

Indian Institute of Management Indore

INTEGRATED PROGRAMME IN MANAGEMENT (IPM) TERM: VIII

TITLE OF THE COURSE: Mobile Data Management

CREDITS: 02

COURSE DESCRIPTION

With the lower-cost and higher-speed mobile-data networks, lower-cost smart phones and several enterprise mobile applications, mobile data management and computing become so important in current business environment to increase the productivity. Mobile data management is to learn how to manage data in an environment which is constrained by the wireless communication, limited bandwidth, small devices and restricted energy and storage, etc. In this intermittent environment, though distributed, but different due to user mobility and battery powered devices managing the data. The applications include sales force automation, mobile e-commerce, day-to-day business applications and Streamlining of business processes, etc. This is a 2 credit course which will teach students the fundamental and theoretical foundation of mobile computing systems for managing data. The specific topics include: mobile computing models and architectures, mobile distributed algorithms, location data management, broadcast data management and indexing, replication and caching, stream data management and mobile cloud computing.

COURSE OBJECTIVES

- 1. To learn different mobile computing architectures and behavior of some distributed algorithms in a mobile computing environment.
- 2. To study various location search and management schemes for finding the user location.
- 3. To introduce various data broadcast data scheduling techniques. In addition, learning broadcast indexing, mobile transaction, caching and replication techniques.
- 4. It is also to learn some advance topics such as stream data management and mobile cloud computing.