAL	2	2	0	0	3	
SPECIALISATION	DEU30023	ANATOMY AND PHYSIOLOGY	2	0	2	0	3	
TOTAL			22				17	
SEMESTER 4								
COMPULSORY	DUE50032	COMMUNICATIVE ENGLISH 3	1	0	2	0	2	DUE30022
DISCIPLINE CORE	MPU22012	ENTREPRENUERSHIP	1	0	2	0	2	
	DEC40053	EMBEDDED SYSTEM APPLICATION	2	2	0	0	3	DEC20012
	DEE30061	COMPUTER AIDED ELECTRICAL DRAWING	0	2	0	0	1	
SPECIALISATION	DEU40032	BIOMEDICAL SIGNAL MEASUREMENT	1	2	0	0	2	
	DEE40113	SIGNAL AND SYSTEM	2	2	0	0	3	DBM20023
ELECTIVES	DEE40082	PROJECT 1	1	2	0	0	2	
ELECTIVES	DEC40082	INTERACTIVE MULTIMEDIA APPLICATION	1	2	0	0	2	
TOTAL			25				17	
SEMESTER 5								
COMPULSORY	MPU23052	SAINS TEKNOLOGI & KEJURUTERAAN ISLAM	1	0	2	0	2	NON-MUSLIM
	MPU23042	NILAI MASYARAKAT MALAYSIA						
SPECIALISATION	DEU50013	MEDICAL SYSTEM PRACTICE	2	2	0	0	3	
	DEU50043	MEDICAL IMAGING	2	2	0	0	3	
	DEU50053	BIOMEDICAL INSTRUMENTATION	2	2	0	0	3	
	DEE50102	PROJECT 2	0	3	0	0	2	DEE40082
ELECTIVES	DEC50122	EMBEDDED ROBOTIC	1	2	0	0	2	
TOTAL			18				15	
SEMESTER 6								
INDUSTRIAL TRAINING	DUT600610	ENGINEERING INDUSTRIAL TRAINING	0	0	0	0	10	
TOTAL CREDIT VALUE			0				10	

Diploma in Electronic Engineering (Communication)

Synopsis

Diploma in Electronic Engineering (Communication) programme covers a wide area of the electronic engineering discipline in the field of communication technology. The programme design includes courses on a wide range of basic electrical and electronic engineering, mathematics, basic electricity and electronics, basic computing and basic system programming, communications, semiconductor devices, electrical wiring and computer aided design to produce graduates who are competent and versatile. Specialization courses offered in this programme are telephony, fiber optic communications, data communications, wireless communications and microwave device. Apart from the technical knowledge and skills, this programme also stresses on holistic development of students in an integrated manner through courses such as Islamic Studies and Moral, co-curricular activities, soft skills and entrepreneurship components.

Career Prospects

Graduates have a wide range of opportunities in the communications sector with companies such as Telekom Malaysia Berhad, Celcom, Maxis, Sapura, Axiata, Webe, SIRIM, consulting firms, and more. Additionally, graduates can contribute to broadcasting systems at radio and television stations, educational institutions, and consulting firms.

This program provides knowledge and skills in Communication Engineering that are widely applicable to various careers. The expertise gained from this program allows graduates to enter the job market in roles such as:

- ❖ Radio Frequency Engineering Assistant
- ❖ Technical Executive
- ❖ Marketing Executive
- ❖ Technical Supervisor
- ❖ Technical Planning Assistant
- ❖ Network Engineering Assistant
- ❖ Network Administration Assistant
- ❖ Drive Test Engineer Assistant
- ❖ Drive Test Analysis Engineer Assistant
- ❖ Electrical/Electronics Technician

Entry Requirements

SPM Graduates.

- ❖ Malaysian citizens.
- ❖ Must have SPM or an equivalent qualification.
- ❖ Must have passed Malay Language.
- ❖ Must have passed History (for SPM 2013 and onwards).
- ❖ Must have passed English.
- ❖ Must have at least THREE (3) credits in the following subjects:

Mathematics

ONE (1) Science/Technical/Vocational subject

ONE (1) additional subject of choice

Candidates should not have any visual impairments (blindness, color blindness), hearing impairments, physical disabilities, or learning difficulties that might hinder practical work.

Graduates other than SPM

Pre-Diploma Graduates from Polytechnic

Must have completed a Pre-Diploma in Science.

APEL Graduates

- ❖ Malaysian citizens.
- ❖ Must hold an APEL (Accreditation of Prior Experiential Learning)
- ❖ Certificate from MQA for admission to a diploma program (Level 4).
- ❖ Must have relevant work experience in the field.

Graduates other than SPM

- ❖ Malaysian citizens.
- ❖ Must have a Certificate recognized by MQA or the Malaysian Skills Certificate (SKM) Level 3 in a relevant field;
OR
- ❖ Hold an APEL (Accreditation of Prior Experiential Learning) Certificate from MQA for admission to a diploma program (Level 4) and have relevant work experience in the field.
- ❖ Candidates should not have any visual impairments (such as blindness or color blindness), hearing impairments, physical disabilities, or learning difficulties that would hinder practical work.

Polytechnic Certificate Level 3, KKM

- ❖ Certificate in Electrical & Electronics Engineering
- ❖ Certificate in Electrical Engineering (Control)
- ❖ Certificate in Electrical Engineering (Computer)
- ❖ Certificate in Electrical Engineering (Power)
- ❖ Certificate in Electrical Engineering (Communication)
- ❖ Certificate in Electrical Engineering (Medical)
- ❖ Certificate in Electrical Engineering (Petroleum)
- ❖ Certificate in Electronics Engineering (Control)
- ❖ Certificate in Electronics Engineering (Petroleum)

Community College Certificate Level 3, KKM

- ❖ Certificate in Electrical Technology
- ❖ Certificate in Electrical Technology Installation and Services
- ❖ Certificate in Mobile Device Technology
- ❖ Certificate in Telecommunications Technology

MARA Skills Institute Certificate Level 3, KKM

- ❖ Certificate in Electronics Engineering Technology (Industry)
- ❖ Certificate in Electronics Engineering Technology (Instrumentation)
- ❖ Certificate in Electronics Engineering Technology (Telecommunications)
Malaysian Skills

Certificate (Level 3), KKM

- ❖ Fiber Optic Technician - Telecommunications (D-400-3)
- ❖ Senior Technician (3G Switching) (EE-032-3)
- ❖ Senior Technician Wireless Radio Frequency (EE-040-3)
- ❖ Senior Technician Circuit Switching (EE-038-3)
- ❖ Senior Technician Radio Access Network (EE-033-3)
- ❖ Senior Technician Radio Frequency Network (EE-036-3)
- ❖ Senior Technician Optical Transmission Network (EE-035-3)
- ❖ Radar Technician (Maintenance) (D-020-3)
- ❖ Radar Maintenance Technician (EE-200-3)
- ❖ Structured Cabling Technician (D-500-3)
- ❖ Telecommunications Technician Switching Operations (D-214-3)
- ❖ Telecommunications Technician Switching Operations (D-217-3)
- ❖ Telecommunications Technician Maintenance (D-211-3) Wireless
- ❖ Telecommunications Technician (D-200-3) Telecommunications Technician
Installation (D-210-3) Lighting Technician (EE-220-3) Broadcast Transmission
- ❖ Operations & Maintenance (EE-140-3:2012) Packet Switch Core Network
Implementation & Development (NID) (EE-037-3:2012)

PROGRAMME STRUCTURE

Diploma in Electronic Engineering (Communication)

CLASSIFICATION	COURSE CODE	COURSE NAME	CONTACT HOURS				CREDIT VALUES	PREREQUISITE
			L	P	T	O		
SEMESTER 1								
COMPULSORY	DUE10012	COMMUNICATIVE ENGLISH 1	1	0	2	0	2	
	MPU24XX1	SUKAN UNIT BERUNIFORM 1	0	2	0	0	1	
COMMON CORE	DUW10022	OCCUPATIONAL, SAFETY AND HEALTH FOR	2	0	0	0	2	
	DBM10013	ENGINEERING MATHEMATICS 1	2	0	2	0	3	
	DBS10012	ENGINEERING SCIENCE	2	1	0	0	2	
DISCIPLINE CORE	DET10013	ELECTRICAL TECHNOLOGY	2	2	0	0	3	
	DET10022	ELECTRICAL WIRING	1	3	0	0	2	
	DEE10013	MEASUREMENT DEVICES	2	2	0	0	3	
TOTAL			26				18	
SEMESTER 2								
COMPULSORY	MPU21032	PENGHAYATAN ETIKA DAN PERADABAN	1	0	2	0	2	
	MPU24XX1	KELAB/ PERSATUAN UNIT BERUNIFORM 2	0	2	0	0	1	MPU24XX1
COMMON CORE	DBM20023	ENGINEERING MATHEMATICS 2	2	0	2	0	3	DBM10013
DISCIPLINE CORE	DET20033	ELECTRICAL CIRCUITS	2	2	0	0	3	DET10013
	DEE20023	SEMICONDUCTOR DEVICES	2	2	0	0	3	
	DEE20033	DIGITAL ELECTRONICS	2	2	0	0	3	
	DEC20012	PROGRAMMING FUNDAMENTALS	1	2	0	0	2	
TOTAL			24				17	
SEMESTER 3								
COMPULSORY	DUE30022	COMMUNICATIVE ENGLISH 2	1	0	2	0	2	DUE10012
COMMON CORE	DBM30043	ELECTRICAL ENGINEERING MATHEMATICS	2	0	2	0	3	DBM20023
DISCIPLINE CORE	DEE30043	ELECTRONIC CIRCUITS	2	2	0	0	3	
	DEE30052	ELECTRONIC EQUIPMENT REPAIR	1	3	0	0	2	DEE20023
	DEE30071	ELECTRONIC COMPUTER AIDED DESIGN	0	2	0	0	1	
	DEP30013	COMMUNICATION SYSTEM FUNDAMENTAL	2	2	0	0	3	
SPECIALISATION	DEP30083	TELECOMMUNICATION NETWORK	2	2	0	0	3	
TOTAL			25				17	
SEMESTER 4								
COMPULSORY	DUE50032	COMMUNICATIVE ENGLISH 3	1	0	2	0	2	DUE30022
	MPU22012	ENTREPRENEURSHIP	1	0	2	0	2	
DISCIPLINE CORE	DEC40053	EMBEDDED SYSTEM APPLICATION	2	2	0	0	3	DEC20012
SPECIALISATION	DEP40053	FIBRE OPTIC COMMUNICATION SYSTEM	2	2	0	0	3	
	DEE40113	SIGNAL AND SYSTEM	2	2	0	0	3	DBM20023
	DEE40082	PROJECT 1	1	2	0	0	2	
ELECTIVES	DEP50072	SATELLITE AND RADAR COMMUNICATION SYSTEMS	2	0	0	0	2	
TOTAL			23				17	
SEMESTER 5								
COMPULSORY	MPU23052	SAINS TEKNOLOGI DAN KEJURUTERAAN ISLAM	1	0	2	0	2	
	MPU23042	NILAI MASYARAKAT MALAYSIA						
DISCIPLINE CORE	DEE30061	COMPUTER AIDED ELECTRICAL DRAWING	0	2	0	0	1	
SPECIALISATION	DEP50033	DATA COMMUNICATION AND NETWORKING	2	2	0	0	3	DEP30013
	DEP50043	MICROWAVE DEVICES	2	2	0	0	3	
	DEP50063	WIRELES COMMUNICATION	2	2	0	0	3	
	DEE50102	PROJECT 2	0	3	0	0	2	DEE40082
ELECTIVES	DEC40082	INTERACTIVE MULTIMEDIA APPLICATION	1	2	0	0	2	
TOTAL			23				16	
SEMESTER 6								
INDUSTRIAL TRAINING	DUT600610	ENGINEERING INDUSTRIAL TRAINING	0	0	0	0	10	
TOTAL			0				10	
TOTAL CREDIT VALUE							95	

Diploma in Electronic Engineering (Control)

Synopsis

This programme provides students with the knowledge and skills in the field of electronic engineering specializing in electronics control systems. Students will attend lectures, complete assignments; undertake projects, practical work and training in the industry. Apart from a basic course in Electrical and Electronics, students will study Industrial Electronics, Control Systems, Microcomputer Systems, CAD Electrical Auto & Moto Control Systems and Industrial Safety. This programme also offers specialized courses in Electronics (Control) such as Industrial Electronics, Control Systems, Instrumentation, Control Motor and Micro Computer Systems. Elective courses are also offered to students.

Career Prospects

- Assistant Engineer
- Medical Equipment Paraprofessionals
- Technical Executive
- Process Automation and Control Programmers
- Service & Repair Personnel
- Engineering Supervisor
- RF Assistant Engineer
- Assistant Network Engineer
- Assistant Network Manager
- Technical Support Assistant
- Marketing Officer
- Entrepreneur
- Sales Executive



Entry Requirements

SPM Graduates.

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- ❖ Must have passed Malay Language.
- ❖ Must have passed History (for SPM 2013 and onwards).
- ❖ Must have passed English.
- ❖ Must have at least THREE (3) credits in the following subjects:

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ONE (1) Science/Technical/Vocational subject

ONE (1) additional subject of choice

Candidates should not have any visual impairments (blindness, color blindness), hearing impairments, physical disabilities, or learning difficulties that might hinder practical work.

Graduates other than SPM

APEL Graduates

Malaysian citizens.

Must hold an APEL (Accreditation of Prior Experiential Learning) Certificate from MQA for admission to a diploma program (Level 4).

Must have relevant work experience in the field.

Graduates other than SPM

- ❖ Malaysian citizens.
- ❖ You must have a Certificate recognized by MQA or the Malaysian Skills Certificate (SKM) Level 3 in a relevant field;
OR
- ❖ Have an APEL (Accreditation of Prior Experiential Learning) Certificate from MQA for admission to a diploma program (Level 4) and possess relevant work experience in the field.
- ❖ Candidates should not have any visual impairments (blindness, color blindness), hearing impairments, physical disabilities, or learning difficulties that might hinder practical work.

- ❖ Polytechnic Certificate Level 3, KKM

Certificate in Electrical & Electronics Engineering
Certificate in Electrical Engineering (Control)
Certificate in Electrical Engineering (Computer)
Certificate in Electrical Engineering (Power)
Certificate in Electrical Engineering (Communication)
Certificate in Electrical Engineering (Medical)
Certificate in Electrical Engineering (Petroleum)
Certificate in Electronics Engineering (Control)
Certificate in Electronics Engineering (Petroleum)

- ❖ Community College Certificate Level 3, KKM

Certificate in Electrical Technology
Certificate in Mobile Device Technology
Certificate in Telecommunications Technology

PROGRAMME STRUCTURE

Diploma in Electronic Engineering (Control)

CLASSIFICATION	COURSE CODE	COURSE NAME	CONTACT HOURS				CREDIT VALUES	PREREQUISITE
			L	P	T	O		
SEMESTER 1								
COMPULSORY	DUE10012	COMMUNICATIVE ENGLISH 1	1	0	2	0	2	
	MPU24X1	SUKAN BADAN BERUNIFORM	0	2	0	0	1	
COMMON CORE	DUW10022	OCCUPATIONAL, SAFETY AND HEALTH FOR ENGINEERING	2	0	0	0	2	
	DBM10013	ENGINEERING MATHEMATICS 1	2	0	2	0	3	
DISCIPLINE CORE	DBS10012	ENGINEERING SCIENCE	2	1	0	0	2	
	DET10013	ELECTRICAL TECHNOLOGY	2	2	0	0	3	
	DET10022	ELECTRICAL WIRING	1	3	0	0	2	
	DEE10013	MEASUREMENT DEVICES	2	2	0	0	3	
TOTAL			26				18	
SEMESTER 2								
COMPULSORY	MPU21032	PENGHAYATAN ETIKA DAN PERADABAN	1	0	2	0	2	
	MPU24X1	KELAB/PERSATUAN BADAN BERUNIFORM	0	2	0	0	1	
DISCIPLINE CORE	DBM20023	ENGINEERING MATHEMATICS 2	2	0	2	0	3	DBM10013
	DET20033	ELECTRICAL CIRCUITS	2	2	0	0	3	DET10013
	DEE20023	SEMICONDUCTOR DEVICES	2	2	0	0	3	
	DEE20033	DIGITAL ELECTRONICS	2	2	0	0	3	
DEC20012	PROGRAMMING FUNDAMENTALS	1	2	0	0	2		
TOTAL			24				17	
SEMESTER 3								
COMPULSORY	DUE30022	COMMUNICATIVE ENGLISH 2	1	0	2	0	2	DUE10012
COMMON CORE	DBM30043	ELECTRICAL ENGINEERING MATHEMATICS	2	0	2	0	3	DBM20023
DISCIPLINE CORE	DEE 30061	COMPUTER AIDED ELECTRICAL DRAWING	0	2	0	0	1	
	DEE30052	ELECTRONIC EQUIPMENT REPAIR	1	3	0	0	2	DEE20023
	DEE30043	ELECTRONIC CIRCUITS	2	2	0	0	3	
SPECIALISATION	DEE30071	ELECTRONIC COMPUTER AIDED DESIGN	0	2	0	0	1	
	DEJ 30013	BASIC CONTROL SYSTEM (JK)	2	2	0	0	3	
	DEJ 30023	INSTRUMENTATION (JK)	2	2	0	0	3	
TOTAL			27				18	
SEMESTER 4								
COMPULSORY	DUE50032	COMMUNICATIVE ENGLISH 3	1	0	2	0	2	DUE30022
DISCIPLINE CORE	MPU22012	ENTREPRENEURSHIP	1	0	2	0	2	
	DEC40053	EMBEDDED SYSTEM APPLICATION	2	2	0	0	3	DEC20012
SPECIALISATION	DEJ 40033	PROGRAMMABLE LOGIC CONTROLLER (PLC) AUTOMATION	2	2	0	0	3	
	DEJ 40043	CONTROL SYSTEMS (JK)	2	2	0	0	3	DEJ30013
ELECTIVES	DEE40082	PROJECT 1	1	2	0	0	2	
	DEC50122	EMBEDDED ROBOTIC	1	2	0	0	2	DEC20012
TOTAL			24				17	
SEMESTER 5								
COMPULSORY	MPU23052	SAINS TEKNOLOGI DAN KEJURUTERAAN ISLAM	1	0	2	0	2	NON-MUSLIM
	MPU23042	NILAI MASYARAKAT MALAYSIA						
SPECIALISATION	DEC 30023	COMPUTER NETWORKING FUNDAMENTALS (JK)	2	2	0	0	3	
	DET 40073	POWER ELECTRONICS (JK)	2	2	0	0	3	
	DEJ 50063	PROCESS MEASUREMENT(JK)	2	2	0	0	3	
ELECTIVES	DEE50102	PROJECT 2	0	3	0	0	2	DEE40082
	DEC40082	INTERACTIVE MULTIMEDIA APPLICATION	1	2	0	0	2	
TOTAL			21				15	
SEMESTER 6								
INDUSTRIAL TRAINING	DUT600610	ENGINEERING INDUSTRIAL TRAINING	0	0	0	0	10	
TOTAL CREDIT VALUE							95	

INFRASTRUCTURES



LODGE: ANGGERIK INN

The lodge : Anggerik Inn offers facilities including Queen rooms, Twin rooms, Single rooms Deluxe , Standard rooms, and a rest area.

LIBRARY

The Sultan Salahuddin Abdul Aziz Shah Polytechnic Library (PSA) opened to users in January 1998 and was officially inaugurated on October 12, 1998. The library serves all students and staff of PSA. The building has a floor area of 2,624 square meters and can accommodate 400 users at a time.



HOSTEL

PSA has provided three hostel blocks known as Kamsis AMAN, Kamsis DAMAI, and Kamsis SENTOSA. The hostels have a total of 626 rooms, which can accommodate 1,252 residents. The fee charged is around RM60.00 per semester.



INFRASTRUCTURES

SPORTS CENTRE

Sports Centre provides facilities and infrastructure that gives access to students from 5.00 to 7.00 p.m. Mondays to Fridays. Among facilities provided are: football and rugby fields, tennis courts, sepak takraw, volleyball, badminton, and more.



CLINIC

The PSA Health Clinic is located in the parking area near the Student Affairs Department building.

The clinic is managed by a Medical Assistant.

Services provides:

An initial treatment for both emergency and non-emergency cases.

Operatig Hours:

Office Hours: 8:00 AM to 5:00 PM



HOSTEL

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Warden's Office Hours: 9:30 PM

to 11:30 PM Emergency Cases:

Available 24/7



INFRASTRUCTURES

ISLAMIC CENTRE

Activities:

- Friday prayers
- Eid al-Adha prayers
- Taraweeh prayers & sermons
- Major iftar (breaking fast) events
- Quran recitation & completion
- Ramadan talks
- Donations to the poor
- Funeral charity donations
- Donations for religious outreach & CSR programs
- Weekly Islamic study classes



KOPERASI PSA (KOPSA BERHAD)

KOPSA established as a consumer cooperative to provide benefits to its members by offering facilities such as a mini market, photocopy center, and more..



