

NIRMA UNIVERSITY
Institute of Management
Master of Business Administration (Full Time) Programme/
Integrated Bachelor of Business Administration-Master of Business
Administration Programme/
Master of Business Administration (Family Business &
Entrepreneurship) Programme

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Course Code	MFT5SEIM14 MBM5SEIM14 MFB5SEIM03
Course Title	Technology Enabled Operations Management

Course Learning Outcomes (CLO):

At the end of the course, students will be able to:

1. Identify different types of technologies used in managing operations, both in manufacturing and services
2. Distinguish between various technologies used in operations for organizational productivity
3. Illustrate appropriate use of technology used in operations with other functions of management.
4. Assess strategic aspects of these technologies

Syllabus

Teaching Hours

<p>Unit I: ICT Tools for Operational Efficiency</p> <ul style="list-style-type: none"> • Evolution of Technology • Human-Machine Interface • Applications of IOT and other Industry 4.0 Technologies in Operations • ICT as a Factor of Production • ICT Systems for Designing, Monitoring & Control – CAD, CNC, PLC, SCADA, Dashboards, Telematics, Biometrics & PKI, Telemetry • ICT tools for Business Process Management (BPM) • Quality Control & Quality Assurance • Project Management through ICT 	15
<p>Unit II: Contemporary Applications of ICT in Operations</p> <ul style="list-style-type: none"> • Application of Information Technology in Assets Tracking & Identification • ICT Tools for Operations: Barcoding, RFID, GPS, GPRS, Satellite based Tracking • Catalytic role of ICT for R&D and New Product Development • Artificial Intelligence (Robotics, Virtual Reality, Neural Networks) & Operations • Enterprise Applications for Operations Management • Technology Implementation and Ethical issues. 	15

Suggested Readings:

1. Baltzan, P., Business Driven Technology. McGraw-Hill Education, New Delhi
2. Applegate, L. M., Austin, R.D., & Soule, D. L., Corporate Information Strategy and Management. McGraw-Hill Publishing Company Ltd., New Delhi
3. Joshi, G. Information Technology for Retail, Oxford University Press, New Delhi

w.e.f. Academic Year 2019-20 and onwards