

# SUBJECT CLASSIFICATION SCHEME FOR THE OR/MS INDEX

<b>Accounting</b>	<b>Facilities/equipment planning</b>	Tax policy	<i>Ordering</i>
Auditing	Capacity expansion	<b>Health care</b>	<i>Pricing</i>
Operating budgets	Continuous	Ambulance service	<i>Replacement</i>
<b>Analysis of algorithms</b>	Design	Blood bank	<i>Review/lead times</i>
Computational complexity	Discrete	Diagnosis	Production smoothing
Data structures	Layout	Epidemiology	<i>Lot-sizing</i>
Suboptimal algorithms	Location	Hospitals	<i>Smoothing</i>
<b>Communications</b>	<i>Continuous</i>	Pharmaceutical	Sensitivity analysis
Information Theory	<i>Discrete</i>	Treatment	Simulation
<b>Computers</b>	<i>Stochastic</i>	<b>Industries</b>	Stochastic
Databases	Maintenance/replacement	Agriculture	Stochastic models
File systems	Stochastic	<i>food</i>	Uncertainty
<i>Operation</i>	<b>Finance</b>	Business services	<i>Deterministic</i>
Time sharing	Asset pricing	Chemical	<i>Stochastic</i>
<b>Computers/computer science</b>	Assets pricing	Communications	<b>Judicial/legal</b>
Artificial intelligence	Capital assets	<i>journalism</i>	Crime
Databases	Capital budgeting	<i>Electronic</i>	Crime prevention
Microcomputers	Capital budgets	Construction	Law
Software	Capital rationing	Electric	Penal system
<i>Operation</i>	Corporate finance	<i>Electronic</i>	<b>Labor</b>
<b>Cost analysis</b>	Depreciation	Hotel/motel	<b>Libraries</b>
<b>Cost-benefit analysis</b>	Investment	Leisure	<b>Manufacturing</b>
<b>Costing</b>	Investment criteria	Lumber/wood	Automated systems
Estimation	Management	Machinery	<i>productivity</i>
<b>Decision analysis</b>	Portfolio	Mining	Strategy
Applications	Securities	<i>metals</i>	<b>Marketing</b>
Approximations	Taxation	Paper	Advertising and media
Criteria	Working capital	Petroleum/natural gas	Advertising/promotion
Inference	<b>Financial institutions</b>	Pharmaceutical	Buyer behavior
Multiple criteria	Banks	Printing	Channels of distribution
Risk	Brokerage/trading	<i>publications</i>	Choice models
Sensitivity	Insurance	Real estate	Competition
Sequential	Investment	<i>sports</i>	Competitive strategy
Systems	Markets	Retail	Distribution
Theory	<b>Forecasting</b>	<i>apparel</i>	Estimation/statistical
<b>Dynamic programming</b>	Applications	Transportation	techniques
Applications	ARIMA processes	Transportation equipment	Industrial marketing
Bayesian	Delphi technique	<i>Shipping</i>	International marketing
Deterministic	Regression	Wholesale	Marketing mix
<i>Discrete time</i>	Time series	<b>Information systems</b>	Measurement
Markov	<b>Games/group decisions</b>	Analysis and design	Mix
<i>Infinite state</i>	Bargaining	Decision support systems	New products
<i>Finite state</i>	Bidding/auctions	Expert systems	Packaging
Semi Markov	Cooperative	Management	Pricing
<b>Dynamic programming/ optimal control</b>	Differential	<b>Inventory/production</b>	Product policy
Applications	Gambling	Applications	Promotion
Deterministic	Non-atomic	Approximations	Retailing and wholesaling
Finite state	Noncooperative	Approximations/heuristics	Sales force
Infinite state	Stochastic	Deterministic	Scaling methods
Markov	Teams	Deterministic models	Segmentation
<i>Finite state</i>	Voting	EOQ	<b>Mathematics</b>
<i>Infinite state</i>	<i>committees</i>	Linear decision rules	Combinatorics
Models	<b>Government</b>	Maintenance/replacement	Convexity
Semi Markov	Agencies	<i>Pricing</i>	Fixed points
<b>Economics</b>	Defense	Measures of effectiveness	Functions
Econometrics	Elections	Multi-item/echelon/stage	Matrices
Input-output analysis	Energy policies	Operating characteristics	Piecewise linear
<b>Education systems</b>	Foreign policy	Parametric analysis	Sets
Operations	Politics	<i>Aging items</i>	<i>Polyhedra</i>
Planning	Programs	<i>Decaying items</i>	Systems solution
<b>Engineering</b>	Regulations	Planning horizons	<i>Equations</i>
Applications	Services	Policies	<i>Inequalities</i>
<b>Environment</b>	<i>Fire</i>	<i>Advertising</i>	<b>Military</b>
Ecology	<i>Police</i>	<i>Capacity</i>	Antisubmarine warfare
Pollution	<i>Postal</i>	<i>Disposal</i>	Cost effectiveness
Weather	<i>Waste disposal</i>	<i>Disposal/issuing</i>	Defense systems
	<i>Water</i>	<i>Lead time</i>	Force effectiveness
			Lanchester theory
			Logistics

Missile systems	Deterministic	<i>Large scale systems</i>	<b>Research and development</b>
Personnel	Flexible manufacturing/line	<i>Multiple criteria</i>	Innovation
Requirements Evaluation	balancing	<i>Nondifferentiable</i>	Project selection
Search/surveillance	Hierarchical planning	<i>Parametric</i>	<b>Search and surveillance</b>
Stochastic duels	Learning	<i>Theory</i>	<b>Simulation</b>
Tactics/strategy	Line balancing	Multiple criteria	Applications
Targeting	Lot sizing (closed shop)	Nondifferentiable	Design of experiments
Test/Evaluation	Materials handling	Nonlinear	Efficiency
Tracking	MRP	<i>Algorithms</i>	Languages
War games	Multiple machine	<i>Applications</i>	Random variable generation
Warfare models	Open shop	<i>Convex</i>	Statistical analysis
<b>Natural resources</b>	<i>Flow shop</i>	<i>Quadratic</i>	System dynamics
Conservation	<i>Job shop</i>	<i>Theory</i>	Systems dynamics
Energy	deterministic	Duality	<b>Space Program</b>
Land development	stochastic	Optimality conditions	<b>Statistics</b>
Water resources	<i>Single stage</i>	Parametric	Analysis of variance
<b>Networks/graphs</b>	Planning	<i>Unconstrained</i>	Bayesian
Applications	Product design	Quadratic	Censoring
Distance algorithms	Sequencing	Stochastic	Cluster analysis
Flow algorithms	<i>Deterministic</i>	Stochastic-chance	Correlation
Generalized networks	multiple machine	constrained	Data
Heuristics	single machine	<b>Project management</b>	Data analysis
Matchings	<i>Stochastic</i>	CPM	Design of experiments
Multicommodity	Single machine	GERT	Estimation
Stochastic	Stochastic	PERT	Factor analysis
Theory	Work studies-learning	Resource constraints	Nonparametric
Traveling salesman	<b>Professional</b>	VERT	Pattern analysis
Tree algorithms	Addresses	<b>Queues</b>	Regression
<b>Organizational studies</b>	Comments on	Algorithms	Sampling
Behavior	Humor/satire	Applications	Time series
Decision making	Journal policies	Approximations	<b>Technology</b>
Design	Obituaries	Balking and reneging	<b>Transportation</b>
Effectiveness/performance	OR/MS education	Batch/bulk	Air
Goals	OR/MS implementation	Birth/Death	Assignment
Information	OR/MS philosophy	Busy period analysis	Automobile
Leadership	OR/MS policy/standards	Cyclic	Costs
Manpower planning	<b>Programming</b>	Diffusion models	Freight/materials handling
Motivation/incentives	Complementarity	Feedback	Fuel
Personnel	<i>Transformations</i>	Limit theorems	Location
Productivity	Fractional	Markovian	Mass transit
State-owned	Geometric	Multichannel	Materials handling
Strategy	Infinite dimensional	Networks	Mode-route choice
Structures	Integer	Nonstationary	Models
Training	<i>Algorithms</i>	Optimization	<i>Assignment</i>
<b>Philosophy</b>	Benders-Decomposition	Output process	<i>Location</i>
<b>Philosophy of modeling</b>	Branch-and-bound	Priority	<i>Network</i>
<b>Planning</b>	Cutting plane	Simulation	<i>Traffic</i>
Community	Cutting plane/facet	Statistical inference	Network
Corporate	Enumerative	Switching	Personnel
Government	Group	Tandem	Rail
Urban	Heuristic	Transient results	Road
<b>Population</b>	Relaxation	<b>Recreation and sports</b>	Route selection
Family planning	Relaxation/subgradient	<b>Reliability</b>	Safety/injuries
<b>Probability</b>	<i>Applications</i>	Availability	Scheduling
Applications	<i>Benders-decomposition</i>	Coherent structures	<i>Personnel</i>
Clearing processes	<i>Cutting plane-facet</i>	Failure models	<i>Vehicles</i>
Crossing problems	<i>generation</i>	Inspection	Taxis/limousines
Diffusion	<i>Group</i>	Life distributions	Traffic
Distribution comparisons	<i>Heuristic</i>	Maintenance/repairs	Travel
Distributions	<i>Interval</i>	Multistate systems	<i>Mode/route choice</i>
Entropy	<i>Nonlinear</i>	Quality control	Vehicle routing
Markov processes	<i>Relaxation-subgradient</i>	Redundancy/spares	Vehicles
Random walk	<i>Theory</i>	Replacement/renewal	Water
Regenerative processes	Interval	Shock models	<b>Utility/preference</b>
Renewal processes	Large scale systems	System safety	Applications
Stochastic model applications	Linear		Choice functions
<b>Production/scheduling</b>	<i>Algorithms</i>		Estimation
Applications	Ellipsoidal		Multiattribute
Approximations/heuristic	Generalized network		Scaling
Cutting stock	Simplex		Theory
<i>Trim</i>	<i>Applications</i>		Value theory