



# **ComputerMinds.com**

## **WORK PROCESS SCHEDULE**

**AND**

## **RELATED INSTRUCTION OUTLINE**

### **Cost breakdown for Related Instruction**

Registration	\$100.00
Tuition	\$8895.00
Books & Supplies	\$1500.00
Other – Certification exams	\$1500.00
Total	\$11995.00



## Appendix A

### **WORK PROCESS SCHEDULE** **OCCUPATIONAL TITLE: Information Technology Project Manager** **O\*NET-SOC CODE: 11-3021.00 RAPIDS CODE: 1048CB**

This schedule is attached to and a part of these Standards for the above identified occupation.

#### **1. TYPE OF OCCUPATION**

Time-based       Competency-based       Hybrid

#### **2. TERM OF APPRENTICESHIP**

The term of the occupation is competency based training supplemented by and 216 hours of related instruction.

#### **3. RATIO OF APPRENTICES TO JOURNEYWORKERS**

The apprentice to Mentor ratio is: 3 Apprentices to 1 Mentor.

#### **4. APPRENTICE WAGE SCHEDULE**

Apprentices shall be paid a progressively increasing schedule of wages based on a dollar amount of the Mentor wage rate, which is \$25.00 per hour.

**Term:**

**Unpaid related instruction training (front- loaded)**

1 <sup>st</sup>	\$8.34 to \$15.00 (6 months)
2 <sup>nd</sup>	\$15.00 to \$18.00 (6 months)

#### **5. WORK PROCESS SCHEDULE (See attached Work Process Schedule)**

#### **6. RELATED INSTRUCTION OUTLINE (See attached Related Instruction Outline)**



## Appendix A

### WORK PROCESS SCHEDULE OCCUPATIONAL TITLE: Information Technology Project Manager O\*NET-SOC CODE: 11-3021.00 RAPIDS CODE: 1048CB

JOB FUNCTION 1: INITIATING PROJECTS			
Competencies	Core or Optional	RI	OJL
A. <b>Perform project assessment based upon available information, lessons learned from previous projects, and meetings with relevant stakeholders in order to support the evaluation of the feasibility of new products or services within the given assumptions and/or constraints.</b>	Core		
B. <b>Identify key deliverables based on the business requirements in order to manage customer expectations and direct the achievement of project goals.</b>	Core		
C. <b>Perform stakeholder analysis using appropriate tools and techniques in order to align expectations and gain support for the project.</b>	Core		
D. <b>Identify high level risks, assumptions, and constraints based on the current environment, organizational factors, historical data, and expert judgment, in order to propose an implementation strategy.</b>	Core		
E. Participate in the development of the project charter by compiling and analyzing gathered information in order to ensure project stakeholders are in agreement on its elements	Core		
F. Obtain project charter approval from the sponsor, in order to formalize the authority assigned to the project manager and gain commitment and acceptance for the project.	Core		
G. Conduct benefit analysis with relevant stakeholders to validate project alignment with organizational strategy and expected business value.	Core		
H. Inform stakeholders of the approved project charter to ensure common understanding of the key deliverables, milestones, and their roles and responsibilities.	Core		
Knowledge and Skills:	Core		



Analytical skills, Benefit analysis techniques, Elements of a project charter, Estimation tools and techniques, Strategic management			
<b>JOB FUNCTION 2 - PLANNING PROJECTS</b>			
<b>Competencies</b>	<b>Core or Optional</b>	<b>OJL</b>	<b>RI</b>
<b>A. Review and assess detailed project requirements, constraints, and assumptions with stakeholders based on the project charter, lessons learned, and by using requirement gathering techniques.</b>	Core		
<b>B. Develop a scope management plan, based on the approved project scope and using scope management techniques.</b>	Core		
<b>C. Develop the cost management plan based on the project scope, schedule, resources, approved project charter and other information, using estimating techniques</b>	Core		
<b>D. Develop the project schedule based on the approved project deliverables and milestones, scope, and resource management plans</b>	Core		
<b>E. Develop the human resource management plan by defining the roles and responsibilities of the project team members in order to create a project organizational structure and provide guidance regarding how resources will be assigned and managed.</b>	Core		
<b>F. Develop the communications management plan based on the project organizational structure and stakeholder requirements</b>	Core		
<b>G. Develop the procurement management plan based on the project scope, budget, and schedule.</b>			
<b>H. Develop the quality management plan and define the quality standards for the project and its products, based on the project scope, risks, and requirements.</b>			
<b>I. Develop the change management plan by defining how changes will be addressed and controlled.</b>			
<b>J. Plan for risk management by developing a risk management plan; identifying, analyzing, and prioritizing project risk; creating the risk</b>			



register; and defining risk response strategies.			
<b>K. Present the project management plan to the relevant stakeholders according to applicable policies and procedures.</b>			
<b>L. Conduct kick-off meeting, communicating the start of the project, key milestones, and other relevant information in order to inform and engage stakeholders and gain commitment.</b>			
<b>M. Develop the stakeholder management plan by analyzing needs, interests, and potential impact in order to effectively manage stakeholders' expectations and engage them in project decisions.</b>			
<b>Knowledge and Skills:</b>  <b>Change management planning,</b>  <b>Cost management planning, including project budgeting tools and techniques,</b> <b>Communications planning</b>  <b>Contract types and selection criteria Estimation tools and techniques</b>  <b>Human resource planning</b>  <b>Lean and efficiency principles</b>  <b>Procurement planning</b>  <b>Quality management planning</b>  <b>Requirements gathering techniques</b>  <b>Regulatory and environmental impacts assessment planning</b>  <b>Risk management planning</b>  <b>Scope deconstruction</b>  <b>Scope management planning Stakeholder management planning</b>  <b>Time management planning, including scheduling tools and techniques</b>  <b>Workflow diagramming techniques</b>			
<b>JOB FUNCTION 3: EXECUTING PROJECTS</b>			



Competencies	Core or Optional	OJL	RI
A. <b>Acquire and manage project resources by following the human resource and procurement management plans in order to meet project requirements.</b>	Optional		
B. <b>Manage task execution based on the project management plan by leading and developing the project team in order to achieve project deliverables.</b>	Optional		
C. <b>Implement the quality management plan using the appropriate tools and techniques in order to ensure that work is performed in accordance with required quality standards.</b>	Optional		
D. <b>Implement approved changes and corrective actions by following the change management plan in order to meet project requirements</b>	Optional		
E. <b>Implement approved actions by following the risk management plan in order to minimize the impact of the risks and take advantage of opportunities on the project.</b>	Optional		
F. <b>Manage the flow of information by following the communications plan in order to keep stakeholders engaged and informed.</b>	Optional		
G. <b>Maintain stakeholder relationships by following the stakeholder management plan in order to receive continued support and manage expectations</b>	Optional		
<b>Knowledge and Skills:</b> Continuous improvement processes Contract management techniques Elements of a statement of work Interdependencies among project elements Project budgeting tools and techniques Quality standard tools Vendor management techniques			
<b>JOB FUNCTION 4: Monitoring and Controlling Projects</b>			
Competencies	Core	OJL	RI



<p><b>A. Measure project performance using appropriate tools and techniques in order to identify and quantify any variances and corrective actions.</b></p>	Core		
<p><b>B. Manage changes to the project by following the change management plan in order to ensure that project goals remain aligned with business needs</b></p>	Core		
<p><b>C. Verify that project deliverables conform to the quality standards established in the quality management plan by using appropriate tools and techniques to meet project requirements and business needs.</b></p>	Core		
<p><b>D. Monitor and assess risk by determining whether exposure has changed and evaluating the effectiveness of response strategies in order to manage the impact of risks and opportunities on the project.</b></p>	Core		
<p>E. Review the issue log, update if necessary, and determine corrective actions by using appropriate tools and techniques in order to minimize the impact on the project.</p>	Core		
<p>F. Capture, analyze, and manage lessons learned, using lessons learned management techniques in order to enable continuous improvement.</p>	Core		
<p>G. Monitor procurement activities according to the procurement plan in order to verify compliance with project objectives.</p>	Core		
<p>Knowledge and Skills:</p> <p>Performance measurement and tracking techniques (e.g., EV, CPM, PERT, Trend Analysis)</p> <p>Process analysis techniques (e.g., LEAN, Kanban, Six Sigma)</p> <p>Project control limits (e.g., thresholds, tolerance)</p> <p>Project finance principles</p> <p>Project monitoring tools and techniques</p> <p>Project quality best practices and standards (e.g., ISO, BS, CMMI, IEEE)</p> <p>Quality measurement tools (e.g., statistical sampling, control charts, flowcharting, inspection, assessment)</p>	Core		



Risk identification and analysis techniques			
Risk response techniques			
Quality validation and verification techniques			
<b>JOB FUNCTION 5: CLOSING PROJECTS</b>			
<b>Competencies</b>	<b>Core</b>	<b>OJL</b>	<b>RI</b>
<b>A. Obtain final acceptance of the project deliverables from relevant stakeholders in order to confirm that project scope and deliverables were achieved.</b>	Optional		
<b>B. Transfer the ownership of deliverables to the assigned stakeholders in accordance with the project plan in order to facilitate project closure.</b>	Optional		
<b>C. Obtain financial, legal, and administrative closure using generally accepted practices and policies in order to communicate formal project closure and ensure transfer of liability.</b>	Optional		
<b>D. Prepare and share the final project report according to the communications management plan in order to document and convey project performance and assist in project evaluation.</b>	Optional		
<b>E. Collate lessons learned that were documented throughout the project and conduct a comprehensive project review in order to update the organization's knowledge base.</b>	Optional		
<b>F. Archive project documents and materials using generally accepted practices in order to comply with statutory requirements and for potential use in future projects and audits.</b>			
<b>G. Obtain feedback from relevant stakeholders using appropriate tools and techniques and based on the stakeholder management plan in order to evaluate their satisfaction.</b>			
<b>Knowledge and Skills:6</b>  <b>Archiving practices and statutes</b>  <b>Compliance (statute/organization)</b>  <b>Contract closure requirements</b>  <b>Close-out procedures</b>  <b>Feedback techniques</b>			





<b>Performance measurement techniques (KPI and key success factors)</b>  <b>Project review techniques</b>  <b>Transition planning technique</b>			
<b>JOB FUNCTION 6: Assists in maintaining or updating web content and manages user access profiles and authorities</b>			
<b>Competencies</b>	<b>Core</b>	<b>OJL</b>	<b>RI</b>
A. Sets user/author access permissions based on organization's policies	Optional		
B. Uploads new content to organization's website or removes old content as instructed	Optional		
C. Tests functionality of links embedded in the website	Optional		
D. Notifies appropriate person if incorrect, outdated or otherwise problematic content is identified	Optional		
E. Notifies appropriate person if website is not functioning properly	Optional		



## Appendix A

**RELATED INSTRUCTION OUTLINE**  
**OCCUPATIONAL TITLE: Information Technology Project Manager**  
**O\*NET-SOC CODE: 11-3021.00 RAPIDS CODE: 1048CB**

<b>Main topics or lessons</b>	<b>80 Hours</b>
<p><b>1.0 Network architecture</b> -Explain the functions and applications of various network devices. Compare and contrast the use of networking services and applications, Install and configure the following networking services/applications, Explain the characteristics and benefits of various WAN technologies,</p> <p>Install and properly terminate various cable types and connectors using appropriate tools, Differentiate between common network topologies., Differentiate between network infrastructure implementations</p>	
<p><b>2.0 Network Operations</b> – Given a scenario, use appropriate monitoring tools. Given a scenario, analyze metrics and reports from monitoring and tracking performance tools. Given a scenario, use appropriate resources to support configuration management, Explain the importance of implementing network segmentation.</p>	
<p><b>3.0 Network security</b> – Compare and contrast risk related concepts, Compare and contrast common network vulnerabilities and threats, Given a scenario, implement network hardening techniques, Compare and contrast physical security controls, Given a scenario, install and configure a basic firewall.. Explain the purpose of various network access control models</p>	
<p><b>4.0 Troubleshooting</b> – Given a scenario, implement the following network troubleshooting methodology. Given a scenario, analyze and interpret the output of troubleshooting tools. Given a scenario, troubleshoot and resolve common wireless issues, Given a scenario, troubleshoot and resolve common copper cable issues. Given a scenario, troubleshoot and resolve common fiber cable issues. Given a scenario, troubleshoot and resolve common network issue, Given a scenario, troubleshoot and resolve common security issues, Given a scenario, troubleshoot and resolve common WAN issues.</p>	
<p><b>5.0 Industry standards, practices, and network theory</b> – Analyze a scenario and determine the corresponding OSI layer, Explain the basics of network theory and concepts, Given a scenario, deploy the appropriate wireless standard, Given a scenario, deploy the appropriate wired connectivity standard</p>	
<p><b>Exit –Microsoft Networking MTA certification</b></p>	



IT Service Management Training	24 Hours
<p><b>Service Management as a Practice;</b> Best-Practice Approaches and ITIL; Why is ITIL So Successful; Services, Customers, and Stakeholders; Understanding the Concepts of Service Management and IT; Understanding Processes and Functions; Introducing the Service Lifecycle</p>	
<p><b>Understanding Service Strategy;</b> Understanding the Service Strategy Stage; Understanding Key Concepts of Service Strategy</p>	
<p>Service Strategy Processes; Understanding Service Portfolio Management; Understanding the Financial Management Process; Understanding the Business Relationship Management</p>	
<p><b>Understanding Service Design;</b> Understanding the Purpose, Objective, and Scope for Service Design; Describing the Service; Four Key Elements of Service Design; Building the Service; Five Major Aspects of Service Design</p>	
<p><b>Service Level Management;</b> Aligning IT with Business Requirements; The Purpose, Objectives, and Scope of Service Level Management; Capturing Service Level Requirements; Understanding the Service Level Agreement; Monitoring and Improving Service Delivery; Interfacing with Other Service Management Processes</p>	
<p><b>The Other Service Design Processes;</b> Service Catalog Management; Availability Management; Information Security Management; Supplier Management; Capacity Management; It Service Continuity Management; Design Coordination</p>	
<p><b>Service Design Roles;</b> Roles and Responsibilities in Service Management; Designing Roles Using the RACI Model; Competence and Training</p>	
<p><b>Understanding Service Transition</b> and the Change Management Processes; Understanding Service Transition; Introduction to the Change Management Process</p>	
<p><b>Service Transition Processes;</b> Transition Planning and Support; Service Asset and Configuration Management; Knowledge Management; Release and Deployment Management</p>	
<p><b>Delivering the Service;</b> The Service Operation Lifecycle Stage; Understanding the Purpose, Objectives, and Scope of Service Operation; Organizing for Service Operations</p>	
<p><b>The Major Service Operation Processes;</b> Incidents and Problems: Two Key Service Management Concepts; Problem Management; Interfaces</p>	
<p><b>The Other Service Operation Processes;</b> Event Management; Request Fulfillment; Access Management</p>	
<p><b>Understanding Continual Service Improvement;</b> Achieving Continual Service Improvement; The Seven-Step Improvement Process</p>	
<p><b>Exit – ITIL Foundation exam</b></p>	



<b>Agile Scrum Training</b>	<b>24 Hours</b>
Definition of Scrum Scrum Theory	
Scrum Values. The Scrum Team	
The Product Owner The Development Team	
The Scrum Master. Scrum Events	
The Sprint Sprint Planning	
Daily Scrum Sprint Review	
Sprint Retrospective Scrum Artifacts	
Product Backlog Sprint Backlog	
Increment Artifact Transparency	
Definition of “Done” End Note	
<b>Exit – Agile Scrum Master Exam</b>	

<b>Lean Six Sigma Training</b>	<b>24 Hours</b>
<b>DEFINE PHASE</b>  The basics of six sigma, The fundamentals of six sigma, Selecting lean six sigma projects, The lean enterprise	
<b>MEASURE PHASE</b>  Process definition, Basic statistics, Measurement system analysis Process capability	
<b>ANALYZE PHASE</b>  Patterns of variation, Inferential statistics,	



Hypothesis testing Hypothesis testing with normal data	
<b>IMPROVE PHASE</b>  Simple linear regression, Multiple regression analysis	
<b>CONTROL PHASE</b>  Lean controls Statistical process control (spc) Six sigma control plans	
<b>Exit – Lean Six Sigma Green Belt Exam</b>	

<b>Cobit 5 Training</b>	<b>24 Hours</b>
COBIT 5: A Business Framework for the Governance and Management of Enterprise IT Overview of COBIT 5	
Principle 1: Meeting Stakeholder Needs, Introduction COBIT 5 Goals Cascade Step 1. Stakeholder Drivers Influence Stakeholder Needs - Step 2. Stakeholder Needs Cascade to Enterprise Goals - Step 3. Enterprise Goals Cascade to IT-related Goals Step 4. IT-related Goals Cascade to Enabler Goals - Using the COBIT 5 Goals Cascade Benefits of the COBIT 5 Goals Cascade, Using the COBIT 5 Goals Cascade Carefully Using the COBIT 5 Goals Cascade in Practice. Governance and Management Questions on IT, How to Find an Answer to These Questions	
Principle 2: Covering the Enterprise End-to-end, Governance Approach Governance Enablers, Governance Scope, Roles, Activities and Relationships	
Principle 3: Applying a Single Integrated Framework COBIT 5 Framework Integrator	
Principle 4: Enabling a Holistic Approach, COBIT 5 Enablers, Systemic Governance and Management through Interconnected Enablers, COBIT 5 Enabler Dimensions, Enabler Dimensions, Enabler Performance Management, Example of Enablers in Practice	
Principle 5: Separating Governance from Management, Governance and Management, Interactions between Governance and Management  COBIT 5 Process Reference Model	
Implementation Guidance – Introduction, Considering the Enterprise Context  Creating the Appropriate Environment, Recognizing Pain Points and Trigger Events  Enabling Change, A Life Cycle Approach, Getting Started: Making the Business Case	



<p>The COBIT 5 Process Capability Model, Introduction</p> <p>Differences Between the COBIT 4.1 Maturity Model and the COBIT 5 Process Capability Model, Differences in Practice, Benefits of the Changes, Performing Process Capability Assessments in COBIT 5</p>	
<p><b>Exit – Cobit 5 exam</b></p>	

<b>Project Management Training</b>	<b>40 Hours</b>
Session 1: Initiating a Project	
Session 2: Planning Project Work	
Session 3: Developing Project Schedules, Cost Estimates, and Budgets -	
Session 4: Planning Project Quality, Staffing, and Communications	
Session 5: Analyzing Risks and Planning Risk Response	
Session 6: Planning Project Procurement	
Session 7: Executing Project Work	
Session 8: Monitoring and Controlling Project Work	
Session 9: Monitoring and Controlling Project Schedule and Costs	
Session 10: Monitoring and Controlling Project Quality, Staffing, and Communications	
Session 11: Monitoring and Controlling Project Risk and Contracts	
Session 12: Closing the Project	
Session 13: PMP Exam Strategies	
<p><b>Exit – CompTIA Project+ exam or PMI Institute CAPM or PMP exam</b></p>	