

One Week Online Faculty Development Programme

On

Rejuvenating Learning with World Class Business Improvement Approach - Lean Six Sigma

(28th June – 2th July, 2021)

Sponsored by



Organized by



Department of Mechanical Engineering
Dharmsinh Desai University,
College Road, Nadiad-387001, Gujarat
Phone: 0268-2520502 Fax: 0268-2520501

Patron

Dr. H. M. Desai,
Vice Chancellor,
Dharmsinh Desai University

Vice-Patron

Prof. K. N. Sheth
Dean, Faculty of Technology

Convener

Dr. (Prof.) G. D. Bassan
Head,
Department of Mechanical Engineering.

Contact Details of Coordinator:

Dr. Shruti J. Raval
Assistant Professor,
Department of Mechanical Engineering.
Mail id: sjraval.mech@ddu.ac.in
Contact Number: +91 9998074388

Co-Coordinator:

Prof. Jaydeepsinh M. Ravalji
Assistant Professor,
Department of Mechanical Engineering
Mail id: jmralvalji.mh@ddu.ac.in
Contact Number: +91 9427516474

Institute Details:

Dharmsinh Desai University (DDU), located at Nadiad, is one of the leading institutions of learning in Gujarat. DDU primarily started as an engineering college (called DDIT) offering degree and diploma in Chemical Engineering in 1968. Since then, it has come a long way - adding other branches of engineering and postgraduate-

courses, becoming autonomous in 1990 and a deemed university in 2000, and subsequently turning into a University in 2005. The university receives NAAC accreditation in 2011 and subsequently in 2017. The university is having state-of-the-art infrastructure with well-equipped laboratories.

About Department of Mechanical Engineering

The department is established in the year 1968 as supporting department for other engineering branches. Since 2010, the department is offering B. Tech. and M. Tech., with specialization in CAD-CAM and Ph. D Programs. Well qualified faculty strength of the department includes doctorates and faculty members pursuing Ph. D. The department is engaged in research activities in the fields of Robotics and Automation, Tribology, Material Science, Thermal Engineering, Industrial Engineering, Production and Automobile.

In order to facilitate students' learning with hands on, the department has 14 laboratories with all required equipments and 3 computer laboratories. Well-qualified faculty strength of the department (36 faculty members) includes 3 doctorates and 13 faculty members pursuing Ph.D. an average experience of 12 years.

The faculty association with the department ranges from minimum 6 years to maximum 32 years with department. Faculties with expertise in the latest technologies carry out research in various domains related to the branch. Eminent scientists of well known research organizations and premier technology institutes including IITs, IIST, PRL, and SAC (ISRO) are associated with research undertaken by the faculty members and research scholars of the department.

Content of the FDP:

The objective of this program is to make people aware of advanced components of Six Sigma and Lean. This is a sequential, linear designed specialization that covers a more advanced level of content of Lean Six Sigma. In this course, the structured DMAIC methodology of Lean Six Sigma will be explained in detail. Concept of each phase of DMAIC and various associated tools such as SIPOC, Project Charter, Gauge R & R, PUGH Matrix, Control Charts, Process Capability, Cost-benefit and Risk Analysis, Mistake proofing, Hypothesis Testing, Correlation analysis, Project closure, tollgate review, etc. will be explained. The FDP also covers recent trends and topics of LSS such as VUCA in operations, Recent research trends, Sustainability approaches, and Behaviour analysis.

Targeted Participants:

The faculty members of the AICTE recognized institutions, Ph. D scholars, PG Scholars, UG Students, participants from various Government sectors and Industry (Bureaucrats/Technicians/Participants from Industry etc.) and staff of host institutions.

Schedule and Topic:

Day 1

Session-1: Overview of lean, Six Sigma and the organization and Define Phase of Lean six sigma (Part-I)

Session- 2: Define Phase of Lean six sigma and toll gate review (Part-II)

Session-3: Measure Phase of Lean Six sigma (Part-I)

Day 2

Session-1: Measure Phase of Lean Six sigma (Part-II)

Session-2: Measure Phase of Lean Six sigma and toll gate review (Part-III)

Session-3: Analyse Phase of Lean Six sigma (Part-I)

Day 3

Session-1: Analyse Phase of Lean Six sigma (Part-II)

Session- 2: Analyse Phase of Lean Six sigma and toll gate review (Part-III)

Session-3: VUCA(volatility, uncertainty, complexity and ambiguity) in operations

Day 4

Session-1: Control Phase of Lean Six sigma and toll gate review

Session-2: Improve Phase of Lean Six sigma and toll gate review

Session-3: Recent research trends in Lean Six Sigma

Day 5

Session-1: Integration of improvement approaches for sustainability

Session- 2: Importance and use of behaviour analysis for implementation of LSS for world class

Session- 3: Exam and feedback