



# MAHAGURU INSTITUTE OF TECHNOLOGY

Affiliated to the APJ Abdul Kalam Technological University, Thiruvananthapuram

Approved by All India Council for Technical Education, New Delhi

Accredited by NAAC with B+ Grade

## PROGRAM OUTCOME STATEMENTS

### B.TECH

**PO1. Engineering knowledge:** Apply the knowledge of mathematics &, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

**PO2. Problem analysis:** Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

**PO3. Design/development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

**PO4. Conduct investigations of complex problems:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

**PO5. Modern tool usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.

**PO6. The engineer and society:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

**PO7. Environment and sustainability:** Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

**PO8. Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

**PO9. Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.



+91 479 2331392, 2331304



[www.mahagurutech.ac.in](http://www.mahagurutech.ac.in)



[office@mahagurutech.ac.in](mailto:office@mahagurutech.ac.in)



# MAHAGURU INSTITUTE OF TECHNOLOGY

Affiliated to the APJ Abdul Kalam Technological University ,Thiruvananthapuram

Approved by All India Council for Technical Education , New Delhi

Accredited by NAAC with B+ Grade

**PO10. Communication:** Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

**PO11. Project management and finance:** Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

**PO12. Life-long learning:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.



+91 479 2331392, 2331304



[www.mahagurutech.ac.in](http://www.mahagurutech.ac.in)



[office@mahagurutech.ac.in](mailto:office@mahagurutech.ac.in)



# MAHAGURU INSTITUTE OF TECHNOLOGY

Affiliated to the APJ Abdul Kalam Technological University ,Thiruvananthapuram  
Approved by All India Council for Technical Education , New Delhi  
Accredited by NAAC with B+ Grade

## **PROGRAM SPECIFIC OUTCOME STATEMENTS**

### **B.TECH**

### **DEPARTMENT OF MECHANICAL ENGINEERING**

**PSO1:** Perform the duties of Mechanical Engineering understanding and analyzing the real time issues of society by investing their fundamental knowledge in mathematics, science and engineering.

**PSO2:** Use modern design and analysis tools to develop the solutions for complex Mechanical Engineering problems through ethical and professional engineering practice.

**PSO3:** Play as a solution provider or entrepreneur in all circumstances to manage, plan, train and communicate professionally for continuous improvement.





# MAHAGURU INSTITUTE OF TECHNOLOGY

Affiliated to the APJ Abdul Kalam Technological University ,Thiruvananthapuram  
Approved by All India Council for Technical Education , New Delhi  
Accredited by NAAC with B+ Grade

## **PROGRAM EDUCATIONAL OBJECTIVES STATEMENTS**

### **B.TECH**

#### **DEPARTMENT OF MECHANICAL ENGINEERING**

**PEO1:** To pursue the career by applying fundamental concepts of mathematics, science and engineering to analyze and solve the mechanical engineering issues.

**PEO2:** To identify, formulate and design the required system for the dynamic problems of society in Eco-friendly economical way.

**PEO3:** To excel in industrial responsibility by investing the Coordination, leadership and professional communication qualities that satisfy the national and international needs of the organization.



# MAHAGURU INSTITUTE OF TECHNOLOGY

Affiliated to the APJ Abdul Kalam Technological University ,Thiruvananthapuram

Approved by All India Council for Technical Education , New Delhi

Accredited by NAAC with B+ Grade



+91 479 2331392, 2331304



[www.mahagurutech.ac.in](http://www.mahagurutech.ac.in)



[office@mahagurutech.ac.in](mailto:office@mahagurutech.ac.in)

Kayamkulam, Pallickal P.O, Alappuzha Dist, Kerala



# MAHAGURU INSTITUTE OF TECHNOLOGY

Affiliated to the APJ Abdul Kalam Technological University ,Thiruvananthapuram

Approved by All India Council for Technical Education , New Delhi

Accredited by NAAC with B+ Grade



+91 479 2331392, 2331304



[www.mahagurutech.ac.in](http://www.mahagurutech.ac.in)



[office@mahagurutech.ac.in](mailto:office@mahagurutech.ac.in)

Kayamkulam, Pallickal P.O, Alappuzha Dist, Kerala





# MAHAGURU INSTITUTE OF TECHNOLOGY

Affiliated to the APJ Abdul Kalam Technological University ,Thiruvananthapuram

Approved by All India Council for Technical Education , New Delhi

Accredited by NAAC with B+ Grade



+91 479 2331392, 2331304



[www.mahagurutech.ac.in](http://www.mahagurutech.ac.in)



[office@mahagurutech.ac.in](mailto:office@mahagurutech.ac.in)

Kayamkulam, Pallickal P.O, Alappuzha Dist, Kerala