TERMS DEFINITIONS

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"Algorithm": "A step-by-step procedure for solving a problem",
"CAD": "Computer-aided design",
"CAM": "Computer-aided manufacturig",
"CNC": "Computer numerical control",
"FEA": "Finite element analysis",
"Fluid Mechanics": "The study of fluids and their behavior",
"HVAC": "Heating, ventilation, and air conditioning",
"Hydraulics": "The study of liquid in motion",
"Kinematics": "The study of motion without considering forces",
"Mechanics of Materials": "The study of material behavior under stress",
"Mechatronics": "The integration of mechanical, electrical, and computer engineering",
"Microcontroller": "A small computer on single integrated ciruit",
"PLC": "Programmable logic controller",
"Robotics": "The design and application of robots",
"Solid Mechanics": "The study of solid materials under stress",
"Stress": "Force per unit area",
"Strain": "Deformation of a material under stress",
"Thermodynamics": "The study of heat and its relation to energy and work",
"Topology": "The study of shapes and their properties",
"Vibration": "Mechanical oscillations about an equilibrium point",
"Aerodynamics": "The study of air in motion",
"Control Systems": "Systems designated to regulate other systems",
"Data Aquisition": "The process of collecting data from sensors",
"DSP": "Processing of digital signals",
"Geotechnical Engineering": "The study of soil and rock behavior",
"Engineering Design": "The process of creating solutions to engineering problems",
"Structural Engineering": "The design and construction of structures",
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"Transportation Engineering": "The design and operation of transportation systems",

"Manufacturing Engineering": "The design and optimization of manufacturing process",