

**Approval: OTA in 2<sup>nd</sup> Convocation Meeting**

Course Name: Kernel Methods for Pattern Analysis

Credits -: 4

**Course Outline:**

The course kernel methods for pattern analysis (KMPA) deals with the advanced topics in the area of pattern analysis. Pattern analysis mainly involves pattern classification, regression and pattern clustering. The course CS669: Pattern Recognition introduces various techniques in pattern classification and clustering. The KMPA course is a continuation of pattern recognition course and introduces advanced pattern classification, clustering and regression techniques. In this course we mainly focus on an advanced concept in pattern analysis called kernel methods. This course aims at expertizing the students in the theory as well as in the practical usage of various pattern analysis techniques.

The course Kernel methods for pattern analysis is currently offered through NKN. This course is taught by Professor C. Chandra Sekhar, Department of Computer Science and Engineering, IIT Madras. This is an approved course in the Department of CSE, IIT Madras offered as CS6011: Kernel Methods for Pattern Analysis.

This course is targeted to II and IV year BTech students who have successfully completed the course CS669: Pattern Recognition and MS & PhD Scholars who have successfully completed the course CS669: Pattern Recognition or have exposure to the pattern analysis techniques.