

MANAGEMENT SCIENCE FACT SHEET

Degree received: Bachelors of Science with a Major in Management Science
Home school: SMU School of Engineering
Home department: Engineering Management, Information, and Systems
Department web site: <http://enr.smu.edu/emis/>

Degree Requirements

Hours required: 122 term credit hours (TCH)
Major courses: EMIS 1360 Introduction to Management Science
EMIS 2360 Engineering Economics
EMIS 3308 Engineering Management
EMIS 3309 Information Engineering and Global Perspectives
EMIS 3360 Operations Research
EMIS 4340 Probability and Statistics
EMIS 4395 Senior Design
EMIS 5362 Production and Operations Management
CSE 1/2341 Principles Of Computer Science I, II
CSE 3365 Introduction to Scientific Computing (Math 3315)
CSE 4360 Technical Entrepreneurship
ENCE 3302 Technical Communications
Electives: 21 term credit hours
Typical 2nd major: Mathematics, economics, computer science, business
Mgt Sci Minor: 18 term credit hours

Course Catalog Description

Management Science is the discipline of applying advanced analytical methods to help make better decisions. Management Science deals with the development of mathematically-based models for planning, managing operating, and decision-making. In our curriculum, these methods are also applied to the design and management of efficient production systems.

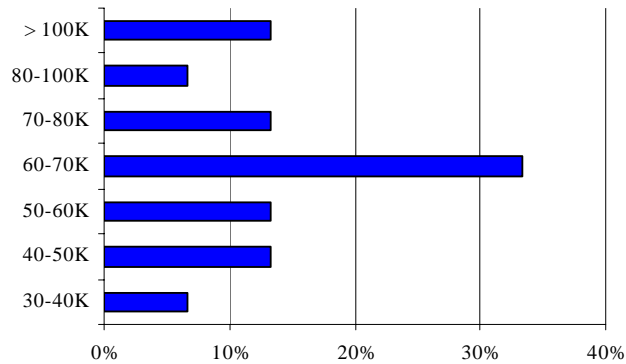
A management scientist at a major airline would be concerned with building models to decide the best scheduling of flights, routing of planes, assignment of pilots and crews to specific flights, and flight gate assignments, as well as deciding the best number of planes to own and operate, which cities to fly to, which cities to use as major hubs, how to lay out an airport terminal, which overbooking policy should be used, and related issues. Usable or optimal decisions for such issues can be uncovered through analysis using computer-based mathematical models. The management scientist uses the data collected and managed by the MIS department in building his or her models.

Because of its generality, Management Science has broad applications in all engineering disciplines and in the fields of computer science, economics, finance, marketing, medicine, logistics, production, information engineering, and statistics. Management Science methods are used extensively in both the public sector and industry and the Management Science program prepares the technically-oriented student to excel in today's competitive environment.

Job Placement

Salary range: See 2004 EMIS
Graduates Salary Survey
(undergraduate and graduate):

Typical industry position: analyst



Recent BSMS graduates and
companies/schools:

Lianna Vetter	2004	Bain & Company	Consulting
Benjamin Luong	2004	Boeing & grad school	Aerospace/defense
Carolyn Trimble	2004	Broadlane	Healthcare systems
Ashley VanMeter	2004	Broadlane & grad school	Healthcare systems
Trevor Weichman	2006	Buxton	Research & analytics
Chris Edison	2005	Computer Sciences Corp	Consulting, systems integration
Chris Davis	2004	Deloitte and Touche	Consulting
Katy Moffett	2004	Deloitte and Touche	Consulting
Steven Schindler	2003	Duke University	Law School
Kristyn Starr	2005	Graduate school (SMU)	Operations Research
Laura Bailey	2006	JP Morgan Chase	Banking and finance
Robert Needham	2001	Lockheed Martin	Aerospace/defense
Chris Noon	2006	Lockheed Martin	Aerospace/defense
Heidi Huber	2001	Lockheed Martin MFC	Defense manufacturing
Claudia Johnson	2004	Lockheed Martin MFC	Military contractor
Julia Marrett	2005	Mercer Consulting	HR consulting
Allison Bass	2006	Perot Systems	IT and consulting
Rachel Potter	2006	Raytheon & grad school	Engineering
Jessica Trimmer	2004	Stryker	Medical products and services
Elaine Cochran	2005	Sunguard Consulting	Healthcare systems
Laura Tasch	2006	Texas Lawyers for Children	Legal support for abused children
Kim Greene	2005	Walt Disney Co.	Entertainment

Graduate School

Accelerated masters? Yes, at SMU Engineering with sufficient grade-point average
Example schools: Duke, U. California (Berkeley), U. Chicago, Harvard, U. Michigan
Northwestern, U. Texas at Austin, SMU
Prepares for: Masters in Operations Research, Systems Engineering, Information
Engineering, Industrial Engineering, Engineering Management; Law
School; M.B.A.; medical school (with Pre-med option)

More Information

Program web site: <http://enr.smu.edu/emis/Programs/BSMS/bsms.html>
Professional society: <http://www.informs.org/>
EMIS department: Science Information Center 356, phone: 214-768-1100
EMIS chair: Prof. Dick Barr, 214-768-1772, SIC 356
Mgt Science advisor: Prof. Mary Alys Lillard, 214-768-1401, SIC 359