



IICSE University
...a liberal arts education

MS in System Engineering and Management Graduate Program

Master of Science in System Engineering and Management (MS)



MS | **SYSTEM ENGINEERING
AND MANAGEMENT**

Systems Engineering and Management incorporates the leadership skills and concepts from engineering, business, and governance to develop and manage real solutions to complicated, evolving problems. The individuals that work in this field are systems thinkers who view problems and solutions through a holistic lens, striving to create a systems solution that incorporates evolution and adaptation as a key attribute, rather than struggling simply to interface individually engineered components. Each phase of the solution life cycle is approached with the ultimate goal of balancing the risks, needs, and desires of the stakeholder community and producing a successful, sustainable system.

This degree program provides a global approach; a systems thinking perspective that incorporates management, technology, and social sciences; and ways to lead across organizational and cultural boundaries to discourse rapidly accelerating complexity and change in today's global markets. This is also a suitable program to help prospective technical entrepreneurs understand the enterprise creation process.

As a student, you will learn how to lead technology projects as well as manage teams, engineering functions, and companies. In addition, you will gain an understanding of the economic decision making processes.

www.iicseuniversity.org



The Program Structure:

Course Code	MS: First Semester Courses	Credit
SYSM 801	Principles and Practices of Management	2
SYSM 802	Statistics for Engineers	3
SYSM 803	System Analysis and Design	3
SYSM 804	System Development Techniques	2
SYSM 805	Production Management	2
SYSM 806	Information Security	3
TOTAL CREDITS		15
Course Code	MS: Second Semester Courses	Credit
SYSM 811	Business Process Re-Engineering	2
SYSM 812	Data Communication and Networking	3
SYSM 813	Organization Theory	3
SYSM 814	Managerial Economics for Engineers	2
SYSM 815	Design and Analysis Algorithms	2
SYSM 816	Organizational Change and Intervention Strategies	3
TOTAL CREDITS		15
Course Code	MS: Third Semester Courses	Credit
SYSM 821	Introduction to Management	2
SYSM 822	Network Security	3
SYSM 823	Safety Management	3
SYSM 824	Software Engineering	2
SYSM 825	Manufacturing Strategy	2
SYSM 826	System Safety Analysis	3
TOTAL CREDITS		15
Course Code	MS: Fourth Semester Courses	Credit
SYSM 831	Industrial Marketing	2
SYSM 832	Financial Management for Engineers	3
SYSM 833	Lean Operation	3
SYSM 834	Total Quality Management	2
SYSM 835	Computer Systems Architecture	2
SYSM 836	Master Thesis	3
TOTAL CREDITS		15

The thesis

A thesis on a particular topic of your choice (with a Supervisor's approval) will be completed by each student in the last semester. There is considerable scope in the choice of subject areas by the student and the research method employed. Each student is allocated a supervisor who guides them through the thesis. The thesis aims to assimilate the theoretical and practical elements of the academic program of study.

Duration of program: A Semester runs for a period of three months. Our "Master's Degree" programs are completed within the period of four semesters (one year). We allow extension in the period of study, in case your courses could not be completed within the stipulated time frame. No additional fee, no extra charge for extension in the period of study.

How to apply

Prospective student must complete the Admission Form and pay the processing fee of \$45 USD or its equivalent. The processing fee is refundable if admission is denied.

