## MAPPING MATLAMAT PENDIDIKAN INSTITUSI VS. OBJEKTIF PENDIDIKAN PROGRAM (PEO) & MATLAMAT PENDIDIKAN INSTITUSI VS. HASIL PEMBELAJARAN PROGRAM (PLO)

PROGRAM: Sarjana Sains Dalam Peralatan Kimia (Master of Science in Chemical Instrumentation)

## **PTJ: PP Sains Kimia**

## a. PEO – IEG mapping

| PEO  | PEO statement   | THINKER<br>(T) | BALANCED (B) | ENTREPRENEURIAL<br>(E) | ARTICULATE<br>(A) | HOLISTIC (H) |
|------|---|----------------|--------------|------------------------|-------------------|--------------|
|      | To produce chemists and professionals that are  | IEG1           | IEG2         | IEG3                   | IEG4              | IEG5         |
| PEO1 | Knowledgeable and scientifically skilled in dealing with chemistry-related issues.                          | /              | /            |                        |                   |              |
| PEO2 | Trustworthy in line with international professional codes and ethics.                                       |                | /            |                        |                   |              |
| PEO3 | Demonstrate quality leadership, communication and interaction skills in professional careers.               |                |              |                        | /                 | /            |
| PEO4 | Proactive, innovative and committed in management and lifelong learning for sustainable career development. | /              | /            |                        |                   | /            |

## b. PLO – IEG Mapping

| PLO   | MQF 2.0 DOMAIN                          | PROGRAM LEARNING OUTCOMES, PLO  | IEG ELEMENT    |                     |      |  |
|-------|---|---|----------------|---------------------|------|--|
| PLO1  | Knowledge and understanding             | Demonstrate mastery of knowledge of chemical instrumentations.  | IEG 1          | THINKER             | Т    |  |
| PLO2  | Practical Skills                        | Apply practical skills and chemical instrumentations efficiently.   | IEG 1<br>IEG 2 | THINKER<br>BALANCED | Т, В |  |
| PLO3  | Cognitive Skills                        | Demonstrate scientific and critical thinking in solving chemistry related problems.                       | IEG 1<br>IEG 2 | THINKER<br>BALANCED | Т, В |  |
| PLO4  | Communication Skills                    | Demonstrate effective communication skills to convey information and knowledge in the field of chemistry. | IEG 4          | ARTICULATE          | А    |  |
| PLO5  | Interpersonal Skills                    | Practice teamwork responsibly for public welfare.   | IEG 4          | ARTICULATE          | А    |  |
| PLO6  | Ethics and Professionalism              | Practice positive values, ethics and accountability in community and professional engagement.             | IEG 2          | BALANCED            | В    |  |
| PLO7  | Personal Skills                         | Integrate information and knowledge for lifelong learning.  | IEG 5          | HOLISTIC            | Н    |  |
| PLO8  | Entrepreneurial Skills                  | Not applicable.   | -              | -                   | -    |  |
| PLO9  | Leadership, Autonomy and Responsibility | Demonstrate leadership abilities in order to foster strong collaboration.                                 | IEG 5          | HOLISTIC            | Н    |  |
| PLO10 | Digital Skills                          | Demonstrate the ability to use digital technology and software in chemistry fields.                       | IEG 2          | BALANCED            | В    |  |
| PLO11 | Numeracy Skills                         | Apply numeracy skills to analyse chemistry related data.  | IEG 1          | THINKER             | Т    |  |