



Shobhit University

EDUCATION EMPOWERS

Centre for Industry 4.0 Technology Studies and Applications (CITSA)

(A Joint Initiative of Acetel Technologies & Shobhit University)

Announces

Industry 4.0 Technology aligned Skill Development and Entrepreneurship Programme

Certificate of Competency (COC) Programme

(4-Week Duration)

Certificate of Awareness (COA) Programme

(1-Week Duration)

Mission

Industry 4.0 Technology (SMART Industry) Capacity Building

in association with

Acetel
TECHNOLOGIES
Touching New Dimensions



Shobhit University: International Skill Development Centre

Shobhit University House, A-87, Sector 57, NOIDA

www.shobhituniversity.ac.in

ABOUT THE UNIVERSITY

Shobhit University is a research-intensive university that shares the values of high-quality teaching within an environment of internationally competitive research. The University seeks to provide a creative and supportive environment in which ideas are generated and flourish. The India Today Survey–2018 ranked the university as one among the top twenty technical universities of India. It has recently been conferred Nation's Best Institution Award for Promoting Industry-Academia Interface by The Associated Chambers of Commerce of India (ASSOCHAM).

The University's academic centers and programs focus on education and research in specific disciplines and areas of study, and share the knowledge gained with the state, the nation, and the world. The excellence and diversity of our research across the Departments of Agriculture Informatics, Bio-Informatics, Biotechnology, Biomedical, Electronics, Informatics & Computer Engineering, Electrical, Mechanical Engineering, Pharmacy, Physical & Mathematical Sciences, Management Studies, Humanities, Education, Law, and Yoga means that in addition to our achievements in fundamental research, we are also well-positioned to make significant contributions to the national innovation agenda. The Confederation of Indian Industry (CII) and Indian Citation Indexed 2016 has ranked Shobhit University 1st in Research Productivity based on Citation/Paper among non-government Universities.

With an understanding that to carry out research of the highest quality, it can no longer merely be an 'in-house' affair, the university has signed a number of MoUs with national and international Universities/ research organizations to develop a platform for communication, collaboration and to promote research as well as academic activities. The University is proud of being a preferred destination for recruitment among young universities in India. Since its inception the University has educated a vast number of students drawn from as diverse backgrounds as deep interiors of rural sections of the Uttar Pradesh, urban-middle class, and metropolitan segments along with international students.

The University has made a mark in creation and dissemination of knowledge in inter-disciplinary and multi-disciplinary areas, and is marching ahead towards the goal of providing quality higher education and achieving excellence in the national context.

Acetel Technologies

M/s Acetel Technologies Pvt. Ltd, along with its technology Partner, M/s Cantier Systems (Singapore) and other ecosystem Partners, have already been engaged in Industry 4.0 Technologies deployment for manufacturing enterprises with its solutions like MES (Manufacturing Execution Solutions) and ERP (Enterprise Resource Planning) solutions.

ABOUT THE CENTRE

For the manufacturing industry, M/s Acetel Cantier MES Software provides real-time visibility and control on all the manufacturing operations enabling the unit, to make full use of the production capacity and increase throughput with Smart Manufacturing. M/s Acetel Technologies Pvt. Ltd, regularly, provides MES Training Programme for capacity building and human resource development.

M/s Acetel Technologies Pvt. Ltd regularly conducts Workshops and Seminars on Industry 4.0 Technologies Manufacturing Solutions" in India

International skills Development Centre (ISDC) - An initiative of Shobhit University

The need of the hour is creation of a globally competent generation that thinks globally but acts locally, and impacts the Nation's growth directly. ISDC has a wide range of courses designed to suit your specific requirements. "All Solutions under One Roof", is the principle on which ISDC works. ISDC guides Youth through all the steps to make Industry ready and offer skill development - both Technical skills and Personality grooming, so as to make employable.

Centre for Industry 4.0 Technology Studies and Applications (CITSA)

Centre for Industry 4.0 Technology Studies and Applications (CITSA) is a Joint Initiative of Acetel Technologies (www.aceteltechnologies.com) and Shobhit University, for promoting, designing and delivering, both academic and capacity building programs in the areas of Industry 4.0 Studies and Applications, Industry 4.0 aligned skill development and entrepreneurship development.

To this effect, CITSA will launch academic courses leading

(a) **MBA- Industry 4.0 Management** (2-Year Full Time/Week End),

(b) **PG Diploma in Industry 4.0 Management** (1 Year Full Time/Week End), and

© **Diploma in Industry 4.0 Management** [1 Year Full Time/Week End for working professionals (eligibility Graduates) with option to upgrade in MBA within this year or after their Diploma], in collaboration with Centre for Agricultural Informatics and e-Governance Research Studies (CAIRS).



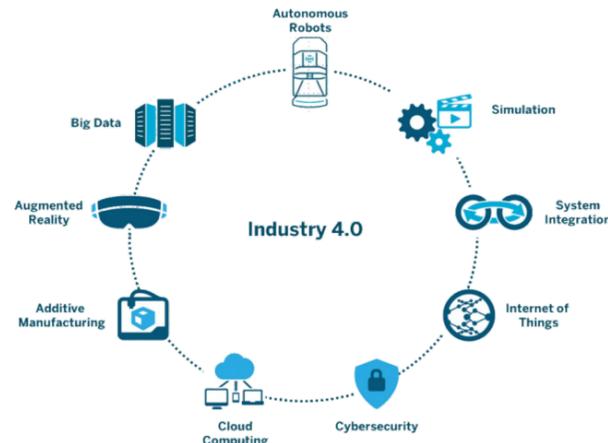
INTRODUCTION

The “**Make in India**” Initiative is spearheading wider adoption of “**Industry 4.0**” which is the current trend of “automation and data exchange” in manufacturing technologies. Adoption of Industry 4.0 is inevitable in view of having large workforce of IT professionals and proven strength of IT in India. Driven by the power of BigData, high Computing Capacity, Artificial Intelligence and Analytics, **Industry 4.0** aims to completely digitise the Indian manufacturing sector. **Exhibit-1** depicts 10 Technologies which are transforming industrial production.

Industry 4.0, which started off as a brainchild of Germany, is being adopted by Countries viz., United States of America (USA), France, Japan etc. Bridging the Development Gaps in human resources for Digital Industrial Revolution: Digital India and Make in India Programmes, has been the Challenge, and was rightly addressed in the Shobhit University's 5th National Conference, **CICON 2015: “Recent Trends in Science, Engineering, Technology and Management”**, held on 12th September 2015. However, there are vast opportunities for the technology institutes who develop students in the areas of Electronics, Tele-Communications, Advanced Computing and Informatics, Information Technology etc. The CICON-2015 has devoted 6 Technical sessions on “**Education and Skill Development**” in digital technologies, out of which one Technical Session was on “Electronics and Telecommunication Equipments Manufacturing Industry”.

In their journey to adopt Industry 4.0, each country is expected to encounter a number of challenges related to “skill level” of their workforce. The skills which are important today will likely to cease to be so in the future, and the workforce will be expected to possess new skills in the domain of Information Technology, Data Analytics, Industrial IOTs, etc. A higher percentage of the jobs will give importance to cognitive abilities and system skills over physical abilities, while defining core work-related skill sets. “**The Trinity of “Knowing”, “Being” and “Doing” will enrich their competency.**”

EXHIBIT 1 | Nine Technologies are Transforming Industrial Production



Industry 4.0 is the vision of the industrial production of the future

Skill Related Challenges that Industries to Face with Industry 4.0

- ✦ Workforce Transformation: Up-skilling, Re-skilling, Continuous Learning and Mindset Change
- ✦ Demand Supply mismatch
- ✦ Skillset Availability
- ✦ Negative image – School Dropouts as Workforce
- ✦ Explosion of Data, and related issues of Data Privacy and Security
- ✦ Awareness and Readiness
- ✦ Scalability from pilots

Opportunities and Challenges of the New Industrial Revolution for Developing Countries and Economies in Transition (www.unido.org) (2017)

Digital technologies allow for new business models and value producing opportunities, and are attainable for most developing countries. Industry 4.0 is one of the major drivers of the Fourth Industrial Revolution:

- ✦ First Industrial Revolution - Mechanisation, Water Power, Steam Power
- ✦ Second Industrial revolution - Mass Production, Assembly Line, Electricity
- ✦ Third Industrial Revolution - Computer and Automation.
- ✦ Fourth Industrial Revolution - Cyber Physical System.

Industry 4.0 has the potential to improve productivity and competitiveness, increase energy and resource efficiency and effectiveness and hence to protect the environment. Increasingly, Industries are applying innovative solutions, including through the “Internet of Things” (IoT), cloud computing, miniaturization, and 3D printing that will enable more interoperability and flexible industrial processes and autonomous and intelligent manufacturing. The physical components of industrial production are being transformed by smart, digital networking into cyber-physical systems (CPS), allowing for the management of production processes in real time across great distances and customized products. If Industry 4.0 is to contribute to creating new wealth and further improve living standards, as the previous industrial revolutions did, we will have to:

- ✦ Highlight the benefits of Industry 4.0, for people, planet and prosperity
- ✦ Make major efforts to train and educate people
- ✦ Make technologies available and affordable so that they can be used in all countries
- ✦ Ensure digital inclusion
- ✦ Move from competition to connection and collaboration
- ✦ Take a customized approach to prepare for Industry 4.0
- ✦ Do not forget implementation
- ✦ Exploit the potential of Industry 4.0 to address climate change and conserve the environment

The Industry 4.0 Technology aligned Skill Development and Entrepreneurship programme, launched by the Centre for Industry 4.0 Technology Studies & Applications, along with its technology partner M/s Cantier System (www.cantier.com), is in line with the “Make in India”, “Startup India”, “Digital India” and “Skill India” Programs, along with emphasis on capacity building for achieving Industry 4.0 empowered “Zero Defect Zero Effect” Vision for the Industry.

There is increasing priority and focus of the Government of India and Private sector on Industry 4.0 aligned smart manufacturing, with support of disruptive technologies such as AI & IIoT duly supported by the International Industry Association, “MESA International”, which is likely to set up its Chapter in India, to boost

international industry linkage and employment support for trained manpower.

- ✦ *It eases current challenges for manufacturers.*
- ✦ *It leads to an innovation economy.*
- ✦ *It puts the consumer in the center of all activities.*
- ✦ *It even puts humans into the center of production.*
- ✦ *It will enable sustainable prosperity.*

With the growing focus on national productivity, Industry 4.0 can accelerate improvements in productivity, cost efficiency, business performance, new businesses, new jobs, and the potential for India. Hence, Industry 4.0 aligned Smart Manufacturing and Manufacturing Execution Systems (MES) is very important. The Industry 4.0 Technology aligned Skill Development and Entrepreneurship programme, aggressively addresses the knowledge gap that serves as the primary barrier to growth of the Manufacturing Operations Management (MOM) and Manufacturing Execution Systems (MES) arena.

Industry 4.0 aligned Acetel Cantier MES software is recognized as “SMART Factory Solution”. This Software is configurable and highly scalable manufacturing software that includes real-time Operations, Inventory, Quality Management and Equipment Maintenance with IIoT capabilities in a single application.

Who Should Attend?

The Industry 4.0 Technology aligned Skill Development and Entrepreneurship programme aggressively addresses the knowledge gap that serves as the primary barrier to growth of Manufacturing Operations Management (MOM) and Manufacturing Execution Systems (MES) space. Slowing that growth inhibits the realization of the significant gains available to end users who successfully embrace MES/MOM. Professionals, who possess the following qualifications, have reasons to attend CoC and CoA Programmes:-

- ✦ Qualified Engineering Professionals having B. Tech. / B.E. / Diploma in any Engineering discipline;
- ✦ Professionals working in manufacturing sector and willing to make a career in Smart Manufacturing;

ABOUT THE PROGRAMME

Programme Feature

- ☉ Certificate of Competency (CoC) Programs meant for Systems Analysts, Architects, Programmers, Project Managers and Consultants;
- ☉ Certificate of Awareness (CoA) Programs designed for Executives, Manufacturing/Operations Personnel, IT Personnel and Sales Professionals.

Programme Module – Training on Industry 4.0 aligned Technologies & Smart Manufacturing Solutions.

Duration: 4 Weeks

Training Venue: New Delhi/Noida

Batch Size: 35–40 Participants

Objectives of the Training:

To tap into USD 12 Trillion global manufacturing market and catalyze it with smart manufacturing with trained faculty led trained engineers gainfully employed in the sector. This Programme will empower, inspire and impart knowledge to the participants, to become talented Indian Engineers/Technical resource persons (fresh/employed), to serve and enhance global competitiveness, with Smart Manufacturing in the manufacturing sector, through various digital technologies involving real-time tracking and execution management of manufacturing processes on various Efficiency, Quality and Environment (EQE) aspects.

Broad Programme Content

- ☉ Industry 4.0 for overall development & Digital India
- ☉ New age Quality Management & Total Productive Maintenance (TPM)
- ☉ New age Six Sigma
- ☉ New age Lean Manufacturing
- ☉ New age Green Manufacturing
- ☉ Zero Defect Zero Effect
- ☉ New age Enterprise Resource Planning (ERP)
- ☉ New age Disruptive Technologies (Robotic process automation, Artificial Intelligence, Virtual Reality, IoT, Social and Mobile, Big Data Analytics, Cloud Computing & 3D Printing)
- ☉ Industry 4.0 aligned Manufacturing Execution Solutions (MES)

Programme Objective

- ☉ Empower participants to enhance knowledge about latest standards, principles, methodology, technical and functional skills about smart manufacturing.
- ☉ Prepare participants for the up skilling in the face of Artificial Intelligence and prospective employment of engineers at higher technical levels of digital application hierarchy and in the jobs of the future.
- ☉ Prepare/Train engineers/technical resource persons to help build, catalyze and run digital transformation of USD 12 Trillion global manufacturing market.
- ☉ Elucidate importance of increased productivity, performance and prosperity with smart manufacturing in the manufacturing sector using advanced technologies with data and real time communication capabilities.
- ☉ Enable Participants in preparing for successful careers as OE and MES Application specialists, Solution architects, business consultants, project managers, and support engineers etc.
- ☉ Provide technical and professional skills necessary for the technocrats and human resource working for the manufacturing excellence and allied smart manufacturing fields embracing various digital applications.

Key Benefits for Manufacturers/Producers:

- ☉ Receive unbiased MES/MOM training that has passed Internationally Renowned Quality Assurance/Approval Process for delivering best-in-class content.
- ☉ *It eases current challenges for manufacturers.*
- ☉ *It leads to an innovation economy.*
- ☉ *It puts the consumer in the center of all activities.*
- ☉ *It even puts humans into the center of production.*
- ☉ *It will enable sustainable prosperity.*

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Nominations and Last Date for Submission of Nomination:

Training Fee & Logistics:

(Please see for registration Form, Payment & Other Instruction at the last page of this brochure)

Certificate of Competency (CoC) Program

- ☉ Fee: INR71,000 (Indian Rupee Seventy-One Thousand only) per participant (inclusive of Training fee and GST @ 18%).
- ☉ Payment: 100% in advance along with registrations.
- ☉ Candidate to bear travel cost (to and fro) from place of origin to the venue of training.
- ☉ Candidate to bear expenses in respect of boarding and lodging if any.

Certificate of Awareness (CoA) Program

- ☉ Fee: INR41,000 (Indian Rupee Forty-One Thousand only) per participant (inclusive of Training fee and GST @ 18%).
- ☉ Payment: 100% in advance along with registrations.
- ☉ Candidate to bear travel cost (to and fro) from place of origin to the venue of training.
- ☉ Candidate to bear expenses in respect of boarding and lodging if any.



PROGRAM DIRECTOR

Mr. Alok Varshney is the Managing Director of M/s Acetel Technologies Pvt. Ltd, an acclaimed and a fast emerging company, in the field of "ICT and Engineering" in India. He is responsible for developing and implementing enterprise business



development and business sustainability policies and strategies. He is also instrumental in execution of a strategic plan for Acetel Technologies in the area of Vocational Skill Development, in partnership with various State Governments, for deployment in the ICT Sector. Prior to launching M/s Acetel Technologies in 2007, Mr. Alok Varshney has spent around 20 years in the international business development and marketing for many reputed manufacturer and merchant export organizations in the Engineering and Technology sectors in India, and was also responsible for developing and delivering exports, in many key markets in North Africa, for Indian Engineering and Technology projects and supplies.

Mr. Alok Varshney graduated in Engineering from Zakir Hussain College of Engineering and Technology, Aligarh Muslim University (AMU) in 198, and Post-Graduation in International business from Delhi School of Economics, University of Delhi. He contributes regularly thought-leadership papers and related inputs to various Government bodies and Industry associations including CMAI, ASSOCHAM, etc. He leads Project Team at Acetel Technologies for delivery of Green Telecom Assets and Processes for Telecom Service Providers (TSPs), which led M/s Acetel Technologies to receive the Distinguished Award of "Emerging Green Telecom Services Company for the Year 2011" from CMAI.

Recently M/s Acetel Technologies and its Associate Company, M/s Cantiers Systems Inc. (Manila, Philippines), have together launched Industry 4.0 aligned Smart Manufacturing Solutions (SMS), for the Country's manufacturing sectors, so as to result in improvement in productivity, performance and prosperity, along with the capacity building initiatives.

PROGRAM DIRECTOR

Prof. M. Moni, Program Director, is Professor Emeritus (Informatics & e-Governance) & Chairman Centre for Industry 4.0 Technology Studies and Applications (CITSA), of Shobhit University, Meerut.



Prof. M. Moni is the Former Director General of National Informatics Centre, which is a premier Institution of Ministry of Electronics & Information Technology, Government of India, in the areas of e-Governance and Informatics development. A Well Known Senior Technocrat in the field of Informatics and e-Governance in the Country, having more than 40 years of experience, and his research publications / reports / lectures/ Addresses (of about 250) have generated academic and research interests in the areas of regional development, agricultural development and informatics development. Played a significant role in taking e-Governance in India and strived hard, thought strategically for long-term solutions, fought ground realities and challenges faced the country, yet devised ways to succeed.

Prof. Moni is the Recipient of Seva Ratna Award 2004 (The Centenarian Trust, Chennai) and Bhoogol Bhushan Award 2006 (The Deccan Geographical Society India, Pune) for ICT for Agricultural development (ICT4Ag) in India, and also nominated to the Technology Museum Award, USA 2004 and 2005 for visualising and operationalising the AGMARKNET Project in India." He also chaired the sub-committee on "Digital Technology in Agriculture" of the Doubling Farmers' Income by 2022" (DFI-2022) of the Government of India.

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To know more about Payment of Fee details, please visit : www.shobhituniversity.ac.in

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