

**PEMETAAN MATLAMAT PENDIDIKAN INSTITUSI VS. OBJEKTIF PENDIDIKAN PROGRAM (PEO) &  
MATLAMAT PENDIDIKAN INSTITUSI VS. HASIL PEMBELAJARAN PROGRAM (PLO)**  
**PROGRAM: Sarjana Sains Dalam Kimia (*Master of Science in Chemistry*)**

PTJ: PP Sains Kimia

a. PEO – IEG mapping

PEO	PEO statement	THINKER (T)	BALANCED (B)	ENTREPRENEURIAL (E)	ARTICULATE (A)	HOLISTIC (H)
	To produce graduants that are	IEG1	IEG2	IEG3	IEG4	IEG5
PEO1	Capable of integrating the latest concepts, theories, methodologies and knowledge in carrying out quality and useful research for the well-being of local and global communities.	√	√			
PEO2	Produce graduates who are skillful in analysing problems critically and accurately besides able to explore creative and innovative alternatives through various latest digital platforms.	√	√			
PEO3	Practise professional codes and ethics in carrying out responsibilities to employers, society and country.		√			√
PEO4	Demonstrate effective and confident communication proficiency to convey knowledge orally and literally.				√	
PEO5	Capable of exploring new knowledge and collaborating with stakeholders that bring impacts on the development and sustainability of the socio-economic of community and country.				√	√

**b. PLO - IEG mapping**

PLO	MQF 2.0 DOMAIN	PROGRAM LEARNING OUTCOMES, PLO	IEG ELEMENT		
			IEG 1	THINKER	T
PLO1	Knowledge and understanding	Master significant and latest knowledge in relevant fields.	IEG 1	THINKER	T
PLO2	Practical Skills	Demonstrate effective and innovative skills in conducting research with minimal supervision.	IEG 1 IEG 2	THINKER BALANCED	T, B
PLO3	Cognitive Skills	Analyse research findings effectively and accurately to solve the complex problems.	IEG 1 IEG 2	THINKER BALANCED	T, B
PLO4	Communication Skills	Demonstrate an ability to present and defend research outcomes in clear, confident and effective manners.	IEG 4	ARTICULATE	A
PLO5	Interpersonal Skills	Demonstrate an ability to collaborate with various stakeholders when carrying out research and have a good social ethical.	IEG 4	ARTICULATE	A
PLO6	Ethics and Professionalism	Comply with safety instructions and rules while showing professionalism and ethics in conducting research.	IEG 2	BALANCED	B
PLO7	Personal Skills	Exhibit high motivation in new knowledge exploration as well as good research resource management and information organisation in systematic and detail manner.	IEG 5	HOLISTIC	H
PLO8	Entrepreneurial Skills	Not applicable.	-	-	-
PLO9	Leadership, Autonomy and Responsibility	Show responsibility in conducting research with good judgment in decision making and able to cooperate in research management.	IEG 5	HOLISTIC	H
PLO10	Digital Skills	Analyse the research findings using various digital technologies and softwares that are appropriate with the research methodology.	IEG 2	BALANCED	B
PLO11	Numeracy Skills	Elaborate the experimental results by using analyses appropriate to research methods and findings to ensure accurate and impactful research conclusions.	IEG 1	THINKER	T