

# Alfaisal University Master of Engineering & System Management



## Professional Occupations

- Operation Analyst or Manager
- Inventory Analyst or Manager
- Logistic Analyst or Manager
- Supply chain Analyst or Manager
- Quality Analyst or Manager
- Operation Research Analyst
- Process reengineering Analyst

**Smart, desirable, feasible,  
marketable innovation to make  
the world better is what we do.  
IT'S WHAT YOU'LL DO.**

## Program Overview

The mission of the Master in Engineering & Systems Management at Alfaisal University is to transform early to mid-career technical professionals into leaders in the analysis, modeling, improvement and design of complex data-intensive systems including those found in the manufacturing and supply chains, software and service industries with special emphasis on advanced career opportunities in the Kingdom of Saudi Arabia.

The Ministry of Education (MOE) approved the M. Sc. in Engineering & Systems Management which can be completed in two years and consists of both thesis and non-thesis tracks. Both tracks have six core courses while they respectively have an additional two and six elective courses. Moreover, students choosing the non-thesis track must complete a research project.

The elective courses span the themes "Decision Analysis and Data Analytics", "Manufacturing & Supply Chain Management" as well as "Development of Cyber-Physical Systems, and it is moreover possible for students to choose some elective courses in any college at Alfaisal University subject to the approval of the program director.

This program is not an MBA; it is a technical master's degree focused on engineering, data science and computation. "Systems thinking" is an important part of the degree, whether applied to the improvement of existing systems and operations or the creation of new products and services. Personal engineering leadership development is a mandatory part of the program.

## Competitive Edge

The emerging global market economy requires skilled engineers who integrates technical and business skills to solve problems in a complex and competitive world of technology. Acquiring such skills gives engineers a competitive advantage.

Organizations seek technical liaison to management who can understand the complexity of technological and business-related challenges. The Engineering management programs meets the demand for such professionals and are distinctive among other graduate engineering programs in combining management and engineering.

The MEM program at Alfaisal University was designed by a collaboration with the Center for Complex Engineering Systems (CCES) KACST and MIT and approved by Ministry of Education. We continue to recruit outstanding faculty members and the majority of our staff are western graduates.

# Curriculum

## Non-Thesis Option (suggested Study Plan)

1st Year	Fall	Course-Title	CRHs
		Statistics and Data Analytics Systems Architecture and Engineering Project and Program Management of Complex Systems <b>Total</b>	3 3 3 9
Spring	Advancement Engineering Economics and Cost Analysis Operations Engineering and Management Leadership Development for Engineering and Systems Managers <b>Total</b>	3 3 3 9	

2nd Year	Fall	Course-Title	CRHs
		Track / Elective Track / Elective Track / Elective Track / Elective <b>Total</b>	3 3 3 3 12
Winter	Research Project Track / Elective Track / Elective <b>Total</b>	6 3 3 12	

## Thesis Option (suggested Study Plan)

1st Year	Fall	Course-Title	CRHs
		Statistics and Data Analytics Systems Architecture and Engineering Project and Program Management of Complex Systems <b>Total</b>	3 3 3 9
Winter	Advancement Engineering Economics and Cost Analysis Operations Engineering and Management Leadership Development for Engineering and Systems Managers <b>Total</b>	3 3 3 9	

2nd Year	Fall	Course-Title	CRHs
		Elective Elective Research Thesis (A) <b>Total</b>	3 3 0 6
Winter	Course-Title Research Thesis (B) <b>Total</b>	9 9 9	

# College Collaboration



## Admissions Requirements

For admission criteria and how to apply, visit  
<http://admissions.alfaisal.edu>

For more information about Alfaisal's  
Master of Engineering & System Management visit  
[http://coe.alfaisal.edu/departments/gp\\_mem](http://coe.alfaisal.edu/departments/gp_mem)

## Alumni Network

Our Alumni network spans some of the most influential national and international companies and institutions

- PWC Saudi Arabia
- SAP Saudi Arabia
- Aramex Saudi Arabia
- SMSA Express
- Saudi Mechanical Industry
- The SAUDI Fund for Development
- ERNST & Young Saudi Arabia
- McKinsey Saudi Arabia

## Alfaisal University

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