DRONACHARYA
Group of Institutions

B-27, Knowledge Park – III, Greater Noida, Uttar Pradesh - 201308
Approved by: All India Council for Technical Education (AICTE), New Delhi
Affiliated to: Dr. A. P. J. Abdul Kalam Technical University (AKTU), Lucknow

DEPARTMENT OF MECHANICAL ENGINEERING

Academic Year -2021-22

Course Outcomes

B.TECH.8th SEM

PROJECT MANAGEMENT & ENTREPRENEURSHIP (KHU802)

Course Outcome (CO)	Details of Course Outcomes
(CO1)	Understand the fundamentals of project management, including project life cycle, planning, scheduling, and control.
(CO2)	Apply various project management tools and techniques such as CPM, PERT, and resource allocation in real-world scenarios.
(CO3)	Identify and evaluate business opportunities, market needs, and entrepreneurial challenges.
(CO4)	Develop a business plan including financial, marketing, and operational strategies for a start-up.
(CO5)	Demonstrate understanding of government policies, legal aspects, and support systems for entrepreneurship development in India.

QUALITY MANAGEMENT (KOE-085)

Course Outcome (CO)	Details of Course Outcomes
(CO1)	Understand the fundamental concepts of quality, quality control, and quality assurance in engineering and industrial contexts.
(CO2)	Apply statistical quality control techniques and tools such as control charts, sampling, and process capability analysis.
(CO3)	Analyze the principles and practices of Total Quality Management (TQM), Six Sigma, and continuous improvement strategies.
(CO4)	Evaluate and implement quality standards and systems such as ISO 9000, QS 9000, and quality audits.
(CO5)	Demonstrate the ability to use quality management tools in decision-making to enhance organizational performance and customer satisfaction.

MODELLING AND SIMULATION OF DYNAMIC SYSTEMS (KOE-096)

Course Outcome (CO)	Details of Course Outcomes
(CO1)	Understand the fundamentals of dynamic systems and classify them based on physical domains (mechanical, electrical, thermal, etc.).
(CO2)	Develop mathematical models for various dynamic systems using physical laws and system representations.
(CO3)	Apply simulation techniques to analyze system behavior using tools such as MATLAB/Simulink or equivalent software.
(CO4)	Analyze time and frequency responses of dynamic systems and assess their performance and stability.
(CO5)	Integrate modeling and simulation methodologies for real-world engineering applications and system design optimization.

Project (KME 851)

Course Outcome (CO)	Details of Course Outcomes
(CO1)	Identify complex engineering problems and define clear objectives for project work aligned with societal, environmental, or industrial needs.
(CO2)	Design and develop effective solutions using modern tools, engineering knowledge, and innovative approaches.
(CO3)	Conduct experiments, analyze data, and validate project outcomes using appropriate methodologies.
(CO4)	Exhibit project management skills, teamwork, and ethical responsibility during planning and execution.
(CO5)	Communicate project results effectively through technical documentation, presentations, and viva-voce.