

# Advanced Manufacturing Processes (AMPs)

## Assignment I

by

**Dr. Sunil Pathak**  
Faculty of Engineering Technology  
[sunilpathak@ump.edu.my](mailto:sunilpathak@ump.edu.my)

# Assignment 1

1. Explain the Following Processes with the help of detailed working principle, schematic diagrams, mechanism of material removal, List of applications, advantages and Limitations:

- a) Electrochemical Machining
- b) Investment Casting
- c) Ultrasonic Machining
- d) Abrasive Water Jet Machining
- e) Magnetorheological Finishing
- f) Electrical Discharge Machining

2. Describe the classification of Advanced Manufacturing Processes on the basis of type of energy used.

3. Explain the Life cycle assessment and the concept of sustainable manufacturing