

## **Research Cluster 8**

### **Manufacturing and Industrial Engineering**

**Cluster leader:** Associate Professor Dr Syed Tarmizi Syed Shazali

**Description:** The Manufacturing and Industrial Engineering Research Cluster is focused primarily on research related to multi-disciplinary studies that include various manufacturing sciences and practices including the research, design and development of systems, processes, machines, tools, and equipment. It also covers a branch of engineering which deals with the optimization of complex processes, systems or organizations in order to eliminate waste of time, money, materials, man-hours, machine time, energy and other resources that do not generate value. The cluster aspires to the development, improvement, and implementation of integrated systems of people, money, knowledge, information, equipment, energy, materials, analysis and synthesis, as well as the mathematical, physical and social sciences together with the principles and methods of engineering design to specify, predict, and evaluate the results to be obtained from such systems or processes.

- Objectives:**
- To become an established effective problem-solving and creative design skills provider for technologically relevant, economically sound and socially responsible world-class manufacturing activities.
  - To develop sound decision-making capability that effectively and efficiently employs and integrates lean principles, technology, materials, machinery, processes, people and monetary resources in progressive modern manufacturing environments.
  - To establish capacity by contributing effectively in multi-disciplinary teams in both leadership and followership roles, with an appreciation for the value of ethical responsibility and cultural diversity.

**Members:**

- 1) Associate Professor Dr Syed Tarmizi Syed Shazali
- 2) Professor Dr M. Shahidul Islam
- 3) Associate Professor Dr Abdullah Yassin
- 4) Dr Magdalene Andrew Munot
- 5) Dr Ana Sakura Zainal Abidin
- 6) Dr Abg Mohammad Nizam Abg Kamaruddin
- 7) Dr Khairul Fikri Tamrin
- 8) Dr Shirley Johnathan Tanjong
- 9) Mr Rasli Muslimen
- 10) Mr Mohd Azrin Mohd Said