



INDIAN INSTITUTE OF TECHNOLOGY (IIT) BOMBAY



CONTINUING EDUCATION &
QUALITY IMPROVEMENT PROGRAMME (CE&QIP)

Certificate

This is to certify that

Sachin Rajaram Vankar

has participated in the CEP course on
Advanced Manufacturing Processes
conducted for Govt. College of Engineering, Jalgaon
by IIT Bombay during August 11 - 16, 2014.

Bandyopadhyay

Prof. B. Bandyopadhyay
Professor-In-Charge (CE & QIP)

Alankar

Prof. P. P. Date
Course Coordinator

No.CE&QIP/ME/I-15/2014-15/23

(See Overleaf for Course Contents)

Course Contents

- Conventional and Modern Manufacturing
- Casting : Calculations related to melting, design of gating system
- Value Stream Mapping
- Toyota Single Piece Flow
- Thermal Aspects of Manufacturing
- Basics of Welding
- Hot Stamping
- Micro forming
- Solid state welding processes
- Advances in Welding
- Statistics in Manufacturing
- Internet based collaborative product development
- Metal Forming (Conventional, high speed forming, sheet metal forming)
- Micro Machining
- Powder Metallurgy: Conventional Powder metallurgy & metal Injection Moulding
- Thermomechanical Processing of Metals
- Plasting material & moulding - Automatic and Semiautomatic machines, Mould design
- Micro-Manufacturing
- Microstructural Aspects of Machining
- Heat Treatment (including cryogenic treatment)