

## Date & Time

Friday, 6<sup>th</sup> December 2019 @ 3.15 pm

## Venue

al-Farabi Seminar Room,  
Second Floor, INSPEM

## Presenter

Mr. Adnan Khalil

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Dept. of Mathematics, Faculty of Science



## Topic

Application and Current Research Topics of Graph Theory

## Abstract

Graph theory is a branch of mathematics that has much application in other areas of mathematics as well as in other branches of science. It also plays a vital role in our everyday life like a navigation system, aerospace engineering, road mapping and optimization of the longest journey (for example chinees postman problems). Graph theory also indulges the calculus operation like matrices, one can represent the graph either directed or undirected into a matrix representation that is very useful in the data structure.

In this presentation, I'll discuss the application of graph theory in real-world problems and various branches of science such as computer science, operation research, chemistry, physics, engineering, etc. I'll also discuss the research topics such as partition dimensions, Topological Indices, Labeling, Ramsey Number, etc. that are very important in graph theory nowadays.