

# OTHM LEVEL 7 DIPLOMA IN PROJECT MANAGEMENT

Qualification Number: 603/5638/8

Specification | March 2020

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## **QUALIFICATION OBJECTIVES**

The OTHM Level 7 Diploma Project Management qualification is designed to meet the needs of senior managers responsible for projects and provide a comprehensive understanding of the fundamental topics needed to manage business projects within a complex and everchanging environment.

This qualification will develop a deeper understanding of both theoretical and practical aspects of project, programme and portfolio management and facilitate the essential skills and competences necessary to plan, monitor, control and deliver successful projects, programmes and portfolios.

## **QUALITY, STANDARDS AND RECOGNITIONS**

OTHM Qualifications are approved and regulated by Ofqual (Office of Qualifications and Examinations Regulation). Visit register of <u>Regulated Qualifications</u>.

OTHM has progression arrangements with several UK universities that acknowledges the ability of learners after studying Level 3-7 qualifications to be considered for advanced entry into corresponding degree year/top up and Master's/top-up programmes.

#### REGULATORY INFORMATION

Qualification Title	OTHM Level 7 Diploma in Project Management
Qualification Ref. Number	603/5638/8
Regulation Start Date	17/03/2020
Operational Start Date	20/03/2020
Duration	1 Year
Total Credit Value	120 Credits
Total Qualification Time (TQT)	1200 Hours
Guided Leaning Hours (GLH)	480 Hours
Sector Subject Area (SSA)	15.3 Business Management
Overall Grading Type	Pass / Fail
Assessment Methods	Coursework
Language of Assessment	English

## **EQUIVALENCES**

The OTHM Level 7 diplomas on the Regulated Qualifications Framework (RQF) are at the same level as master's degrees. However, they are shorter (120 credits), and learners will have to proceed to the dissertation stage (60 credits) with university to achieve a full masters programme.

## **QUALIFICATION STRUCTURE**

The OTHM Level 7 Diploma in Project Management qualification consists of 5 mandatory units for a combined total of 120 credits, 1200 Hours Total Qualification Time (TQT) and 480 Guided Learning Hours (GLH) for the completed qualification.

Unit Ref. No.	Unit title	Credit	ECTS	GLH	TQT
F/618/0223	Planning, Controlling and Leading a Project	30	15	120	300
R/618/0226	Procurement Risk and Contract Management	30	15	120	300
H/618/0229	Advanced Project and Logistics Management	20	10	80	200
K/618/0233	Operations and Information Management for	20	10	80	200
	Project Managers				
A/618/0236	Advanced Research Methods	20	10	80	200

#### **DEFINITIONS**

**Total Qualification Time (TQT)** is the number of notional Hours which represents an estimate of the total amount of time that could reasonably be expected to be required in order for a learner to achieve and demonstrate the achievement of the level of attainment necessary for the award of a qualification.

Total Qualification Time is comprised of the following two elements –

- a) the number of Hours which an awarding organisation has assigned to a qualification for Guided Learning, and
- b) an estimate of the number of Hours a Learner will reasonably be likely to spend in preparation, study or any other form of participation in education or training, including assessment, which takes place as directed by but, unlike Guided Learning, not under the Immediate Guidance or Supervision of a lecturer, supervisor, tutor or other appropriate provider of education or training.

(Ofqual 15/5775 September 2015)

**Guided Learning Hours (GLH)** are defined as the Hours that a teacher, lecturer or other member of staff is available to provide immediate teaching support or supervision to a student working towards a qualification.

**Credit value** is defined as being the number of credits that may be awarded to al learner for the successful achievement of the learning outcomes of a unit. One credit is equal to 10 Hours of TQT.

## **ENTRY REQUIREMENTS**

Learner should possess an undergraduate degree (or equivalent qualification at level 6). The degree can be in any subject, although we may give preference to learners with knowledge of relevant areas include business studies, economics, events management, and operations research. However, learners with qualifications in other disciplines, such as engineering, IT, environmental sciences, the humanities and languages are also encouraged to apply. Alternative professional qualifications with at least three years' relevant professional experience will also be considered.

**English requirements:** If a learner is not from a majority English-speaking country, they must provide evidence of English language competency. For more information visit <u>English Language Expectations</u> page.

#### **PROGRESSION**

Successful completion of the OTHM Level 7 Diploma in Project Management qualification enables learners to progress into or within employment and/or continue their study towards a relevant master top-up programme with advanced standing at many universities in the UK and overseas. For more information visit University Progressions page.

## **DELIVERY OF OTHM QUALIFICATIONS**

OTHM do not specify the mode of delivery for its qualifications, therefore OTHM Centres are free to deliver this qualification using any mode of delivery that meets the needs of their Learners. However, OTHM Centres should consider the Learners' complete learning experience when designing the delivery of programmes.

OTHM Centres must ensure that the chosen mode of delivery does not unlawfully or unfairly discriminate, whether directly or indirectly, and that equality of opportunity is promoted. Where it is reasonable and practicable to do so, it will take steps to address identified inequalities or barriers that may arise.

Guided Learning Hours (GLH) which are listed in each unit gives the Centres the number of Hours of teacher-supervised or direct study time likely to be required to teach that unit.

## ASSESSMENT AND VERIFICATION

All units within this qualification are internally assessed by the centre and externally verified by OTHM. The qualifications are criterion referenced, based on the achievement of all the specified learning outcomes.

To achieve a 'pass' for a unit, learners must provide evidence to demonstrate that they have fulfilled all the learning outcomes and meet the standards specified by all assessment criteria. Judgement that the learners have successfully fulfilled the assessment criteria is made by the Assessor.

The Assessor should provide an audit trail showing how the judgement of the learners' overall achievement has been arrived at.

Specific assessment guidance and relevant marking criteria for each unit are made available in the Assignment Brief document. These are made available to centres immediately after registration of one or more learners.

## **OPPORTUNITIES FOR LEARNERS TO PASS**

Centres are responsible for managing learners who have not achieved a Pass for the qualification having completed the assessment. However, OTHM expects at a minimum, that centres must have in place a clear feedback mechanism to learners by which they can effectively retrain the learner in all the areas required before re-assessing the learner.

#### RECOGNITION OF PRIOR LEARNING AND ACHIEVEMENT

Recognition of Prior Learning (RPL) is a method of assessment that considers whether learners can demonstrate that they can meet the assessment requirements for a unit

through knowledge, understanding or skills they already possess and do not need to develop through a course of learning.

RPL policies and procedures have been developed over time, which has led to the use of a number of terms to describe the process. Among the most common are:

- Accreditation of Prior Learning (APL)
- Accreditation of Prior Experiential Learning (APEL)
- Accreditation of Prior Achievement (APA)
- Accreditation of Prior Learning and Achievement (APLA)

All evidence must be evaluated with reference to the stipulated learning outcomes and assessment criteria against the respective unit(s). The assessor must be satisfied that the evidence produced by the learner meets the assessment standard established by the learning outcome and its related assessment criteria at that particular level.

Most often RPL will be used for units. It is not acceptable to claim for an entire qualification through RPL. Where evidence is assessed to be only sufficient to cover one or more learning outcomes, or to partly meet the need of a learning outcome, then additional assessment methods should be used to generate sufficient evidence to be able to award the learning outcome(s) for the whole unit. This may include a combination of units where applicable.

#### **EQUALITY AND DIVERSITY**

OTHM provides equality and diversity training to staff and consultants. This makes clear that staff and consultants must comply with the requirements of the Equality Act 2010, and all other related equality and diversity legislation, in relation to our qualifications.

We develop and revise our qualifications to avoid, where possible, any feature that might disadvantage learners because of their age, disability, gender, pregnancy or maternity, race, religion or belief, and sexual orientation.

If a specific qualification requires a feature that might disadvantage a particular group (e.g. a legal requirement regarding health and safety in the workplace), we will clarify this explicitly in the qualification specification.

# **UNIT SPECIFICATIONS**

# Planning, Controlling and Leading a Project

Unit Reference Number	F/618/0223
Unit Title	Planning, Controlling and Leading a Project
Unit Level	7
Number of Credits	30
Total Qualification Time (TQT)	300 Hours
Guided Learning Hours (GLH)	120 Hours
Mandatory / Optional	Mandatory
Sector Subject Area (SSA)	15.3 Business Management
Unit Grading Structure	Pass/Fail

#### **Unit Aims**

This unit aims to introduce learners to the realities of developing and managing a project. It will also introduce learners to the challenges of project management practice in the global business arena. It aims to promote thinking critically about project management as complex, process-based cultural systems and as constantly developing with the high performing team efforts. As increasing number of firms have project development and project management activities, understanding the efficient project management is of vital importance. Learners will learn about the roles and responsibilities of a project team members. Various level of management skills will be studied with special focus on success factors, monitoring and control.

## **Learning Outcomes, Assessment Criteria and Indicative Contents**

Learning Outcomes –	Assessment Criteria –	Indicative Contents
the learner will:	the learner can:	
Understand the concepts and principles of project management in business.	<ul> <li>1.1 Examine the role of project management in achieving business objectives.</li> <li>1.2 Explain the application of key concepts and principles of project management in different business environments.</li> <li>1.3 Appraise business objectives in order to determine potential projects.</li> </ul>	Project management: principles; role of the project manager e.g. management of change, understanding of project management system elements and their integration, management of multiple projects; project environment and the impact of external influences on projects; identification of the major project phases (initiate,

		plan, execute, monitor/control, evaluate/close) and why they are required, understanding of the work in each phase; the nature of work in the lifecycles of projects in various industries.  The Product Breakdown Structure (PBS)  Work Breakdown Structure (WBS),  Project Execution Strategy (PES) and the Organisation Breakdown Structure (OBS) e.g. preparation of organisational charts, task responsibility matrix, statement of work (SOW) for project tasks.  Relationship between schedules, OBS and WBS, network techniques, resourcing techniques, computer-based scheduling and resourcing packages, project progress measurement and reporting techniques, staff-Hours earned value and progress 'S' curves, critical path analysis and reporting, milestone trending. C  Cost control: cost breakdown structure e.g. types of project estimate, resources needed, estimating techniques, estimating accuracy, contingency and estimation, bid estimates, whole-life cost estimates, sources of information, cost information sensitivity, computer-based estimating.
Be able to design systems and plans for initiating and managing and leading projects.	<ul> <li>2.1 Examine key leadership and management theories related to project management.</li> <li>2.2 Develop role and responsibilities of the project manager for a project.</li> <li>2.3 Develop a project organogram identifying roles of key project team members.</li> </ul>	<ul> <li>The why, what, how, when, where and by whom of Project Management e.g. contract terms, document distribution schedules, procurement, establishing the baseline for the project.</li> <li>Critical path method, PERT/CPA modelling, quality control and analysis,</li> </ul>

- 2.4 Determine sources of finance available for a project.
- 2.5 Assess the feasibility of a proposed project.
- 2.6 Prepare a detailed project plan with high level estimates of time, resources and costs that meet agreed milestones.
- Total Quality Management (TQM), quality chain, milestone charting
- Team structures: Hierarchical, virtual, functional team, matrix management.
- Roles and responsibilities of Project Manager:
  - o Managing team and stakeholders,
  - o change management,
  - o project environment,
  - o understanding life cycle of projects,
  - setting schedule,
  - o budget and timing,
  - o developing the project plan,
  - managing project risks,
  - o interfaces with other projects,
  - conflict resolution including role of project manager and sponsor,
  - constructive vs. destructive conflicts, compromise, skill complementarities, goal congruence.
- · Long term and short-term sources of funding.
- Share Capital or Equity Shares, Preference
  Capital or Preference Shares, Trade Credit,
  Preference Capital or Preference Shares, Bonds,
  Factoring Services, Retained Earnings or Internal
  Accruals, Lease Finance, Bill Discounting etc.,
  Bonds, Hire Purchase Finance, Advances
  received from customers, Term Loans from
  Financial Institutes, Government, and Commercial
  Banks, Medium Term Loans from Financial
  Institutes, Government, and Commercial Banks,

		<ul> <li>Short Term Loans like Working Capital Loans from Commercial Banks, Venture Funding, Fixed Deposits (&lt;1 Year), Asset Securitization, Receivables and Payables</li> <li>International Financing by way of Euro Issue, Foreign Currency Loans, ADR, GDR etc.</li> <li>Project methodology: Traditional approach, critical change approach, event change approach or proprietary/ formalised approaches, for example PRINCE, AGILE.</li> <li>Feasibility: Risk Management; identifying risk, impact analysis, risk management/planning, review cost-benefit and risk equation for projects. Consider other issues impacting on project e.g. issues of globalisation (advantages and disadvantages of cross-country/culture projects).</li> </ul>
3. Be able to evaluate the effectiveness of communication within a project management team.  The state of the effectiveness of communication within a project management team.	<ul> <li>3.1 Explain the key contents of a project communication plan.</li> <li>3.2 Evaluate the benefits of a project communication plan to stakeholders of a project.</li> <li>3.3 Analyse the factors that can affect communication during a project's life span.</li> </ul>	<ul> <li>Communication plan:         <ul> <li>Identify the Audience: To WHOM do we need to communicate?</li> <li>Determine Goals and Objectives: WHY communicate?</li> <li>Develop Key Messages: WHAT do we need to communicate?</li> <li>Develop Tactical Plan: HOW will we communicate, to whom and when?</li> <li>Identify Measures of Evaluation: HOW will we know if we are successful?</li> </ul> </li> <li>Mendelow's Matrix, Expectations, Consistency, Productivity, Outcome</li> <li>Factors:</li> </ul>

4. Be able to design monitoring and controlling mechanisms for a project.	<ul> <li>4.1 Evaluate risk factors that may impede completion of a project.</li> <li>4.2 Design systems and measures to monitor and appraise the status and progress of a project.</li> <li>4.3 Develop contingency plans to help mitigate potential delays in the progress of a project.</li> </ul>	<ul> <li>Cultural Diversity.</li> <li>Misunderstanding of Message.</li> <li>Emotional Difference.</li> <li>Past Experiences.</li> <li>Educational and Intellectual Difference.</li> <li>Group Affiliations.</li> <li>Positional Differences among the Personnel.</li> <li>Functional Relationship between Sender and Receiver.</li> <li>Project creep, gaps in the scope or accountability of the project, changing dependencies (other projects, business conditions etc.), delays, planning errors, skills or other resource deficits.</li> <li>Financial constraints, lack of decision making, lack of ownership for the project, communication failures, 'meaningless' plan without buy-in, changes to project team, priority changes within the organisation, Project monitoring.</li> <li>Status and plan documentation and regular monitoring meetings, performance management against targets, defining responsibilities and accountability, communications, traceability, audit trails, formalised frameworks and stages, contingency planning.</li> </ul>
5. Understand how to close and review the completion of a project.	<ul><li>5.1 Explain the closing stages of a project.</li><li>5.2 Assess the importance of project evaluation.</li></ul>	Relationship between schedules, OBS and WBS, network techniques, resourcing techniques, computer-based scheduling and resourcing packages, project progress measurement and reporting techniques, staff-Hours earned value

	<ul> <li>and progress 'S' curves, critical path analysis and reporting, milestone trending. Cost control: cost breakdown structure e.g. types of project estimate, resources needed, estimating techniques, estimating accuracy, contingency and estimation, bid estimates, whole-life cost estimates, sources of information, cost information sensitivity, computer-based estimating.</li> <li>Analysis of results and planned procedures; use of appropriate evaluation techniques; application of project evaluation and review techniques (PERT); opportunities for further studies and developments, use of appropriate techniques to justify project progress and outcomes in terms of the original agreed project specification</li> </ul>
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To achieve a 'pass' for this unit, learners must provide evidence to demonstrate that they have fulfilled all the learning outcomes and met the standards specified by all assessment criteria.

Learning Outcomes to be met	Assessment criteria to be covered	Type of assessment	Word count (approx. length)
All 1 to 5	All under LO 1 to LO 5	Coursework	4000 words

## **Indicative reading list**

Kerzner, H. (2017). *Project Management: a systems approach to planning, scheduling, and controlling*. Hoboken, New Jersey: John Wiley & Sons, Inc.

Burke, R. (2013). Project Management: planning and control techniques. Hoboken, N.J.: Wiley; Chichester.

Meredith, J.R., Shafer, S.M. and Mantel, S.J. (2019). Project Management: a managerial approach. Milton Qld: John Wiley & Sons Australia, Ltd.

# **Procurement Risk and Contract Management**

Unit Reference Number	R/618/0226
Unit Title	Procurement Risk and Contract Management
Unit Level	7
Number of Credits	30
Total Qualification Time (TQT)	300 Hours
Guided Learning Hours (GLH)	120 Hours
Mandatory / Optional	Mandatory
Sector Subject Area (SSA)	15.3 Business Management
Unit Grading Structure	Pass/Fail

#### **Unit Aims**

The aim of the unit is to enable the student to understand the core concepts of procurement along with the importance of identifying and managing risks related to procurement and contract management. The learners will also develop a critical understanding of various legislative frameworks important for procurement and consider frameworks for risk assessment in the procurement context.

## **Learning Outcomes, Assessment Criteria and Indicative Contents**

Learning Outcomes – the learner will:	Assessment Criteria – the learner can:	Indicative Contents
Understand the core concepts of procurement and contract management.	1.1 Define procurement and contract management.  1.2 Examine the principles of procurement and contract management as applied to a large multinational organisation.  1.3 Evaluate the importance of sustainable procurement.	<ul> <li>Procurement &amp; sourcing methods, inventory management, distribution facility, structural changes, definition by CIPS.</li> <li>Procurement cycle support wider social, economic and environmental objectives.</li> <li>Contract Management: Standardised Processes and Procedures, Spend, Visibility, Improved Compliance, Solid Foundation for Spend and Performance Analysis, Rebate Management, Reduced Maverick Spending, Evergreen</li> </ul>

environment and legislation.  private sector.  2.2 Critically assess the role of European Union in procurement.  (Logically assess the role of European Union in procurement.  2.3 Evaluate the importance of establishing of Free Contract Procedure Rules' and applying of GE	e Public Service (Social Value) Act
Relevant f     EU Conso Remedies Regulation No. 102), by the Eurent Conduction     Competition research a criteria     Invitations submission tenders/qu     Clarification negotiation     Award of connections of income-generation income-gener	redom of Information Act 2000 PR 2019 cal Government Act 2000, Part 1 rameworks in own country idated Public Procurement Directive, Directive, Public Contracts as 2015 (Statutory Instrument 2015 Court action or enforcement action opean Union. g purchase and disposal in requirements, pre-tender market and consultation, contract award to tender/quotations, shortlisting, in, receipt and opening of

		questionnaire (PQQ)
Understand the management of procurement operations.	<ul> <li>3.1 Discuss the key principles and application of category management.</li> <li>3.2 Critically assess the impact of technology on procurement operations.</li> <li>3.3 Examine the use of electronic promotion of contract opportunities and electronic tendering.</li> <li>3.4 Explain the various risks associated with etendering.</li> </ul>	<ul> <li>Category Management: Strategic, Bottleneck, Routine, Leverage</li> <li>Electronic procurement: Public Services Network (PSN), Procure to Pay (P2P), Enterprise Resource, Planning system (ERP).</li> <li>E-Sourcing / e-Tendering: Electronic reverse auctions, Electronic marketplace, Purchase cards, Request for information, Request for proposal, Request for quotation, RFx (the previous three together), and eRFx (software for managing RFx projects), System for Acquisition Management (SAM).</li> <li>Risks: Micromanagement, Time-Consuming Approval Chains, Supplier Onboarding Problems, Hacking, Data Loss</li> </ul>
Understand the risk management process in procurement and contract management.	<ul><li>4.1 Evaluate the risk management factors that impact on procurement and contract management.</li><li>4.2 Evaluate frameworks of risk assessment in relation to procurement.</li></ul>	<ul> <li>Risk and Issue Register, Risk Probability Framework, Scoring Impact, Scoring Probability, Sources of Risk, Risk Control</li> <li>Procurement Cycle Risks, Measuring risk against expenditure type risk and cost, Procurement Risk Register, Prioritisation of Risk Matrix</li> </ul>

To achieve a 'pass' for this unit, learners must provide evidence to demonstrate that they have fulfilled all the learning outcomes and met the standards specified by all assessment criteria.

Learning Outcomes to be met	Assessment criteria to be covered	Type of assessment	Word count (approx. length)
All 1 to 4	All under LO 1 to LO 4	Report	4000 words

## **Indicative reading list**

Carter, R., Kirby, S. and Oxenbury, A. (2012). Practical contract management. Cambridge: Cambridge Academic.

Crocker, B., Baily, P.J.H., Farmer, D. and Jessop, D. (2015). *Procurement principles and management*. Harlow, United Kingdom: Pearson Education.

Lysons, K. and Farrington, B. (2016). Procurement and supply chain management. Boston: Pearson.

# **Advanced Project and Logistics Management**

Unit Reference Number	H/618/0229
Unit Title	Advanced Project and Logistics Management
Unit Level	7
Number of Credits	20
Total Qualification Time (TQT)	200 Hours
Guided Learning Hours (GLH)	80 Hours
Mandatory / Optional	Mandatory
Sector Subject Area (SSA)	15.3 Business Management
Unit Grading Structure	Pass/Fail

#### **Unit Aims**

The aim of this unit is to allow the learner to understand concepts of portfolio management and the associated features. The value of having a Project Management Office will also be examined and the stages of establishing and effective project management office will be considered. Learners will also examine the supply chain ecosystem and review IT frameworks appropriate for logistics and supply chain complexities.

## **Learning Outcomes, Assessment Criteria and Indicative Contents**

Learning Outcomes – the learner will:	Assessment Criteria – the learner can:	Indicative Contents
Understand the features and aims of project, program and portfolio management.	<ul> <li>1.1 Compare the features and aims of programme management with project management.</li> <li>1.2 Define the principles of portfolio management.</li> <li>1.3 Examine the differences between programmes and portfolios.</li> <li>1.4 Evaluate the relation between portfolio management and organisational strategy.</li> <li>1.5 Evaluate the efficacy of various portfolio selection tools and techniques.</li> </ul>	<ul> <li>Cross-project and Multi-disciplined</li> <li>Focal Point for Ownership and Accountability</li> <li>Horizontal Collaboration</li> <li>Strategic in Nature</li> <li>Strategic vs. Tactical</li> <li>Scope of Responsibility</li> <li>Management of Risk</li> <li>Life Cycle Involvement</li> <li>Process Orientation</li> <li>Skills and Capabilities</li> </ul>

		<ul> <li>Process vs. Function</li> <li>Portfolio Management and Organisational Strategy</li> <li>A Portfolio Roadmap</li> <li>Enterprise portfolio management</li> </ul>
		<ul> <li>Single-Criterion Prioritization Model</li> <li>Multiple-Criteria Weighted Ranking Model</li> <li>Multiple-Criteria Scoring Model</li> </ul>
Understand the requirements for implementing a Project Management Office.	<ul> <li>2.1 Critically assess the benefits of the Project Management Office.</li> <li>2.2 Assess the implementation of a levelled Project Management Office structure.</li> <li>2.3 Critically evaluate the stages involved in planning and implementing the Project management Office.</li> <li>2.4 Create a Project Management Office charter for an organisation.</li> </ul>	<ul> <li>Multiple-Criteria Scoring Model</li> <li>Benefits of the Project Management Office.         (PMO)         <ul> <li>Executive management</li> <li>Functional managers</li> <li>Customer and sponsor</li> <li>Project/Program managers</li> <li>Consistent framework for stakeholders</li> </ul> </li> <li>Structure of PMO         <ul> <li>Level 1 PMO – The Project (Process)</li> <li>Control Office</li> <li>Level 2 PMO – The Business Unit Project Office</li> </ul> </li> <li>Functions         <ul> <li>Project Management Competency</li> <li>Project Management Services</li> <li>Project Operations Support</li> </ul> </li> <li>PMO staffing, PMO Charter, Assign the PMO Manager, Integrate Applicable Organisational Policies, Establish Project Manager         <ul> <li>Qualifications, Establish PMO Processes and Procedures, Create a Change Management Plan</li> </ul> </li> </ul>

3. Understand the global supply chain ecosystem.	<ul> <li>3.1 Define what global supply chain ecosystem is.</li> <li>3.2 Explain how to map global supply chain ecosystem.</li> <li>3.3 Explain the use of the ecosystem framework in supply chain analysis.</li> <li>3.4 Examine how modern manufacturing and services are intertwined.</li> </ul>	<ul> <li>Create the PMO Charter         <ul> <li>Formalizes establishment of the PMO</li> <li>Specifies executive-level support and access to executive management</li> <li>Indicates PMO and project manager authority</li> <li>Designates program manager/director as PMO head</li> <li>Identifies resources and budgets</li> <li>Identifies assigned programs/projects</li> <li>Establishes roles and responsibilities</li> <li>Provides internal consulting to project managers</li> </ul> </li> <li>Supply Chain Ecosystem</li> <li>The Ecosystem Elements as Enablers of Globalization</li> <li>Supply Chain De-Verticalization, Modularization, and Outsourcing</li> <li>Organisational modularity</li> <li>Supply chain trends: Modularity and outsourcing</li> <li>De-verticalization of electronics firms, Deverticalization of apparel firms</li> <li>Role of Institutions</li> <li>Economic, regulatory and trade-related innovations, Institutions and supply chains, Resources and Management, Clusters</li> <li>Delivery Infrastructure: Logistics, Communication, IT, and ITeS</li> <li>Logistics Ecosystem Framework</li> <li>Mapping the ecosystem of a supply chain: Auto</li> </ul>
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		<ul> <li>vertical</li> <li>Mapping the ecosystem of a service chain: Inbound logistics</li> <li>GRIP analysis</li> <li>Smartening the players in the industry vertical</li> <li>Ecosystem-based analysis of CEMEX</li> </ul>
4. Understand the role of information technology in logistics and supply chain.   Output  Description:	<ul> <li>4.1 Critically assess the relationship between logistics and information systems.</li> <li>4.2 Define Critical Success Factors (CSF) for IT integration in logistics.</li> <li>4.3 Design a framework to integrate IT into the Total Logistic System.</li> </ul>	Information Logistics (IL), information element (IE), Data logistics  (1) Pre-transaction elements:     Inventory availability     Target delivery dates.  (2) Transaction elements:     Order status     Order tracing     Back-order status     Shipment shortages     Product substitutions.  (3) Post-transaction elements:     Actual delivery dates     Returns/adjustments.  Examples of CSF may include the following: For inventory availability:     Accurate inventory records     Effective and accurate decision rules for the replenishment decision     Well-functioning order-placing and follow-up system     Effective and loyal supplier base.

For order status and order tracking:  o Accurate on-time updating and reporting information
<ul> <li>Effective well-planned documentation procedures</li> </ul>
procedures.  • Frameworks: The Project Integrate Framework,
Enterprise application integration, ELPIF: E- Logistics Processes Integration Framework Based on Web Services, Resource Integration
Framework of Logistics Resource Grid (LRG).

To achieve a 'pass' for this unit, learners must provide evidence to demonstrate that they have fulfilled all the learning outcomes and met the standards specified by all assessment criteria.

Learning Outcomes to be met	Assessment criteria to be covered	Type of assessment	Word count (approx. length)
All 1 to 4	All under LO 1 to LO 4	Report	4000 words

## Indicative reading list

Ayers, J.B. (2010). Supply chain project management: a structured collaborative and measurable approach. Boca Raton: Crc Press.

Christopher, M. (2011). Logistics & Supply Chain Management. Harlow: Financial Times Prentice Hall.

Cousins, P. (2008). Strategic Supply Management: Principles, Theories and Practice. Harlow: Financial Times Prentice Hall.

Coyle, J.J., Langley Jr., C.J., Gibson, B.J., Novack, R.A. and Bardi, E.J. (2013). *Supply Chain Management: A Logistics Perspective.* 9th Edition., South-Western Aus.: Cengage Learning.

#### OTHM LEVEL 7 DIPLOMA IN PROJECT MANAGEMENT | SPECIFICATION

Mangan, J. and Lalwani, C. (2016).	Global logistics and supply chain management.	Chichester: John Wiley & Sons, Inc.

# **Operations and Information Management for Project Managers**

Unit Reference Number	K/618/0233
Unit Title	Operations and Information Management for Project Managers
Unit Level	7
Number of Credits	20
Total Qualification Time (TQT)	200 Hours
Guided Learning Hours (GLH)	80 Hours
Mandatory / Optional	Mandatory
Sector Subject Area (SSA)	15.3 Business Management
Unit Grading Structure	Pass/Fail

#### **Unit Aims**

The aim of this unit is to develop critical understanding of managing operations and information systems within projects. The interrelationships within functional areas will be examined and the influence of contemporary factors. Learners will explore organisational strategy in relation to capacity to plan for products and consider the value of inventory management using information systems and inventory scheduling.

## **Learning Outcomes, Assessment Criteria and Indicative Contents**

Learning Outcomes –	Assessment Criteria –	Indicative Contents
the learner will:	the learner can:	
1. Understand the role of operations	1.1 Assess the similarities and differences	Differences: Tangibility of Output, Production on
management within a business.	between production and service operations.	Demand, Customer Specific Production, Labour
	1.2 Analyse the three major functional areas of	Requirements and Automated Processes,
	organisations and describe how they	Physical Production Location, Degree of
	interrelate.	customer contact, Uniformity of inputs, Quality
	1.3 Evaluate a range of theories related to	assurance, Inventory, Wages, Ability to patent
	operations management.	Major functional areas: Finance, Operations,
	1.4 Describe the operations function and the	Marketing
	nature of the operations manager's job.	Finance, Operation, Operation, Design of the
	1.5 Evaluate current issues in business that are	product, Forecasting, Supply Chain

impacting operations management.	Configuration, Managing the Quality  Business Process Management (BPM), Business Process Reengineering, Six Sigma, Supply Chain Management  Operations Manager Responsibilities:  Provide leadership.  Make important policy, planning, and strategy decisions.  Develop, implement and review operational policies and procedures.  Assist HR with recruiting.  Help promote a company culture that encourages top performance and high morale.  Oversee budgeting, reporting, planning, and auditing.  Work with senior stakeholders.  Ensure all legal and regulatory documents are filed and monitor compliance with laws and regulations.  Work with the board of directors.  Identify and address problems and opportunities for the company.  Build alliances and partnerships with other organisations.
	• Issues.  o Economic conditions,
	o Innovating,
	<ul> <li>Quality problems,</li> </ul>
	o Risk management,

Understand strategic capacity planning for products and services.	<ul> <li>2.1 Critically assess the importance of capacity planning.</li> <li>2.2 Analyse ways of defining and measuring capacity.</li> <li>2.3 Evaluate the factors to consider when deciding whether to operate in-house or outsource.</li> <li>2.4 Describe the steps that are used to resolve constraint issues.</li> </ul>	<ul> <li>Competing in a global economy,</li> <li>Ethical Conduct.</li> <li>Importance of capacity planning: Employee Skills, Calculate Accurate Workloads, Strategies, Charting the Future.</li> <li>Design capacity, Effective capacity.</li> <li>Available capacity, Expertise, Quality considerations, The nature of demand, Cost, Risks</li> <li>There are seven categories of constraints:         <ul> <li>Market: Insufficient demand.</li> <li>Resource: Too little of one or more resources (e.g., workers, equipment, and space),</li> <li>Material: Too little of one or more materials.</li> <li>Financial: Insufficient funds.</li> <li>Supplier: Unreliable, long lead time, substandard quality.</li> <li>Knowledge or competency: Needed knowledge or skills missing or incomplete.</li> </ul> </li> <li>Policy: Laws or regulations interfere.</li> </ul>
Understand requirements for effective inventory management using information systems.	<ul> <li>3.1 Evaluate the nature and importance of inventories.</li> <li>3.2 Analyse the requirements for effective inventory management.</li> <li>3.3 Evaluate the use of the A-B-C approach to inventory management.</li> <li>3.4 Describe the principles of Economic Order</li> </ul>	<ul> <li>Inventory:         <ul> <li>Raw materials and purchased parts.</li> <li>Partially completed goods, called work-in-process (WIP).</li> <li>Finished-goods inventories (manufacturing firms) or merchandise (retail stores).</li> </ul> </li> </ul>

Quantity (EOQ) model and its assumptions.	<ul> <li>Tools and supplies.</li> </ul>
3.5 Examine the single-period model and its	<ul> <li>Maintenance and repairs (MRO)</li> </ul>
assumptions.	inventory.
	<ul> <li>Goods-in-transit to warehouses,</li> </ul>
	distributors, or customers (pipeline
	inventory).
	Keep track of the inventory, forecast of demand,
	lead times and lead time variability, holding
	costs, ordering costs, and shortage costs,
	classification system for inventory items
	A (very important), B (moderately important), and
	C (least important), Cycle counting: A physical
	count of items in inventory, APICS guidelines.
	EOQ variables, average inventory level and
	number of orders per year.
	Single-period model: Model for ordering of
	perishables and other items with limited useful
	lives.
	<ul> <li>Shortage cost: Generally, the unrealized profit per unit.</li> </ul>
	Excess cost: Difference between purchase cost
	and salvage value of items left over at the end of
	a period.
	Continuous Stocking Levels, Discrete Stocking
	Levels.
	Lovoio.

- 4. Understand scheduling operations for project managers.
- 4.1 Explain what scheduling involves and the importance of good scheduling.
- 4.2 Compare product and service scheduling hierarchies.
- 4.3 Evaluate approaches used for scheduling service systems.
- 4.4 Explain how to overcome a range of unique problems encountered in service systems.
- Flow system: High-volume system in which jobs all follow the same sequence. Flow-shop scheduling: Scheduling for flow systems. Jobshop scheduling: Scheduling for low-volume systems with many variations in requirements.
- Infinite loading: Jobs are assigned to work centres without regard to the capacity of the work centre.
- Finite loading: Jobs are assigned to work centres taking into account the work centre capacity and job processing times.
- Input/output (I/O) control: Managing workflow and gueues at work centres.
- Hungarian method: Method of assigning jobs by a one-for one matching to identify the lowest-cost solution.
- Sequencing: Determining the order in which jobs at a work centre will be processed.
- Priority rules: Simple heuristics used to select the order in which jobs will be processed.
- Global priority rules: Incorporate information from multiple workstations when establishing a job sequence.
- The Theory of Constraint s- Production planning approach that emphasises balancing flow throughout a system and pursues a perpetual five-step improvement process centred around the system's currently most restrictive constraint.
- Scheduling services, Scheduling Multiple Resources, Time—Cost Trade-Offs.

5. Understand systems for project	5.1 Identify resources, tools and systems that	•	Facilities; workforce; machinery; transportation;
quality management.	can support a project's quality		technology; quality systems; quality circles;
	management.		managing and monitoring quality.
	5.2 Evaluate quality assurance frameworks that	•	ISO 9000/ EN 29000; TQM; Kaizen, continuous
	can be applied to a project.		improvement.

To achieve a 'pass' for this unit, learners must provide evidence to demonstrate that they have fulfilled all the learning outcomes and met the standards specified by all assessment criteria.

Learning Outcomes to be met	Assessment criteria to be covered	Type of assessment	Word count (approx. length)
All 1 to 5	All under LO 1 to LO 5	Report	4000 words

## **Indicative reading list**

Stevenson, W.J., Mehran Hojati and Cao, J. (2018). *Operations management*. Whitby, Ontario: Mcgraw Hill Education

Mcmanus, John and Wood-Harper, Trevor (2004) *Information systems project management: methods, tools, and techniques.* Pearson Education Financial Times Press. ISBN 0273646990

Chapman, R. J. (2019). The rules of project risk management: Implementation guidelines for major projects. Routledge.

Zwikael, O., & Smyrk, J. R. (2019). Project Management: A Benefit Realisation Approach. Springer.

## **Advanced Research Methods**

Unit Reference Number	A/618/0236
Unit Title	Advanced Research Methods
Unit Level	7
Number of Credits	20
Total Qualification Time (TQT)	200 Hours
Guided Learning Hours (GLH)	80 Hours
Mandatory / Optional	Mandatory
Sector Subject Area (SSA)	15.3 Business Management
Unit Grading type	Pass / Fail

#### **Unit Aims**

The unit aims to equip learners with the practical, technical, and methodological skills to conduct independent research for their research project and management broadly defined. It recognises that conducting research requires the development of specific and generic research skills, including understanding the research design process, understanding different techniques for conducting research in business and management studies, and appreciating the ethical and social implications of undertaking high value research. This unit will enable learners to develop critical awareness of key research skills as researchers and/or intendent practitioners.

## **Learning Outcomes, Assessment Criteria and Indicative contents**

Learning Outcomes –	Assessment Criteria –	Indicative Contents	
the learner will:	the learner can:		
Be able to develop research	1.1 Appraise relevant research problems.	Different qualitative and quantitative approaches to	
approaches in an appropriate project management context.	<ul><li>1.2 Develop and justify appropriate research aims and objectives within a defined scope and timeframe.</li><li>1.3 Critically explore, select and justify research approaches.</li></ul>	<ul> <li>business/management research (e.g. interviewing, archival research, 'at a distance' methods, content analysis, surveys, case studies, etc.)</li> <li>The strengths and weaknesses of different</li> </ul>	

2.	Be able to critically review literature on a relevant project management research topic.	<ul><li>2.1 Critically analyse different theoretical approaches to a research problem.</li><li>2.2 Create a structured and thorough critical literature review.</li></ul>	•	approaches to business/management research The theoretical foundations of different research methodologies The practicalities of business/management research
3.	Be able to design research methodologies for a relevant project management topic.	<ul> <li>3.1 Critically evaluate relevant research methodologies to reflect the research objectives.</li> <li>3.2 Design an appropriate methodology in terms of the research objectives for a defined population.</li> <li>3.3 Justify the methodology selected in terms of the research objectives within agreed ethical guidelines.</li> </ul>	•	(sources, evidence, dealing with human subjects) The ethical, legal and safety dimensions of conducting business/management research Preparing a research question, strategy, and plan Explanations of relevant quantitative and qualitative research methods Exercises examining how to apply different research methods Explorations of the challenges involved in different
4.	Be able to develop and present a research proposal.	<ul><li>4.1 Create a research question, literature review and methodology.</li><li>4.2 Propose techniques for use with quantitative and qualitative data collection and analysis.</li><li>4.3 Present the proposal using suitable methods.</li></ul>	•	research methodologies  Writing the research proposal

To achieve a 'pass' for this unit, learners must provide evidence to demonstrate that they have fulfilled all the learning outcomes and meet the standards specified by all assessment criteria.

Learning Outcomes to be met	Assessment criteria to be covered	Type of assessment	Word count (approx. length)
All 1 to 4	All under LO 1 to LO 4	Research Proposal	2500 words

## **Indicative reading list**

Bryman, Alan and Emma Bell (2015). Business Research Methods (4th ed.). Oxford: Oxford University Press

Chilsa, B. (2012) Indigenous Research Methodologies. London: Sage

Denzin, N.K., Lincoln Y.S., and Tuhiwai Smith, L. (2008, Eds.) Handbook of Critical and Indigenous Methodologies London: Sage

Hantrais, Linda (2009). International Comparative Research: Theory, Methods and Practice. Basingstoke and New York: Palgrave

Piekkari, R. and Welch, C. (2011, Eds.): Rethinking the Case Study in International Business and Management Research, Cheltenham, UK: Edward Elgar

Marschan-Piekkari, R. and Welch, C. (2004, Eds.): *Handbook of Qualitative Research Methods for International Business*, Cheltenham, UK and Northampton, MA: Edward Elgar

Neuman, W.L. (2011) Social research methods: qualitative and quantitative approaches. Boston and London: Pearson Education.

Saunders, M., Lewis, P., & Thornhill, A. (2003). Research methods for business learners. Essex: Prentice Hall: Financial Times.

## **IMPORTANT NOTE**

Whilst we make every effort to keep the information contained in programme specification up to date, some changes to procedures, regulations, fees matter, timetables, etc may occur during the course of your studies. You should, therefore, recognise that this document serves only as a useful guide to your learning experience.

For updated information please visit our website www.othm.org.uk.

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