Knowledge Management in IT and ITES

Course Objectives

The core objective of the course is to prepare students to become familiar with the current theories, practices, tools and techniques in knowledge management (KM), and to assist students in pursuing a career in the information technology or IT enabled sectors.

Syllabus

Overview of Knowledge Management (KM), Managing organizational knowledge, learning and intellectual capital, the knowledge management core process, Knowledge Management Tools, Application of Knowledge Management tools in IT & ITES sectors.

Expected Outcomes

Upon completion of this course, the students will be able to:

1. Define KM, learning organizations, intellectual capital and related terminologies and understand the role of knowledge management in organizations.

2. Identify and select tools and techniques of KM for the stages of creation, acquisition, transfer and management of knowledge.

3. Evaluate the impact of technology including telecommunications, networks, and Internet/intranet role in managing knowledge.

4. Identify KM in specific environments: managerial and decision making communities.

5. Demonstrate an understanding of the importance of intellectual capital to benefit the competitive advantage in organizations.

References

1. Kai Mertins, Peter Heisig and Jens Vorbeck, Knowledge Management – Concepts and Best Practices, Springer, 2003

2. Davenport, Thomas and Laurence Prusak. Working Knowledge: How Corporations Manage What They Know. Boston, Harvard Business School Press. 2000.

3. Kimiz Dalkir, Knowledge Management in Theory and Practice, MIT Press, 2011

4. Edna Pasher and Tuvya Ronen, Knowledge Management in Theory and Practice, John Wiley & Sons, 2011

5. Dr. Santwana Chaudhuri, Knowledge Management in Indian IT Industries2011 3rd International Conference on Information and Financial Engineering IPEDR vol.12, IACSIT Press, Singapore, http://www.ipedr.com/vol12/45-C115.pdf

6. Donald Hislop, Knowledge Management in Organizations: A Critical Introduction, Oxford University Press, 2013

7. Elias.M. Award and Hassan M. Ghaziri, Knowledge Management, Pearson Education, 2003

8. Guus Schreiber, Hans Akkermans, Anjo Anjewierden, Robert de Hoog, Nigel Shadbolt, Walter Van de Velde and Bob Wielinga, Knowledge Engineering and Management, Universities Press, 2001.

9. Carla O'Dell and Jack Grayson, If Only We Knew What We Know: The Transfer of Internal Knowledge and Best Practice, Free Press, 2012

10. Philip Rosner, Knowledge isn't POWER ... Until It Is Applied: The Three Keys to Developing Future Leaders In Your Company Kindle Edition, HRD Publishing, 2016

11. C.W. Holsapple, "Handbooks on Knowledge Management", International Handbooks on Information Systems, Vol 1 and 2, Springer,2003

Units Topics

1 Overview of Knowledge Management

Human cognition from the technology manager's perspective; Knowledge creation at the level of the individual, group and organization; The nature of technical problem solving, Formulating knowledge, Explicit and codified knowledge

Tacit, implicit and sticky knowledge; Technological versus pre-technological knowledge; Experts and expertise.

2 Managing organizational knowledge, learning and intellectual capital

Developing metrics for knowledge, learning and intellectual capital; Knowledge quality; Organizational knowledge creation theories and their application; Experimentation strategies for knowledge creation; Knowledge diversity and knowledge integration; Multi-dimensional organizational learning; Knowledge transfer; Value-of-ownership models

First Internal Examination

3 The knowledge management core process

The Knowledge Management Design Fields; Business Process Oriented Knowledge Management – The GPO-WM Implementation Mode, KM Strategy, The GPO-WM Analysis of Business Process, KM Solutions, KM-Implementation Phase

The Fraunhofer Knowledge Management Audit (FKM Audit), Audit approaches for the evaluation of Knowledge Management – The Knowledge Audit (According to Liebowitz), Knowledge Management Assessment Tool (KMAT), Knowledge Management Diagnostic (KMD), Knowledge Aduit(According to Pfeifer), Knowledge Management Maturity Model (KMMM).

4 Knowledge Management Tools

Diagnostic technologies and their value Structuring Knowledge and Information – Definition of knowledge structure, Search strategies and knowledge structures, methods of structuring knowledge and Information

Data management, information technology and organizational productivity; Web-centric knowledge management Global, joint, simultaneous problem solving in a value network; Content Analysis

Second Internal Examination

5 Applications of knowledge management in IT & ITES

Application - Information Technology – Intranets; Best Practices; Systems Analysis Techniques; Systems Lifecycle; Design & Evaluation; Knowledge management in manufacturing and the service sector;Knowledge Management: Retaining Knowledge in IT/ITES Companies – Dissatisfied customers – breaches in SLAs; Productivity challenges; Increased competition; Knowledge scarcity; KM Solution - Nephila

Final Examination