

Course Code :
Course Title : **Technology Based Business Transformation**
No of Credits : **2**
Contact Hours : **20 hrs**
Course Faculty:

Course Description:

Information Technology (IT) is fast changing the world around us. This course will provide the students understanding of IT-enabled changes in the business environment, and how insightful executives leverage IT to create value and win competitive battles. The course focuses on the industry impacts of technological innovation, competition and business models in the high-tech industry. It provides in-depth insights of latest technologies & their changing business trends. With the help of case studies & news articles students can explore competitive dynamics of industries that consume significant technology with emphasis on how technology has disrupted industries. The course covers various application program interfaces like smart devices, cloud computing etc.

Course Codes	CO Statements	Cognition Levels	Remarks
<i>After the completion of course, students should be able to</i>			
0211300357.1	Illustrate technical and business issues associated with market and industry based digital disruptions.	L3-Applying	
0211300357.2	Apply critical thinking and reasoning to examine industry and organization related context.	L3-Applying	
0211300357..3	Demonstrate recent technologies, innovation and job opportunities in this sector.	L3-Applying	

Mapping COs with POs

Scale 1- low alignment, 2- Moderate alignment, 3 – high alignment, - – No alignment

COs / POs	PO 1	PO 2	PO 3	PO 4	PO 5
0211300357.1	2	2	1	-	-
0211300357.2	2	3	1	-	1
0211300357..3	2	2	1	-	1
CO	2	2.3	1	-	1
CO EQ	2	2	1	-	

Contents:

- IOT Concepts & Architecture
- Business Models and Opportunities for IOT
- Artificial Intelligence
- Big Data & Real time Analytics
- Machine Learning
- Deep Learning
- Augmented Reality
- Virtual Reality
- Block Chain
- Emerging & Advanced Technologies
- API based Integration.
- Smart Devices
- Digitizing Products for Sustainability's Sake
- Cloud Technologies (AWS)
- Robotic Process Automation (RPA)
- Security & Risk

SESSION-WISE COURSE OUTLINE:

Session		Topics/Subtopics	Reading Reference	Topics mapped with COs	Cognition Level
Session 1	Topic	Latest Technologies – Changing Business Trends	http://fortune.com/2017/12/26/4-technology-trends-2018/	0211300357.1, 0211300357.3	L3-Applying
Session 2,3	Topic Sub Topics	<ul style="list-style-type: none">• IOT Concepts• IOT Architecture• Internet of Things• Business Models and Opportunities for IOT	http://fortune.com/2017/12/26/4-technology-trends-2018/	0211300357.1, 0211300357.3	L3-Applying

Session 4,5	Topics	<ul style="list-style-type: none"> Artificial Intelligence The next wave of artificial intelligence Machine Learning 	0211300357.1, 0211300357.3	0211300357.3	L3-Applying
Session 6,7	Topic Sub Topics	<ul style="list-style-type: none"> Deep Learning Augmented Reality Virtual Reality 	https://hubworks.com/13-technologies-will-change-small-business.html	0211300357.1, 0211300357.3	L3-Applying
Session 8,9	Topics	<ul style="list-style-type: none"> Block Chain Emerging & Advanced Technologies 	Case study: A Case Study for Blockchain in Manufacturing: “FabRec”: A Prototype for Peer-to-Peer Network of Manufacturing Node https://arxiv.org/ftp/arxiv/papers/1804/1804.01083.pdf	0211300357.1, 0211300357.3	L3-Applying
Session 10	Topics	<ul style="list-style-type: none"> Augmented Reality Virtual Reality 	Case Study: 7 Inspiring Case Studies on VR and AR https://medium.com/bestfolios/7-inspiring-case-studies-on-vr-and-ar-7235c562844b	0211300357.1, 0211300357.3	L3-Applying
Session 11,12	Topics	<ul style="list-style-type: none"> Emerging & Advanced Technologies Application program interfaces Smart Devices 	Case study: “Smart Home with Full Automation” Available at: http://www.ecsilc.com/wp-content/uploads/2015/08/Smart-	0211300357.2, 0211300357.3	L3-Applying

			Home-Case-Study.pdf		
Session 13,14		<ul style="list-style-type: none"> Digitizing Products for Sustainability's Sake Innovation. Cloud Computing. Security & Risk RPA	Case study: https://blogs.cisco.com/smallbusiness/the-top-5-security-risks-of-cloud-computing	0211300357.2, 0211300357.3	L3-Applying
Session 15,16		Internal Evaluation II			

Evaluation:	Marks
Internal	20%
External	30%
Total	50%

Scope of Internal Assessment:

1. Class Assignment
2. Class Test
3. Case Study Analysis
4. Class Participation & Attendance

Reference Books:

1. Internet of Things – Architecture and design principles – Raj Kamal – Mc Graw Hill.
2. [The Digital Transformation Playbook – Rethink Your Business for the Digital Age \(Columbia Business School Publishing\)](#)- David Rogers-26 April 2016
3. Digital Transformation, Lindsay Herbert- Bloomsbury Publication,2018.
4. Demystifying Digital Transformation: A Practitioner's Companion- [Nishith Sharan](#)- 2018.

E-Books / Online Materials

1. <https://www.forbes.com/sites/jaysondemers/2017/12/30/7-technology-trends-that-will-dominate-2018/#702d35c857d7>
2. <http://fortune.com/2017/12/26/4-technology-trends-2018/>
3. <https://www.inc.com/yoram-solomon/3-hottest-technologies-that-will-change-your-busin.html>
4. <https://hubworks.com/13-technologies-will-change-small-business.html>
5. Smart city - https://pages.questexweb.com/rs/294-MQF-056/images/Build_a_Smart_City_FINAL.pdf
6. Artificial intelligence - <https://courses.csail.mit.edu/6.034f/ai3/rest.pdf>
7. Artificial intelligence - http://gunkelweb.com/coms493/texts/AI_Dummies.pdf
8. Bitcoin and cryptocurrency technologies - [https://lopp.net/pdf/princeton bitcoin book.pdf](https://lopp.net/pdf/princeton_bitcoin_book.pdf).

9.IOT

[https://support.ptc.com/WCMS/files/160474/en/PTC eBook Impact of the IoT on Manufacturers.pdf](https://support.ptc.com/WCMS/files/160474/en/PTC_eBook_Impact_of_the_IoT_on_Manufacturers.pdf)