



Job/Task Analysis for a Facility Manager

April 6, 2011 — November 9, 2011

Professional Testing, Inc.
Orlando, Florida

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JOB/TASK ANALYSIS
FOR A

FACILITY MANAGER

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Conducted: June 7-9, 2011

Facility Manager Job Description

A Facility Manager is a building maintenance specialist and property administrator who conducts building operations and maintenance activities, coordinates facility programs and projects, and supervises building personnel; by inspecting the facility, analyzing building data, forecasting future needs, solving problems, and communicating with others; to ensure the efficient and sustainable operations of the facility and the satisfaction of the facility occupants.

A proposed content outline resulting from this Job/Task Analysis follows.

Facility Manager	
A	Managing Facility O&M Programs
B	Managing People/Personnel
C	Managing Other Internal/External Facility Programs
D	Managing Facility Projects
E	Managing Facility Finances
F	Conducting Strategic Planning Activities
G	Managing Facility Assets
H	Managing Facility Resources

This Job/Task Analysis used input from a broad group of industry practitioners and was facilitated by Professional Testing, Inc. for the National Renewable Energy Laboratory and the U.S. Department of Energy.

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1.0 Introduction

The National Renewable Energy Laboratory secured the services of Professional Testing to help develop a job/task analysis (JTA) for facility managers.

JTA is a procedure for analyzing the tasks performed by individuals in an occupation, as well as the knowledge, skills, and abilities required to perform those tasks. Specifically, a JTA can be defined as “any systematic procedure for collecting and analyzing job-related information to meet a particular purpose” (Raymond 2001). JTA can be used to describe, classify, and evaluate jobs; ensure compliance with legal and quasi-legal requirements; develop training, promote worker mobility, plan workforces, increase efficiency and safety, and appraise performance (Brannick et al. 2007).

JTA is traditionally used by secondary and postsecondary educators, test developers, and business, industry, government, and military trainers to help identify core knowledge areas, critical work functions, and skills that are common across a representative sampling of current practitioners.

This project used the “developing a curriculum” (DACUM) method to conduct a JTA. DACUM is an occupational analysis led by a trained facilitator, where practitioners in a specific occupation come together for a multiday workshop to provide input about the specific tasks, knowledge, and skills needed to perform their job.

This document provides draft results of the analysis and will form the basis for a subsequent “industry validation” phase, where a larger group of industry practitioners will evaluate the list of job-related tasks. This group will ensure that the identified tasks and weighting factors accurately represent the job of a facility manager. This step will also provide an opportunity for industry to identify any missed tasks or any that were included erroneously.

This document should be used as a starting point for understanding the job of a facility manager as currently practiced. It is not meant to function as a “best practices” guide.

2.0 Subject Matter Expert Selection Process

Professional Testing helped to establish the criteria for selecting the DACUM panel of subject matter experts (SMEs). To be eligible for the workshop panel, applicants were required to submit an electronic application and to demonstrate that they were active practitioners in their field. To create a representative panel of practitioners, Professional Testing selected SMEs from a larger applicant pool to ensure:

- Geographic diversity
- Representation of a wide range of experience levels (novice to expert)
- No single organization or organization size dominated the group
- All sectors were represented with no single sector dominating (public versus private)
- Diversity of industry-related credentials, represented by the panelists.

Twelve applicants meeting the above criteria were selected to create the facility manager SME panel.

3.0 Job/Task Analysis Workshop

The facility manager JTA workshop was held in Greenwood Village, Colorado, June 7-9, 2011.

Day 1 consisted of an introduction to the DACUM process. The trained DACUM facilitator explained the JTA process and provided the SME panel with duty and task statement definitions. A duty reflects a large area of work for a specific profession; multiple tasks describe how to perform each duty. The presentation then shifted to a discussion about facility managers, more specifically the “who, how, what, and why” of the profession. The SME panelists compiled this information into a comprehensive list to capture key facility manager job components.

The DACUM Philosophy:

- Practitioners can describe and define their jobs more accurately than anyone else.
- One of the most effective ways to define a job is to describe the tasks practitioners perform.
- All jobs can be effectively and sufficiently described in terms of the tasks successful workers perform.
- All tasks, to be performed correctly, demand certain knowledge, skills, abilities, attributes, and tools.

The next step was to identify duty (or domain) areas. Once the SME panelists reached consensus on the duty areas, they delineated each duty by identifying the required tasks.

On Day 2, the facilitator projected a spreadsheet that contained the identified duty areas and corresponding task statements. The SMEs were asked to list the steps under each task and to identify the knowledge, skills, abilities, and tools needed to complete each task.

On Day 3, work concluded with the SMEs finalizing an overarching job description for facility managers.

4.0 Results

This document presents aspects of a facility manager, as captured by the 12-member panel during the June 7-9, 2011 JTA workshop in Greenwood Village, Colorado. The tables that follow reflect job requirements and are meant to provide a clear understanding and detailed description of the work performed.

5.0 References

Brannick, M. T., Levine, E. L., & Morgeson, F. P. (2007). *Job and work analysis: Methods, research and applications for human resource management*. Thousand Oaks, CA: Sage.

Raymond, M.R. (2001). Job analysis and the specification of content for licensure and certification examinations. *Applied Measurement in Education* 14(4), 369-415.

6.0 Nomenclature

Table 1 provides a list of the acronyms and abbreviations used in this document. In addition to increasing the efficiency of communications, many technical and process acronyms are useful in memory retention and learning. Occupational acronyms are therefore of interest to trainers and curriculum designers.

Table 1: List of Acronyms and Abbreviations

Nomenclature	Definition
AED	Automatic external defibrillator
AHJ	Authority having jurisdiction
ASHRAE	American Society of Heating, Refrigerating, and Air-Conditioning Engineers
BAS	Building automation system
CAFM	Computer assisted facility management
CMMS	Computerized maintenance management system
CPM	Critical path methods
CPR	Cardio pulmonary resuscitation
CSP	Critical spare parts
DACUM	Developing a curriculum
EPP	Environmentally preferred product
ESCO	Energy service company
F	Fahrenheit
FAR	Federal Acquisition Regulation
FFE	Furniture, fixtures, equipment
FMEA	Failure mode effects analysis
GAAP	Generally accepted accounting principles
HAZMAT	Hazardous materials
HR	Human resources
HVAC	Heating, ventilation, and air-conditioning
IT	Institutional technology
JTA	Job/task analysis
KPI	Key performance indicator
MAC	Moves, adds, changes
MMS	Maintenance management systems
MSDS	Material safety data sheet
O&M	Operations and maintenance
OBM	Occupant behavioral modification
RFI	Request for information
RFP	Request for proposal
RIF	Reduction in force
ROI	Return on investments
SME	Subject matter expert
SLA	Service level agreements
SOX	Sarbanes Oxley
SWOT	Strengths, weaknesses, opportunities, and threats

7.0 Proposed Content Blueprint

The SMEs rated the list of job-related duties and tasks defined during the JTA workshop based on a two-factor scale: the importance of the duty area or task to overall job performance and the frequency with which duties and tasks are performed. The result is a weighted ranking of the duties and tasks known as a *content blueprint*.

The proposed content blueprint provides an initial basis from which an assessment (e.g., a certification or licensure examination) may be constructed and provides curriculum developers with a model to align training to the core needs of the occupation.

Table 2: Proposed Content Blueprint for Facility Managers

	Duties and Tasks	Weighting
A	Managing Facility O&M Programs	32%
1	Manage the Work Order Program	3%
2	Manage MMS Programs (CMMS, CAFM, etc.)	3%
3	Manage Building Automation Systems	3%
4	Manage Access Control Systems (mechanical and electrical)	3%
5	Manage Security Systems	3%
6	Manage Fire and Life Safety Systems	3%
7	Manage the Preventative Maintenance Program	3%
8	Coordinate with Public Utilities	3%
9	Manage the Building Systems	4%
10	Manage the Building Services	4%
B	Managing People/Personnel	15%
1	Conduct Operational Meetings (personnel, staff, planning, etc.)	4%
2	Conduct Staff Development Activities	3%
3	Perform HR Activities	4%
4	Conduct Relationship Management Activities	4%
C	Managing Other Internal/External Facility Programs	15%
1	Develop an Enterprise Risk Management Strategy	3%
2	Manage Amenity Programs	3%
3	Manage Sustainability Programs	3%
4	Manage Tenant/Landlord Related Programs	3%
5	Manage Procurement Programs	3%
D	Managing Facility Projects	10%
1	Initiate a Facility Project	3%
2	Execute Facility Project	4%
3	Close Out Facility Projects	3%
E	Managing Facility Finances	11%
1	Develop Facility Budgets	4%
2	Administer the Budget	4%
3	Reconcile the Budget	3%
F	Conducting Strategic Planning Activities	5%
1	Gather Reference Information for Strategic Planning	2%
2	Implement Strategic Plan	3%
G	Managing Facility Assets	7%
1	Acquire Facility Assets (real property and other assets)	2%
2	Optimize Facility Assets	3%
3	Dispose of Assets (property, fixtures, etc.)	2%

Table 2 (Continued): Proposed Content Blueprint for Facility Managers

	Duties and Tasks	Weighting
H	Managing Facility Resources	5%
1	Manage Administrative Resources	3%
2	Manage Equipment, Tools, and Supplies	2%
Total		100%

8.0 Knowledge

The SMEs identified and categorized specific types of knowledge needed to be a proficient facility manager (Table 3). General knowledge areas (calculations, basic measurements, and communications), although not exclusive to this occupation, were also identified using a group consensus process (Table 4). The panelists concluded that a practitioner must master the knowledge in both tables to be competent as a facility manager.

Table 3: Specialized Knowledge Required of Facility Managers

Specialized Knowledge	
Accounting principles	Business strategy
AHJ regulations and requirements	Capital planning
Alternative sources of funding/revenue	Capital sources and funding basis
Alternative work strategies	Change order processes
Amenity budgets	Characteristics of program consumer/end user
Audit requirements	Command and control
Available amenity programs	Commissioning processes
BAS knowledge	Communications plans
Baseline energy consumption	Computer skills
Basic facility processes	Conduct specialized meetings
Basic accounting principles/systems	Conservation strategies
Basic contract law	Construction close-out processes
Basic document management	Construction management processes
Basic environmental regulations	Construction processes/practices
Basic fire and life safety codes	Consultant/service contracts
Basic fire and life safety systems	Contract administration/management
Basic human psychology	Contract law
Basic materials and practices	Contract requirements
Basic ordinances and regulations	Contract specifications
Basic principles of finance	Contract terminology
Basic real estate law	Contractor capabilities
Basic security options	Control sequences
Basic suppression system capabilities and risks	Core business industry
Basic threats facing facilities	Corporate core values and mission statements
Best industry practices	Corporate vision
Bid processes	CPR and utilize AEDs
Budgeting processes	Critical infrastructures
Building certifying entities	CSP (critical spare parts) program
Building codes	Current and pending regulations
Building functions	Database usage/management
Building services (trash, room setups, etc.)	Deferred maintenance impact
Building services and contract obligations	Detailed mechanical systems
Building services/operations	Document retention policies
Building system operations	Economics
Building systems, equipment, and services	Emergency escalation protocols
Building systems/components interoperability	Emergency response procedures
Building technologies	Employee work environments
Building trades	Energy management
Business growth or contraction forecasts	Enforcement expectations

Table 3 (Continued): Specialized Knowledge Required of Facility Managers

Specialized Knowledge	
External funded programs and strategies	MAC knowledge
Facilities maintenance processes	Managing equipment warranty programs
Facilities management industry	Mapping maintenance processes
Facility equipment and systems	Market conditions and trends
Facility security operations	Market data and indicators
Finance principles	Market knowledge
Financial analyses/reconciliation	Market local service providers
Financial lien processes	Master keying systems hierarchy
Fire and life safety testing procedures	Meeting formats
FMEA processes	MMS knowledge
Forms of reinforcement (positive, etc.)	MSDS
GAAP	Organizational culture
General access control systems	Organizational needs and priorities
General building trades	Organizational objectives
Globalization impact on workforce/business	Organizational policies and procedures
HR policies and procedures	Organizational standard practices and terms for contracts
HR regulatory requirements	Organizational strategy
Impacts of construction	Organizational vision, mission, core values
Industry systems/and services best practices	Outage procedures
Infrastructure required to support new work tools	Par levels (acceptable levels of stock)
Insurance liability	Personnel motivation techniques
Insurance policies	Physical security principles
Insurance programs	Power distribution and loads
Insurance regulations	Processes for challenging invoices
Internal financial policies	Procurement processes
Inventory management	Program needs
Job roles and tasks	Project bonus payments and penalty clauses
Job specifications	Project budgets
Key control	Project forecasting
Labor contracts	Project impacts
Labor market	Project management tools
Labor relations	Purposes of strategic plans
Landlord/tenant law	Real estate knowledge/principles
Lease accounting	Real estate tax structures
Lease escalation clauses	Reduction strategies
Lease terminology	Regulatory requirements
Leases/lease obligations	Renewable energy credits
Lien laws/processes	Reporting requirements
Life cycle analysis processes	Resource scheduling
Local deregulation requirements	Risk assessment procedures
Local emergency personnel	Risk mitigation strategies
Local market compensation structures	Safety requirements
Local ordinances/codes	Scheduling processes and systems
Local response capabilities	Space management principles
Locksmith knowledge	Space planning principles

Table 3 (Continued): Specialized Knowledge Required of Facility Managers

Specialized Knowledge	
Standard maintenance intervals	Techniques for fostering relationships
Strategic plan development	Tenant demographics
Supply chain	Types of training available for staff
Sustainability best practices	Use of various facilities
SWOT analyses	Utility rate structures
System failures	Utility rebates
Technical aspects of facilities	Utility responsibilities versus facility responsibilities
Techniques for empowering staff	Value engineering processes
Security systems/hardware	Vendor and suppliers
Service level requirements (minimum air temperatures, etc.)	Warranty management processes
Site planning	Work priorities (routine, emergency, etc.)
SOX requirements	Work scope development
Techniques for fostering positive morale	Zoning and permitting requirements
Building Systems	
Access control systems	Lighting systems
Architectural systems	Mechanical systems
Communication systems	Parking control systems
Control systems	Plumbing systems
Electrical systems	Security systems
Fire/Life Safety systems	Structural systems
Foundation/subsurface systems	Vertical transportation systems
Hardscape systems	Window washing systems
Irrigation systems	
Building Services	
Catering/dietary/food service	O&M
Concierge	Pest control
Environmental health and safety	Parking management
Event support	Printing
Finish carpentry	Recycling
Fleet management	Security
Janitorial	Switchboard
Landscaping	Transporters
Life safety	Trash removal
Locksmith	Utilities
Mail room	Vertical transportation
Metal, stone and wood	Wellness
Movers	Window washing

Table 4: General Knowledge Required of Facility Managers

General Knowledge	
Calculations	
Change numbers from fractions into decimals and back	Perform mathematical operations with fractions
Change numbers from percentages into decimals and back	Perform simple math operations of addition
Collect information to solve a problem	Perform simple math operations of division
Compare numbers	Perform simple math operations of multiplication
Figure averages	Perform simple math operations of subtraction
Make rough estimates	Solve percent problems
Multiply and factor algebraic expressions	Solve problems with graphs
Perform math operations using signed (positive and negative) numbers	Solve ratio problems
Perform math operations using single and multiple digit numbers	Transfer number sequences from a source into a column
Perform mathematical operations with decimals	Use a calculator
Basic Measurements	
Calculate the perimeter and areas of common figures	Measure temperature to within 1 degree F
Convert measurements from one unit into another (English to metric, etc.)	Measure volume (cubic inches, liters, etc.)
Estimate and approximate measurements	Measure weights using devices calibrated in ounces
Find distances and directions on land maps	Measure weights using devices calibrated in pounds
Find the dimensions of an object from a scale drawing	Read and apply coefficient measurements indicated in a table or chart
Make simple scale drawings	Read and use the scale of a drawing
Measure area (square inches, square centimeters, etc.)	Read measurements taken with common measuring tools
Measure board feet	Read, interpret, and use size-scale relationships
Measure length to 1/32 of an inch	Record measurements, using appropriate unit notations (feet, yards, etc.)
Measure linear distances (length, width, etc.)	Use tools to measure quantities and solve problems involving measurements
Communications	
Apply assertiveness	Evaluate options/alternatives
Ask questions	Evaluate solutions
Communicate using the vocabulary/terminology of a related trade	Explain procedures
Communicate with co-workers and/or business people in writing (letters, memos)	Find information in catalogs
Communicate with co-workers and/or business people verbally (face-to-face)	Find information in references (machinery handbooks, tap/drill charts, etc.)
Communicate with co-workers and/or business people verbally (telephone, radio)	Follow verbal job instructions
Compare names	Listen

Table 4 (Continued): General Knowledge Required of Facility Managers

General Knowledge	
Communications	
Participate in brainstorming	Read information from tables and graphs (bar, circle, etc.)
Present to others	Read statistical data
Read and follow a map, chart, plan, etc.	Research information
Read and follow directions found in equipment manuals and code books	Speak to large groups
Read and interpret directions found on labels, packages, or instruction sheets	Summarize information
Read codes (building codes, electrical codes, standards, etc.)	Write reports
Read drawings and specifications sheets	Write words and numbers legibly
Read flowcharts	

9.0 Skills, Abilities, and Attributes

A proficient worker possesses key skills, abilities, and attributes that influence job success. Skills are developed through experience and training and may apply to a wide range of tasks; proper skills enable workers to perform their tasks with precision and quality.

Abilities and attributes are more fundamental than knowledge and skills; they represent underlying, enduring traits, both cognitive and physical, that support the successful performance of a wide range of job tasks.

The panelists identified task-specific skills and abilities, as well as broad attributes (e.g., analytic, creative, patient), to define the recommended traits a facility manager should possess (Table 5).

Human Resource professionals and job analysts often analyze skills, abilities, and attributes to compare jobs in terms of worker characteristics.

Table 5: Skills, Abilities, and Attributes Required of Facility Managers

Skills, Abilities, and Attributes	
Ability to communicate highly technical content in layman's terms	Analytical skills
Ability to compare bid packages	Appropriate dresser/personal hygiene
Ability to conduct exercises	Assessment skills
Ability to construct a business case	Basic math skills
Ability to create a CPM schedule	Basic mechanical skills
Ability to create and evaluate contracts	Basic understanding of IT
Ability to design exercises	Big picture thinking skills
Ability to develop fire and life safety plan	Coaching skills
Ability to develop innovative solutions to building system problems	Collaborative
Ability to diagnose building system issues or problems	Command and control skills
Ability to document procedures	Common sense
Ability to ensure final project meets the expected outcome	Computer skills
Ability to obtain buy-in	Confidence/self-esteem
Ability to operate fire and life safety systems (panels)	Conflict resolution skills
Ability to operate security systems	Conscientious
Ability to operate/remain calm under pressure	Contract administration skills
Ability to perform financial analyses	Contract negotiation skills
Ability to rally support of internal resources	Cooperative
Ability to read a contract	Cost benefit analysis skills
Ability to read a utility meter	Courteous
Ability to read and interpret construction drawings	Creative problem solving skills
Ability to translate technical content into financial terms	Creativity
Ability to use emergency equipment	Credibility
Accurate/precise	Critical thinking skills
Adaptable/flexible	Customer service skills
Administrative skills	Customer-oriented

Table 5 (Continued): Skills, Abilities, and Attributes Required of Facility Managers

Skills, Abilities, and Attributes	
Data analysis skills	Organizational skills
Data collection skills	Patience
Database management skills	Persistent
Dependable	Persuasive
Detail-oriented	Plan reading ability
Eager to learn new things	Planning skills
Enthusiasm	Political savvy
Ethical	Positive attitude
Facilitation skills	Presentation skills
Financial accounting skills	Pride in job
Financial modeling skills	Prioritization skills
Focused	Problem solving skills
Forecasting skills	Procurement skills
Free of substance abuse	Professional
Friendly	Punctual
Goal-oriented	Quality focused
Helpful	Reading comprehension skills
Honest/trustworthy	Researching skills
Industrious	Respectful
Initiative	Responsible/accountable
Inspection skills	Risk analysis skills
Integrity	Safety conscious
Interpersonal skills	Salesmanship
Interpretation skills	Scheduling skills
Interviewing skills	Self-discipline
Leadership skills	Self-motivated
Listening skills	Sense of humor
Manage stress/pressure	Social skills
Management skills	Spatial analysis ability (ability to determine amount of space that will be required for people)
Manual dexterity	Tactful
Marketing skills	Team player
Media/press management skills	Time management skills
Mediation skills	Tolerant
Motivational skills	Training skills
Multi-tasker	Trend analysis skills
Negotiation skills	Unbiased
Networking skills	Visualization skills
Open-minded to change	Work efficiently (resources)
Organizational savvy	Written and verbal communication skills

10.0 Tools, Equipment, and Resources

Each occupation requires a unique set of support materials. It is important to identify the tools, equipment, and other tangible objects, as well as the resources (e.g., information technologies, codes and standards) required for a worker to effectively accomplish tasks. Table 6 lists the panelist-identified inventory of tools, equipment, and resources necessary to perform the identified tasks.

Table 6: Tools, Equipment, and Resources Used by Facility Managers

Tools, Equipment, and Resources	
General Tools, Equipment, and Resources	
Access to the strategic planning process	Contracts
Accounting software	Cost database
Accounting system	Current financial information
Accounting tools	Data input/output device (bar code reader, data entry person, etc.)
Administrative support	Database
Analytical data	Depreciation schedules
ASHRAE standards	Design drawings
Asset inventory tools	Document control system
Audio visual media	Document protection systems
Availability of funding incentives	Drawings and floor plans
Benchmark data	Emergency communication devices
Bids	Emergency preparedness plan
Body of precedence	Employee database (real time access)
Budget	Engineering reports
Budgeting software	Evaluation tools
Building automation systems manual	Expeditors
Building codes	Facilitators
Building plans	Facility budget
Building professional organizations	FAR
Business continuity manual	Financial data
Business plan	Financial expertise
Calculator	Fire and life safety systems equipment
Cameras	Fire codes
Close out package	Forecasting data
Codes	Forecasting software and/or system
Commissioning documents	Historical data
Communication devices	HR policy and procedures manuals
Competitor's and other market data	Industry costs
Computer	Industry standards
Computer software	Internal champions
Construction blueprints	Internal public affairs department
Construction budgets	Inventory management tools
Construction management programs	IT policy manual
Construction scheduling tools	Labor agreements
Consumer Price Index and other financial information	Leases
Contract matrix	Leasing laws
Contractor/consultant database	Legal expertise

Table 6 (Continued): Tools, Equipment, and Resources Used by Facility Managers

Tools, Equipment, and Resources	
General Tools, Equipment, and Resources	
Life cycle analyses	Promotional avenue
Life cycle plan	Punch lists
Life safety codes	Real estate broker
List of suppliers and vendors	Real estate laws
Local businesses	Real estate property tax information
Local regulatory requirements	Regulatory requirements
Market data and indicators	Safety equipment
Meeting place	Sample sustainability plans
Methods to record meetings	Security systems and hardware
MMS software	Service providers
MSDS	Spend data/budgets
Organizational data	Storage equipment
Organizational HR policies and procedures	Storage space (onsite, offsite)
Organizational plans	Subject matter experts and consultants
Personnel files	Support materials
Position descriptions	Sustainability organizations
Preventative maintenance tools	Tech support
Price sheets	Training budget
Productivity software	Turnstiles
Project plans	Urban planning data
Project space allocations	Utility meters
Project specifications	X-ray machines
Projected capital plan	Zoning information
Projections	
Inspection Equipment	
Camera	Light meters
Decibel meters	Multi-tool
Flashlight	Safety glasses
Flow meter	Screwdrivers
Hardhat	Tape measure
Infrared measuring device	
Building Resource Library	
Blueprints	Photo library
Building operations plan	Policies and procedures
Operating manuals	Start up manuals
Permits and licenses	Warranties

11.0 DACUM Chart

The DACUM chart (Table 7) is a tabular representation of the JTA. Capital letters identify major job duty areas. Numbers identify tasks, and lowercase letters identify the steps required to accomplish each task. Moving horizontally across the chart, adjacent columns detail (1) specialized knowledge, (2) skills and abilities, and (3) tools, equipment, and resources required to perform each task. The information contained in these columns is related to each task and does not necessarily correspond to a specific step.

The importance of the DACUM chart is to show the relationship between job tasks and the specialized knowledge, skills and abilities, and tools, equipment, and resources required to perform each task. This concept, called *job-relatedness*, is essential to compliance with key legal and professional validity standards pertaining to the use of JTA information in employee selection. Such information is also critical to the development of high-stakes assessments for occupational licensing and certification examinations.

The DACUM chart depicts the job element relationships associated with each task, and can therefore easily be used to assess the relevance of current programs (curriculum), develop instructional objectives and training content, sequence instructional materials, and develop examination, competency, and performance evaluation instruments.

Table 7: DACUM Chart for Facility Managers

	Duties, Tasks, and Steps	Specialized Knowledge	Skills and Abilities	Tools, Equipment, and Resources
A	Managing Facility O&M Programs			
1	Manage the Work Order Program			
a	Identify if a request is a work order	<ul style="list-style-type: none"> • Basic facility processes • Building services (trash, room setups, etc.) • Building systems • Building trades • Leases/lease obligations • Safety requirements • Scheduling processes and systems • Work priorities (routine, emergency, etc.) 	<ul style="list-style-type: none"> • Ability to operate/remain calm under pressure • Analytical skills • Credibility • Critical thinking skills • Customer service skills • Interpersonal skills • Multi-tasker • Scheduling skills • Time management skills • Written and verbal communication skills 	<ul style="list-style-type: none"> • Communication devices • Computer • Database
b	Identify type of work order (IT, maintenance, etc.)			
c	Receive and distribute work orders			
d	Prioritize work orders			
e	Capture status change			
f	Ensure quality control			
g	Perform the work			
h	Capture effort associated with the work (man hours, costs, etc.)			
i	Define the work			
j	Notify occupants of work			
k	Document the results of the work order activities			
l	Close out the work order			
m	Identify capabilities of in-house staff			
n	Identify facility processes			

Table 7 (Continued): DACUM Chart for Facility Managers

	Duties, Tasks, and Steps	Specialized Knowledge	Skills and Abilities	Tools, Equipment, and Resources
A	Managing Facility O&M Programs			
2	Manage MMS Programs (CMMS, CAFM, etc.)			
a	Set up the program	<ul style="list-style-type: none"> • Building systems • Building systems/components interoperability • Building trades • Database usage/management • Facilities maintenance processes • Mapping maintenance processes 	<ul style="list-style-type: none"> • Analytical skills • Computer skills • Manual dexterity • Procurement skills 	<ul style="list-style-type: none"> • Administrative support • Computer • Data input/output device (bar code reader, data entry person, etc.) • MMS software • Records, data, inventory • Tech support
b	Populate the program with the data			
c	Identify items to be measured (equipment, space, etc.)			
d	Establish baselines (standards, priorities, naming conventions)			
e	Establish process for how work will be accomplished			
f	Establish maintenance schedules			
g	Determine reporting needs			
h	Set up reports			
i	Establish inventory control			
j	Establish inter-operability with accounting system			
k	Establish inventory thresholds/levels			
l	Determine maintenance tasks			
m	Determine user roles (access levels)			
n	Identify system administrators			
o	Establish close-out procedures			
p	Process departmental charge-backs			
q	Determine costs/pricing structure (labor, materials, overhead, etc.)			
r	Ensure system maintenance			
s	Back up data			
t	Develop data archiving strategy			
u	Train users			
v	Set up dashboard			
w	Identify in-house skill levels			

Table 7 (Continued): DACUM Chart for Facility Managers

	Duties, Tasks, and Steps	Specialized Knowledge	Skills and Abilities	Tools, Equipment, and Resources
A	Managing Facility O&M Programs			
3	Manage Building Automation Systems			
a	Enter equipment into BAS	<ul style="list-style-type: none"> • Basic energy • Building system operations • Control sequences • Detailed mechanical systems 	<ul style="list-style-type: none"> • Analytical skills • Basic math skills • Computer skills • Problem solving skills 	<ul style="list-style-type: none"> • Building automation systems manual • Commissioning documents • Communication devices • Computer
b	Schedule system			
c	Establish control strategies			
d	Set up overrides			
e	Set up trends to be monitored			
f	Define reports required			
g	Obtain expertise to modify the system (training or external)			
h	Conduct system oversight			
i	Set up alarms			
j	Respond to alarms			
k	Adjust operating schedule to comply with lease agreements			
l	Report variances for billing			
m	Tie the BAS to the MMS to the accounting system			
n	Identify building schedules (meetings, etc.)			
o	Map equipment to spaces served			

Table 7 (Continued): DACUM Chart for Facility Managers

	Duties, Tasks, and Steps	Specialized Knowledge	Skills and Abilities	Tools, Equipment, and Resources
A	Managing Facility O&M Programs			
4	Manage Access Control Systems (mechanical and electrical)			
a	Define levels of access	<ul style="list-style-type: none"> • Computer skills • General access control systems • Key control • Locksmith knowledge • Master keying systems hierarchy • Physical security principles 	<ul style="list-style-type: none"> • Computer skills 	<ul style="list-style-type: none"> • Computer • Computer software • Contractor/consultant database • Design drawings • Employee database (real time access) • Fire codes • Life safety codes
b	Define specifications for particular levels of access			
c	Enter personnel data into control system			
d	Conduct audits of access			
e	Qualify personnel for access (citizenship, etc.)			
f	Program access cards/keys			
g	De-program access cards/retrieve keys/change locks			
h	Map access points			
i	Prepare access reports			
j	Interface to security system			
k	Manage access records/documents			
l	Design access control system			
m	Manage access control design documents (wiring diagrams, etc.)			
n	Conduct maintenance activities with access control system			
o	Troubleshoot problems			
p	Identify interface between access control system and alarm systems			
q	Physically set locks on doors			
r	Define controls of primary and secondary access systems			

Table 7 (Continued): DACUM Chart for Facility Managers

	Duties, Tasks, and Steps	Specialized Knowledge	Skills and Abilities	Tools, Equipment, and Resources
A	Managing Facility O&M Programs			
5	Manage Security Systems			
a	Assess current security situation	<ul style="list-style-type: none"> • Basic ordinances and regulations • Basic security options • Basic threats facing facilities • Facility security operations • Local response capabilities • Security systems/hardware 	<ul style="list-style-type: none"> • Ability to operate security systems • Analytical skills • Assessment skills • Collaborative • Command and control skills • Critical thinking skills • Training skills • Written and verbal communication skills 	<ul style="list-style-type: none"> • Cameras • Security systems and hardware • Turnstiles • X-ray machines
b	Determine security equipment			
c	Determine security staffing			
d	Audit personnel monitoring security			
e	Determine type of security personnel desired (uniforms, coat/tie, etc.)			
f	Determine type of reporting desired			
g	Determine frequency of reporting			
h	Document escalation procedures (post orders)			
i	Maintain security hardware			
k	Train security personnel			
l	Collaborate with local authorities			
m	Develop a security plan			
n	Determine third party monitoring needs			
o	Back up data			
p	Evaluate surrounding environment			
q	Conduct background checks on personnel			

Table 7 (Continued): DACUM Chart for Facility Managers

	Duties, Tasks, and Steps	Specialized Knowledge	Skills and Abilities	Tools, Equipment, and Resources
A	Managing Facility O&M Programs			
6	Manage Fire and Life Safety Systems			
a	Conduct regular testing of fire alarms and systems	<ul style="list-style-type: none"> • AHJ regulations and requirements • Basic fire and life safety codes • Basic fire and life safety systems • Basic suppression system capabilities and risks • CPR and utilize AEDs • Enforcement expectations • Fire and life safety testing procedures • Local emergency personnel 	<ul style="list-style-type: none"> • Ability to develop fire and life safety plan • Ability to operate fire and life safety systems (panels) • Ability to operate/remain calm under pressure • Ability to use emergency equipment • Collaborative • Persuasive • Plan reading ability • Training skills • Written and verbal communication skills 	<ul style="list-style-type: none"> • Fire and life safety systems equipment • Life safety codes
b	Maintain fire alarm and system certifications			
c	Conduct fire drills			
d	Conduct evacuation drills			
e	Conduct life safety drills			
f	Create fire and life safety plans			
g	Post evacuation routes			
h	Communicate fire and life safety plans			
i	Participate in fire Marshall, insurance, etc. inspections			
j	Maintain code compliance of the fire and life safety system			
k	Review fire and life safety design			
l	Inspect all components of the fire and life safety systems (exit lights, fire extinguishers, emergency light bulbs, etc.)			
m	Implement interim life safety measures			
n	Identify fire wardens			
o	Train fire wardens			
p	Create personnel accountability system			
q	Direct emergency response team			
r	Establish communications plan			
s	Test emergency generator/power backup systems			
t	Identify locations for people with mobility disabilities and create evacuation plan			
u	Establish occupancy levels for meeting spaces and community spaces			
v	Monitor occupancy during events			
w	Ensure clear egress			
x	Conduct HAZMAT drills			

Table 7 (Continued): DACUM Chart for Facility Managers

	Duties, Tasks, and Steps	Specialized Knowledge	Skills and Abilities	Tools, Equipment, and Resources
A	Managing Facility O&M Programs			
6	Manage Fire and Life Safety Systems			
y	Document fire and life safety drills, tests and activities			
z	Identify person to respond to incidents			
7	Manage the Preventative Maintenance Program			
a	Identify equipment or assets to be maintained	<ul style="list-style-type: none"> • Building systems • Building systems/components interoperability • Facility equipment and systems • FMEA processes • Managing equipment warranty programs • Resource scheduling • Standard maintenance intervals • System failures 	<ul style="list-style-type: none"> • Ability to diagnose building system issues or problems • Ability to document procedures • Analytical skills • Basic mechanical skills • Critical thinking skills • Organizational skills • Written and verbal communication skills 	<ul style="list-style-type: none"> • ASHRAE standards • Preventative maintenance tools
b	Build and maintain an inventory for preventative maintenance			
c	Identify maintenance procedures			
d	Identify maintenance frequencies			
e	Obtain manufacturer's recommendations			
f	Customize the manufacturer's recommendations based on an FMEA or facility needs			
g	Identify resources required for preventative maintenance (tools, time, equipment, manpower, etc.)			
h	Conduct a job/hazard assessment for the task			
i	Establish maintenance philosophy			
j	Document maintenance procedures			
k	Report results of the preventative maintenance program			
l	Analyze results of the preventative maintenance program			
m	Ensure equipment history for all tasks performed			
n	Follow up on issues identified during preventative maintenance			
o	Establish a naming convention for equipment (identification tags, etc.)			

Table 7 (Continued): DACUM Chart for Facility Managers

	Duties, Tasks, and Steps	Specialized Knowledge	Skills and Abilities	Tools, Equipment, and Resources
A	Managing Facility O&M Programs			
8	Coordinate with Public Utilities			
a	Identify utilities	<ul style="list-style-type: none"> • Basic environmental regulations • Energy management • Local deregulation requirements • Outage procedures • Power distribution and loads • Renewable energy credits • Utility rate structures • Utility rebates • Utility responsibilities versus facility responsibilities 	<ul style="list-style-type: none"> • Ability to read a utility meter • Basic math skills • Negotiation skills • Written and verbal communication skills 	<ul style="list-style-type: none"> • Utility meters
b	Identify options to utilities			
c	Identify utility suppliers			
d	Identify utility supplier contacts			
e	Validate utility billing			
f	Obtain copies of utility rate schedules			
g	Identify utility meters			
h	Read utility meters			
i	Identify local utility programs (curtailment, ESCO, etc.)			
j	Negotiate rate contracts and discounts			
k	Establish utility access procedures			
l	Establish utility emergency procedures/contacts			
m	Coordinate planned consumption with utilities			
n	Coordinate work with utility departments (locate hidden lines)			

Table 7 (Continued): DACUM Chart for Facility Managers

	Duties, Tasks, and Steps	Specialized Knowledge	Skills and Abilities	Tools, Equipment, and Resources
A	Managing Facility O&M Programs			
9	Manage the Building Systems			
a	Develop a building operations plan	<ul style="list-style-type: none"> • BAS knowledge • Basic accounting principles/systems • Building codes • Building functions • Building services and contract obligations • Building systems • Building systems/components interoperability • Contract terminology • Deferred maintenance impact • Industry systems/and services best practices • Market local service providers • MMS knowledge • Service level requirements (minimum air temperatures, etc.) 	<ul style="list-style-type: none"> • Ability to develop innovative solutions to building system problems • Ability to diagnose building system issues or problems • Ability to read and interpret construction drawings • Analytical skills • Computer skills • Contract administration skills • Critical thinking skills • Data analysis skills • Data collection skills • Management skills • Negotiation skills • Problem solving skills • Written and verbal communication skills 	<ul style="list-style-type: none"> • Building resource library • Codes • Computer • Construction blueprints • Database
b	Manage the architectural systems			
c	Manage carpeting/flooring maintenance			
d	Manage mechanical systems (HVAC, plumbing, etc.)			
e	Manage the elevator program			
f	Manage the electrical systems			
g	Conduct painting and carpentry maintenance			
h	Conduct building envelope maintenance			
i	Manager vendor contracts			
j	Create and maintain building systems documents			
k	Implement a continual improvement plan			

Table 7 (Continued): DACUM Chart for Facility Managers

	Duties, Tasks, and Steps	Specialized Knowledge	Skills and Abilities	Tools, Equipment, and Resources
A	Managing Facility O&M Programs			
10	Manage the Building Services			
a	Maintain common areas	<ul style="list-style-type: none"> • Bid processes • Budgeting processes • Building services/operations • Contract requirements • Contractor capabilities • Regulatory requirements • Scheduling processes and systems • Tenant demographics • Use of various facilities 	<ul style="list-style-type: none"> • Ability to read a contract • Contract negotiation skills • Customer service skills • Problem solving skills • Written and verbal communication skills 	<ul style="list-style-type: none"> • Building resource library • Computer • Contracts • MSDS
b	Manage the landscaping program			
c	Manage the grounds program			
d	Manage the cafeteria program			
e	Manage the janitorial program			
f	Manage the parking program			
g	Set up rooms for conferences and meetings			
h	Manage the pest control program			
i	Manage the facility fleet			
j	Manage the recycling program			
k	Manage the trash program			
l	Manage vendor contracts			
m	Identify building services			
n	Negotiate contracts for building services			
o	Develop SLAs and KPIs			
p	Identify in-house capabilities versus outsourced services			
q	Identify obligations of ownership versus service provider			
B	Managing People/Personnel			
1	Conduct Operational Meetings (personnel, staff, planning, etc.)			
a	Develop resourcing requirements	<ul style="list-style-type: none"> • Conduct specialized meetings • HR policies and procedures • Meeting formats • Project forecasting 	<ul style="list-style-type: none"> • Facilitation skills • Interpersonal skills • Organizational skills • Written and verbal communication skills 	<ul style="list-style-type: none"> • Audio Visual media • Meeting place • Methods to record meetings • Support materials
b	Determine who needs to attend the meeting			
c	Develop the purpose for the meeting			
d	Develop an agenda for the meeting			
e	Identify capabilities and limitations of staff			
f	Allocate time for attendance at meetings			

Table 7 (Continued): DACUM Chart for Facility Managers

	Duties, Tasks, and Steps	Specialized Knowledge	Skills and Abilities	Tools, Equipment, and Resources
B	Managing People/Personnel			
2	Conduct Staff Development Activities			
a	Conduct team building activities	<ul style="list-style-type: none"> • Forms of reinforcement (positive, etc.) • Job roles and tasks • Personnel motivation techniques • Techniques for empowering staff • Techniques for fostering positive morale • Types of training available for staff 	<ul style="list-style-type: none"> • Interpersonal skills • Written and verbal communication skills 	<ul style="list-style-type: none"> • Training budget • Organizational HR policies and procedures
b	Conduct staff brainstorming sessions			
c	Conduct cross-training activities			
d	Provide training opportunities for staff			
e	Counsel/mentor facility personnel			
f	Communicate expectations/goals to personnel			
g	Provide growth goals and opportunities for personnel (employee development assignments)			
h	Conduct a personnel gap analysis			
i	Develop a workforce plan			
j	Identify aspirations of staff			
k	Identify strengths and weaknesses of staff			
l	Reinforce organizational culture			

Table 7 (Continued): DACUM Chart for Facility Managers

	Duties, Tasks, and Steps	Specialized Knowledge	Skills and Abilities	Tools, Equipment, and Resources
B	Managing People/Personnel			
3	Perform HR Activities			
a	Recruit facility personnel	<ul style="list-style-type: none"> • Basic human psychology • Consultant/service contracts • Employee work environments • HR regulatory requirements • Labor contracts • Local market compensation structures • Organizational policies and procedures 	<ul style="list-style-type: none"> • Coaching skills • Conflict resolution skills • Contract negotiation skills • Creative problem solving skills • Interpersonal skills • Interviewing skills • Mediation skills • Motivational skills • Written and verbal communication skills 	<ul style="list-style-type: none"> • Body of precedence • Document control system • HR policy and procedures manuals • Labor agreements • Personnel files • Position descriptions
b	Hire facility personnel			
c	Negotiate personnel contracts			
d	Create job descriptions including scopes of authority			
e	Assign personnel tasks			
f	Perform personnel performance evaluations			
g	Counsel facility personnel			
h	Negotiate personnel grievances			
i	Arbitrate personnel disputes			
j	Fire facility personnel			
k	Conduct RIF activities			
l	Investigate employee complaints			
m	Manage personnel and work remotely			
n	Develop performance award criteria			
o	Establish compensation ranges			
p	Establish employee incentive programs			
q	Establish departmental culture			
r	Enforce personnel policies and procedures			
s	Develop succession plans			
t	Implement a performance improvement plan			
u	Manage staffing coverage			
v	Obtain expert HR assistance			

Table 7 (Continued): DACUM Chart for Facility Managers

	Duties, Tasks, and Steps	Specialized Knowledge	Skills and Abilities	Tools, Equipment, and Resources
B	Managing People/Personnel			
4	Conduct Relationship Management Activities			
a	Interact with the media/press	<ul style="list-style-type: none"> • Local ordinances/codes • Techniques for fostering relationships 	<ul style="list-style-type: none"> • Interpersonal skills • Media/press management skills • Networking skills • Organizational savvy • Presentation skills • Written and verbal communication skills 	
b	Interact with professional trade associations			
c	Work with supervisors to obtain a common goal			
d	Liaise with neighbors			
e	Liaise with other departments			
f	Maintain relationships with AHJ (fire marshal, code enforcement, etc.)			
g	Respond to complaints			
h	Coordinate activities with other organizations			
i	Manage political activism programs			

Table 7 (Continued): DACUM Chart for Facility Managers

	Duties, Tasks, and Steps	Specialized Knowledge	Skills and Abilities	Tools, Equipment, and Resources
C	Managing Other Internal/External Facility Programs			
1	Develop an Enterprise Risk Management Strategy			
a	Manage an IT security plan	<ul style="list-style-type: none"> • Command and control • Communications plans • Critical infrastructures • Emergency escalation protocols • Emergency response procedures • Insurance policies • Insurance programs • Regulatory requirements • Risk assessment procedures • Risk mitigation strategies • SWOT analyses 	<ul style="list-style-type: none"> • Ability to conduct exercises • Ability to design exercises • Ability to develop a plan • Ability to document procedures • Ability to operate/remain calm under pressure • Basic understanding of IT • Multi-tasker • Prioritization skills • Written and verbal communication skills 	<ul style="list-style-type: none"> • Business continuity manual • Communication devices • Computer • Emergency communication devices • Emergency preparedness plan • IT policy manual
b	Manage business continuity programs			
c	Manage communication programs			
d	Manage compliance programs			
e	Manage crises management programs			
f	Manage critical systems (data centers, life safety, etc.)			
g	Manage emergency response programs			
h	Manage incident notification programs			
i	Manage risk management programs			
j	Manage safety programs			
k	Manage security program			
2	Manage Amenity Programs			
a	Manage art programs	<ul style="list-style-type: none"> • Amenity budgets • Available amenity programs • Characteristics of program consumer/end user • Program needs • Regulatory requirements 	<ul style="list-style-type: none"> • Marketing skills • Negotiation skills • Written and verbal communication skills 	<ul style="list-style-type: none"> • Internal public affairs department • Local businesses • Promotional avenue • Service providers • Space allotment
b	Manage community service programs			
c	Manage first impressions programs (visitors)			
d	Manage literacy programs			
e	Manage day care programs			
f	Manage fitness programs			
g	Manage wellness programs			
h	Align amenities with corporate objectives			
i	Manage outreach and education programs			
j	Manage conference and event rooms			

Table 7 (Continued): DACUM Chart for Facility Managers

	Duties, Tasks, and Steps	Specialized Knowledge	Skills and Abilities	Tools, Equipment, and Resources
C	Managing Other Internal/External Facility Programs			
3	Manage Sustainability Programs			
a	Develop energy management program	<ul style="list-style-type: none"> • Alternative work strategies • Baseline energy consumption • Building certifying entities • Building systems, equipment, and services • Conservation strategies • Contract administration/management • Current and pending regulations • External funded programs and strategies • Reduction strategies • Sustainability best practices 	<ul style="list-style-type: none"> • Ability to perform financial analyses • Ability to rally support of internal resources • Organizational skills • Political savvy • Salesmanship • Written and verbal communication skills 	<ul style="list-style-type: none"> • Building professional organizations • Computer • Industry standards • Internal champions • Local regulatory requirements • Sample sustainability plans • Sustainability organizations
b	Develop recycling program			
c	Develop resource conservation program			
d	Explore certification of programs			
e	Develop green procurement program (EPP)			
f	Develop alternative transportation strategies			
g	Develop HAZMAT reduction strategy			
h	Develop composting program			
i	Develop water conservation measures			
j	Conduct benchmarking activities			
k	Communicate the impact of sustainability programs			
l	Align the program with corporate objectives			
m	Establish program milestones			
n	Measure and verify program data			
o	Conduct audits and inspections			
p	Explore relationships with suppliers			
q	Explore alternative work strategies (space optimization, etc.)			
r	Develop a green cleaning program			
s	Establish carbon footprint			
t	Develop an OBM strategy			

Table 7 (Continued): DACUM Chart for Facility Managers

		Duties, Tasks, and Steps	Specialized Knowledge	Skills and Abilities	Tools, Equipment, and Resources
C	Managing Other Internal/External Facility Programs				
4	Manage Tenant/Landlord Related Programs				
	a	Manage lease administration programs	<ul style="list-style-type: none"> • Building codes • Building systems, equipment, and services • Construction processes/practices • Landlord/tenant law • Lease accounting • Leases/lease obligations • Market conditions and trends • Typical Leases/lease obligations 	<ul style="list-style-type: none"> • Ability to read a contract • Ability to read and interpret construction drawings • Administrative skills • Negotiation skills • Persuasive • Written and verbal communication skills 	<ul style="list-style-type: none"> • Building codes • Leases • Legal expertise
	b	Manage tenant build-outs			
	c	Manage tenant relations			
	d	Manage landlord relationship			
	e	Finding facility tenants			
	f	Finding facility space			
5	Manage Procurement Programs				
	a	Develop procurement program	<ul style="list-style-type: none"> • Basic contract law • Contract administration/management • Contract terminology • Database usage/management • Insurance liability • Organizational standard practices and terms for contracts 	<ul style="list-style-type: none"> • Analytical skills • Basic math skills • Detail-oriented • Negotiation skills • Reading comprehension skills • Written and verbal communication skills 	<ul style="list-style-type: none"> • Computer • Contract matrix • Evaluation tools • FAR • Financial expertise • Legal expertise
	b	Develop contract matrices			
	c	Identify service providers			
	d	Identify contracting philosophy			
	e	Develop and implement an acquisition process (RFP, RFI, bid waivers, etc.)			
	f	Define standard terms and conditions			
	g	Administer contracts			
	h	Develop standards of ethical conduct			

Table 7 (Continued): DACUM Chart for Facility Managers

	Duties, Tasks, and Steps	Specialized Knowledge	Skills and Abilities	Tools, Equipment, and Resources
D	Managing Facility Projects			
1	Initiate a Facility Project			
a	Conduct a needs assessment	<ul style="list-style-type: none"> • Basic accounting principles/systems • Basic materials and practices • Building codes • Building technologies • Contract specifications • Local ordinances/codes • Project impacts • Project management tools • Scheduling processes and systems • Site planning • Work scope development • Zoning and permitting requirements 	<ul style="list-style-type: none"> • Ability to compare bid packages • Ability to create a CPM schedule • Ability to ensure final project meets the expected outcome • Ability to read and interpret construction drawings • Analytical skills • Mediation skills • Negotiation skills • Organizational skills • Visualization skills 	<ul style="list-style-type: none"> • Building plans • Computer • Expeditors • Facilitators • Project plans • Project space allocations • Subject matter experts and consultants
b	Select project site			
c	Estimate project costs			
d	Define project requirements			
e	Justify project need			
f	Develop scope of work			
g	Develop project plans			
h	Conduct requests for proposals			
i	Obtain project bids			
j	Secure project funding			
k	Prepare project budget			
l	Award project contracts			
m	Develop project timeline			
n	Develop project communications plan			
o	Obtain project permits			
p	Obtain certificates of insurance/bonds from contractors			
q	Review project plans			
r	Develop project accounting process			
s	Ensure regulatory compliance			

Table 7 (Continued): DACUM Chart for Facility Managers

	Duties, Tasks, and Steps	Specialized Knowledge	Skills and Abilities	Tools, Equipment, and Resources
D	Managing Facility Projects			
2	Execute Facility Project			
a	Maintain services during ongoing construction	<ul style="list-style-type: none"> • Basic accounting principles/systems • Change order processes • Construction management processes • Construction processes/practices • Contract terminology • General building trades • Impacts of construction • Job specifications • Labor market • Labor relations • Value engineering processes • Warranty management processes 	<ul style="list-style-type: none"> • Ability to read and interpret construction drawings • Basic math skills • Critical thinking skills • Interpretation skills • Organizational skills • Training skills 	<ul style="list-style-type: none"> • Accounting tools • Building plans • Computer • Construction budgets • Construction management programs • Construction scheduling tools • Project specifications • Safety equipment
b	Assign project resources			
c	Inspect project work			
d	Manage impacts of project on existing facility			
e	Conduct project meetings			
f	Report project progress			
g	Monitor project costs			
h	Monitor project schedules			
i	Produce project change orders			
j	Attend site reviews			
k	Approve project payments/draws			
l	Resolve project issues			
m	Obtain maintenance contracts			
n	Secure project warranties			
o	Arrange staff training for new equipment			
p	Develop spare parts lists			

Table 7 (Continued): DACUM Chart for Facility Managers

	Duties, Tasks, and Steps	Specialized Knowledge	Skills and Abilities	Tools, Equipment, and Resources
D	Managing Facility Projects			
3	Close Out Facility Projects			
a	Obtain project as-builts	<ul style="list-style-type: none"> • Building codes • Commissioning processes • Construction close-out processes • Financial lien processes • Lien laws/processes • Project bonus payments and penalty clauses • Project budgets • Warranty management processes 	<ul style="list-style-type: none"> • Ability to ensure final project meets the expected outcome • Ability to read and interpret construction drawings • Financial accounting skills • Inspection skills • Visualization skills 	<ul style="list-style-type: none"> • Close out package • Punch lists
b	Perform project close-outs			
c	Create and complete project punch-lists			
d	Obtain certificate of occupancy			
e	Accept beneficial use			
f	Commission the project			
g	Review lessons learned			
h	Obtain lien waivers/release of liens			
i	Issue final payment			
j	Create budget variance report			

Table 7 (Continued): DACUM Chart for Facility Managers

	Duties, Tasks, and Steps	Specialized Knowledge	Skills and Abilities	Tools, Equipment, and Resources
E	Managing Facility Finances			
1	Develop Facility Budgets			
a	Review historical costs	<ul style="list-style-type: none"> • Alternative sources of funding/revenue • Basic accounting principles/systems • Budgeting processes • Building systems • Core business industry • Facilities management industry • Finance principles • Leases/lease obligations • Market data and indicators • Organizational culture • Organizational needs and priorities • Regulatory requirements • Technical aspects of facilities 	<ul style="list-style-type: none"> • Ability to communicate highly technical content in layman's terms • Ability to construct a business case • Ability to translate technical content into financial terms • Basic math skills • Computer skills • Cost benefit analysis skills • Negotiation skills • Organizational savvy • Presentation skills • Risk analysis skills • Salesmanship 	<ul style="list-style-type: none"> • Accounting system • Bids • Budgeting software • Business plan • Calculator • Competitor's and other market data • Computer • Consumer Price Index and other financial information • Cost database • Forecasting software and/or system • Historical data • Leases • Life cycle plan • Projected capital plan • Real estate property tax information • Subject matter experts and consultants
b	Forecast future needs			
c	Inspect the property for repairs and improvements			
d	Clarify needs versus wants			
e	Identify areas for reduction (cost cutting)			
f	Identify cost savings/cost avoidance			
g	Prioritize funding requirements			
h	Advocate for facility funding			
i	Identify risks for failure to fund			
j	Create estimates for cost of doing work internally			
k	Identify risks of deferred maintenance			
l	Determine ROI			
m	Prioritize capital projects			
n	Identify alternative revenue sources			
o	Identify cost of funding			
p	Identify alternative funding sources			
q	Create the facility budget			
r	Submit the facility budget for approval			
s	Defend the facility budget			

Table 7 (Continued): DACUM Chart for Facility Managers

	Duties, Tasks, and Steps	Specialized Knowledge	Skills and Abilities	Tools, Equipment, and Resources
E	Managing Facility Finances			
2	Administer the Budget			
a	Identify areas for reduction (cost cutting)	<ul style="list-style-type: none"> • Accounting principles • Audit requirements • Best industry practices • Budgeting processes • Building services/operations • Building systems • Contract administration/manage ment • Finance principles • Financial analyses/reconciliation • GAAP • Internal financial policies • Lease escalation clauses • Market knowledge • Processes for challenging invoices • Procurement processes • Real estate tax structures • SOX requirements • Supply chain 	<ul style="list-style-type: none"> • Analytical skills • Basic math skills • Critical thinking skills • Detail-oriented • Financial accounting skills • Negotiation skills • Organizational skills • Presentation skills • Written and verbal communication skills 	<ul style="list-style-type: none"> • Accounting software • Budgeting software • Computer • Current financial information • Facility budget • Industry costs • Leases • Price sheets
b	Identify sources of supply			
c	Administer the operating budget			
d	Report on financial variances			
e	Approve invoices/expenditures			
f	Collect facility revenue			
g	Administer charge-backs			
h	Revise financial projections			
i	Prepare financial reconciliations			
j	Compare finances to benchmarks			
k	Challenge real estate taxes			
l	Conduct periodic financial reviews			
m	Validate facility costs			
n	Approve facility contracts			
o	Conduct monthly financial reporting			
p	Manage internal spend re-allocations			
q	Prepare operating expense escalation statements			
r	Prepare regular accruals			

Table 7 (Continued): DACUM Chart for Facility Managers

	Duties, Tasks, and Steps	Specialized Knowledge	Skills and Abilities	Tools, Equipment, and Resources
E	Managing Facility Finances			
3	Reconcile the Budget			
a	Document life cycle savings	<ul style="list-style-type: none"> • Basic accounting principles/systems • Basic principles of finance • Building services/operations • Building systems • Life cycle analysis processes 	<ul style="list-style-type: none"> • Basic math skills • Political savvy • Presentation skills • Written and verbal communication skills 	<ul style="list-style-type: none"> • Analytical data • Benchmark data • Budget • Computer • Forecasting data • Subject matter experts and consultants
b	Identify areas for reduction (cost cutting)			
c	Prepare financial reconciliations			
d	Revise financial projections			
e	Validate facility costs			
f	Prepare accruals			
g	Prepare year-end presentation			
h	Assess financial performance			
i	Prepare annual report			
j	Manage the year-end audit process			
k	Explain year-end variances			
l	Close out the financial year			
m	Develop new budgets from results of existing year			
n	Reconcile budget KPIs			
F	Conducting Strategic Planning Activities			
1	Gather Reference Information for Strategic Planning			
a	Determine corporate strategy	<ul style="list-style-type: none"> • Core business industry • Corporate core values and mission statements • Corporate vision • Economics • Life cycle analysis processes • Market data and indicators 	<ul style="list-style-type: none"> • Analytical skills • Basic math skills • Big picture thinking skills • Forecasting skills • Researching skills 	<ul style="list-style-type: none"> • Business plan • Historical data • Market information • Organizational data • Projections • Reference information
b	Review macro-economic indicators			
c	Review outsourcing versus insourcing models			
d	Conduct life cycle analyses			
e	Perform hedging on utility costs			
f	Forecast future needs			
g	Forecast future obsolescence			
h	Review new technologies			

Table 7 (Continued): DACUM Chart for Facility Managers

	Duties, Tasks, and Steps	Specialized Knowledge	Skills and Abilities	Tools, Equipment, and Resources
F	Conducting Strategic Planning Activities			
2	Implement Strategic Plan			
a	Recommend new work tools (IT, equipment, etc.)	<ul style="list-style-type: none"> • Accounting principles • Budgeting processes • Building services/operations • Building systems • Capital planning • Finance principles • Globalization impact on workforce/business • Infrastructure required to support new work tools • Market conditions and trends • Organizational vision, mission, core values • Purposes of strategic plans • Space planning principles • Strategic plan development 	<ul style="list-style-type: none"> • Ability to obtain buy-in • Analytical skills • Financial skills • Forecasting skills • Marketing skills • Persuasive • Trend analysis skills • Written and verbal communication skills 	<ul style="list-style-type: none"> • Access to the strategic planning process • Computer • Reference materials
b	Recommend new business lines			
c	Project new technologies, trends, opportunities and threats			
d	Align facility strategy with corporate strategy			
e	Develop property positioning for space marketing			
f	Develop a space needs plan			
g	Develop a five- and ten-year capital plan			
h	Develop a facilities master plan			
i	Communicate the strategic plan			
j	Align budget with strategic plan			
k	Project personnel space needs			
l	Develop a succession plan			
m	Plan for trends and changes			

Table 7 (Continued): DACUM Chart for Facility Managers

	Duties, Tasks, and Steps	Specialized Knowledge	Skills and Abilities	Tools, Equipment, and Resources
G	Managing Facility Assets			
1	Acquire Facility Assets (real property and other assets)			
a	Conduct site feasibility analysis	<ul style="list-style-type: none"> • Basic real estate law • Building services/operations • Building systems • Business growth or contraction forecasts • Capital sources and funding basis • Contract law • Economics • Financial analyses/reconciliation • Lease terminology • Leases/lease obligations • Market knowledge • Organizational needs and priorities • Procurement processes • Space planning principles 	<ul style="list-style-type: none"> • Ability to create and evaluate contracts • Analytical skills • Basic math skills • Financial modeling skills • Negotiation skills • Planning skills • Spatial analysis ability (ability to determine amount of space that will be required for people) • Written and verbal communication skills 	<ul style="list-style-type: none"> • Availability of funding incentives • Computer • Market data and indicators • Organizational plans • Subject matter experts and consultants • Urban planning data
b	Select site			
c	Buy real estate			
d	Acquire assets			
e	Develop a space utilization plan			
f	Conduct asset life cycle analyses			
g	Evaluate the master portfolio plan			
h	Evaluate the facility plan			
i	Conduct due diligence			
j	Conduct RFPs, negotiations, etc.			
k	Identify organizational need			
l	Identify vendor/supplier for asset			
m	Justify costs of asset			
n	Evaluate options (purchase vs. lease; suppliers/brands/sites; etc.)			
o	Decide on purchase			
p	Conduct market research			
q	Coordinate the external facility lease process (locate properties to lease)			
r	Create and execute leases			

Table 7 (Continued): DACUM Chart for Facility Managers

	Duties, Tasks, and Steps	Specialized Knowledge	Skills and Abilities	Tools, Equipment, and Resources
G	Managing Facility Assets			
2	Optimize Facility Assets			
a	Conduct space management activities	<ul style="list-style-type: none"> • Accounting principles • Building services/operations • Building systems • Building technologies • Finance principles • MAC knowledge • Market data and indicators • Organizational objectives • Real estate knowledge/principles • Space management principles • Zoning and permitting requirements 	<ul style="list-style-type: none"> • Analytical skills • Basic math skills • Critical thinking skills • Negotiation skills • Organizational skills • Planning skills • Political savvy • Presentation skills • Written and verbal communication skills 	<ul style="list-style-type: none"> • Computer • Depreciation schedules • Drawings and floor plans • Engineering reports • Historical data • Inspection equipment • Leases • Market data • Real estate broker • Reference materials • Spend data/budgets • Subject matter experts and consultants • The organization's plan
b	Conduct space planning activities			
c	Allocate facility space			
d	Manage furniture, fixtures, and equipment			
e	Maintain the master facility plan			
f	Manage the churn rate			
g	Inspect the facility assets			
h	Monitor the financial performance of assets			
i	Evaluate the feasibility of decommissioning inefficient space			
k	Evaluate rental rates			
l	Conduct market analyses			
m	Evaluate alternative methods for energy efficiency			
n	Evaluate total cost of ownership			
o	Evaluate rental terms			
p	Analyze depreciation			
q	Evaluate ways to reduce costs and/or increase revenue			
r	Coordinate the internal facility lease process (locate tenants to lease space)			
s	Identify broker to market space			

Table 7 (Continued): DACUM Chart for Facility Managers

	Duties, Tasks, and Steps	Specialized Knowledge	Skills and Abilities	Tools, Equipment, and Resources
G	Managing Facility Assets			
3	Dispose of Assets (property, fixtures, etc.)			
a	Sell real estate	<ul style="list-style-type: none"> • Accounting principles • Building services/operations • Building systems • Business strategy • Finance principles • Market knowledge • Organizational strategy • Real estate knowledge/principles 	<ul style="list-style-type: none"> • Analytical skills • Basic math skills • Facilitation skills • Financial accounting skills • Marketing skills • Negotiation skills • Written and verbal communication skills 	<ul style="list-style-type: none"> • Asset inventory tools • Computer • Contracts • Depreciation schedules • Financial data • Historical data • Leases • Leasing laws • Life cycle analyses • Market data and indicators • Real estate laws • Regulatory requirements • Zoning information
b	Sell other assets (FFE)			
c	Market the asset			
d	Identify expert to dispose of asset (Broker, vendor, furniture company representative, etc.)			
e	Establish the value of asset			
f	Identify market comparables			
g	Write asset off books			
h	Identify potential buyers			
i	Adjust asset tables			
j	Inventory assets			
k	Determine sell versus donate			
l	Evaluate the asset			

Table 7 (Continued): DACUM Chart for Facility Managers

	Duties, Tasks, and Steps	Specialized Knowledge	Skills and Abilities	Tools, Equipment, and Resources
H	Managing Facility Resources			
1	Manage Administrative Resources			
a	Obtain administrative resources	<ul style="list-style-type: none"> • Basic document management • Document retention policies • MSDS • Reporting requirements 	<ul style="list-style-type: none"> • Database management skills • Organizational skills 	<ul style="list-style-type: none"> • Computer • Database • Document protection systems • Storage equipment • Storage space (onsite, offsite)
b	Prepare document retention policy/procedures			
c	Document procedures and processes			
d	Maintain facility documents			
e	Manage legacy programs			
f	Manage document filing and storage systems (electronic and paper)			
g	Managing reporting processes			
h	Dispose of documents			
2	Manage Equipment, Tools, and Supplies			
a	Manage materials and supplies	<ul style="list-style-type: none"> • Building services/operations • Building systems • CSP (critical spare parts) program • Insurance regulations • Inventory management • MSDS • Par levels (acceptable levels of stock) • Vendor and suppliers 	<ul style="list-style-type: none"> • Computer skills • Detail-oriented • Organizational skills 	<ul style="list-style-type: none"> • Computer • Database • Inventory management tools • List of suppliers and vendors • Productivity software • Storage space
b	Manage spares inventory			
c	Manage maintenance tools			
d	Manage technology tools/equipment			
e	Manage internal communication tools/equipment			
f	Manage external communication tools/equipment			
g	Manage uniform program			

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