

## **A Major in Computer and Information Science with a Concentration in OPERATIONS MANAGEMENT & BUSINESS STATISTICS**

Business decision-makers must work in an environment of uncertainty. Recent research has provided theories and techniques that help to describe decision problems and organize information so that decision-makers can define their goals more clearly. The computer scientist with an Operations Management and Business Statistics concentration uses his/her computer expertise in combination with mathematical and statistical techniques such as forecasting, linear programming, inventory analysis, and system simulation to formulate and solve business problems.

*CIS Core Program:* All CIS majors must complete the CIS core program. See the CSU Undergraduate Bulletin for details.

### *Recommended Electives in Computer Science (16 hours or more):*

CIS 408	(4)	Internet Programming	(CIS 265)
CIS 430	(4)	Database Concepts	(CIS 265)
CIS 433	(4)	Systems Analysis	(CIS 430)
CIS 434	(3)	Software Engineering	(CIS 433)
CIS 454	(4)	Data Communications	(CIS 345)
CIS 424	(4)	Comparative Programming Languages	(CIS 265)
CIS 465	(3)	Multimedia	(CIS 265)
CIS 490	(3)	Foundation Of Computing	(CIS 335,MTH 182,MTH 220)

### *Recommended Courses in OMS:*

Level 1: 6 credit hours:

OMS 201	(3)	Business Statistics I	(MTH 156)
OMS 311	(3)	Introduction to Operations Management	(OMS 201)

These three courses can be waived based upon proof of prior equivalent course work.

Level 2: At least 10 credit hours from OMS upper-division courses (not including OMS 311)

OMS 312	(4)	Operations Research	(OMS 311)
OMS 412	(4)	Supply Chain Management	(OMS 311)
OMS 413	(4)	Production Planning and Control	(OMS 311 or Permission of instructor)
OMS 415	(4)	Case Studies In Operations Management	(OMS 311 or Permission of instructor)
OMS 417	(4)	Principles of Lean Operations	(OMS 311 or Permission of instructor)
OMS 419	(4)	Operations Strategy	(OMS 311 or Permission of instructor)
OMS 421	(4)	Service Operations Management	(OMS 311 or

			Permission of instructor)
OMS 422	(4)	Project Management for Business and Technology	(OMS 311)
OMS 425	(3)	International Operations Management	(OMS 311)
OMS 431	(4)	Sampling And Experimental design	(OMS 202)
OMS 433	(4)	Data Analysis	(OMS 202)
OMS 445	(4)	Quality Control And Management	(OMS 311)
OMS 448	(4)	Queuing And Simulation	(OMS 311)

Note: College of Business courses and 300+ level Economics courses in excess of 32 hours will not count in the 128 hours needed for graduation; OMS 201 and 202 and CIS courses are not included in the 32 hours.