

# MASTERS IN PROJECT MANAGEMENT

*With Global MBA from  
EIU*



## COURSE OVERVIEW

The Masters in Project Management is a career development generalist Program for those who have significant post-graduation and relevant work experience on which the learning process should build.

The main emphasis of the Program is on leadership through strategic management. While the academic level is masters, there is a strong practical and professional orientation to the curriculum. As an Masters in Project Management you should be able to ground your new knowledge within the base of your professional experience. You will be able to reflect on and learn from that prior experience and thus be able to integrate new knowledge with past experience and apply it to new situations.

You will be able to challenge preconceptions and to remove subject and functional boundaries so as to handle complex situations holistically. You should also have particular strengths in analysing, synthesising and solving complex, unstructured business problems.

In addition to being able to communicate your findings, you should have developed the skills to implement agreed solutions effectively and efficiently. You should therefore have strongly developed interpersonal skills and be able to interact effectively with a range of specialists.

The Masters in Project Management is directed both at the acquisition and critical understanding of a body of knowledge and at the acquisition of a range of personal capabilities.

## PROGRAM OUTCOMES

The qualification provides opportunities for you to develop and demonstrate knowledge and understanding, qualities, skills and other attributes in the following areas:

- **Knowledge and understanding**

You will be able to collect relevant information across a range of areas pertaining to a current situation, analyse that information and synthesise it into an appropriate form in order to evaluate situations and alternative courses of action that may be contemplated. Within the broad framework of organisations, their external context and management, you will be able to use knowledge to analyse (e.g. by classifying, contrasting, discriminating, examining), to synthesise (e.g. by constructing, creating, formulating, hypothesising, negotiating, planning, validating) and to evaluate (e.g. by appraising, concluding, judging, measuring, prioritising, recommending) cases in the following topic areas:

- ✓ impact of contextual forces on organisations including legal systems .
- ✓ ethical, economic, environmental, social and technological change issues .
- ✓ international developments; corporate governance markets and customers .
- ✓ the development and operation of markets for resources, goods and services .
- ✓ expectations of customers and equivalent stakeholders, service and orientation the concepts, processes and institutions in the production and marketing of goods and/or services.

- ✓ the management of resources and operations the financing of the business enterprise or other forms of organisations: sources, uses and management of finance.
- ✓ use of accounting for managerial and financial reporting applications the management and development of people within organisations: organisational theory, behaviour, industrial/employee relations, human resource management, change management the development of appropriate business policies and strategies within a changing context to meet stakeholder interests.

- **Cognitive skills**

When you have completed your Masters in Project Management you will be able to:

- ✓ think critically and creatively: manage creative processes in yourself & others.
- ✓ organise thought, analysis, synthesis and critical appraisal
- ✓ including to identify assumptions, evaluate statements in terms of evidence, detect false logic or reasoning, identify implicit values, define terms adequately and generalise appropriately tackle situations by establishing criteria,
- ✓ formulating potential courses of action implementing and controlling selected courses of action, evaluating results, and reviewing processes exercise and develop relevant personal and interactive skills.

- **Practical and/or professional skills**

When you have completed your Masters in Project Management you will be able to:

- ✓ select appropriate leadership style for situations set targets, motivate, monitor performance, coach and mentor, in order to continuously improve the people, activities, operations and units being managed recognise situations in which unusual ethical matters arise.
- ✓ apply ethical, societal and organisational values to situations and choices conduct some research into business and management issues and explore different frameworks of analysis learn through reflection on practice and experience. Cognitive skills

- **Key skills**

When you have completed your Masters in Project Management you will be able to:

- ✓ scan and organise data, abstracting meaning from information and sharing knowledge perform everyday mathematical skills in relation to quantitative data, including using models of business situations.
- ✓ exercise basic qualitative research skills use proficiently communication and information technology, including word-processing and spreadsheet software, messaging and conferencing, and the internet communicate effectively, orally and in writing, using a range of media, including preparing and appraising business reports.

- ✓ including listening to, negotiating with and persuading and influencing others exercise self-awareness and self-management, perform time management.
- ✓ exercise sensitivity to diversity in people and different situations
- ✓ continue learning and reflection in your workplace perform effectively within a team environment, and recognise and utilise other people's contributions in group processes.
- ✓ perform team selection, delegation, development and management.

## **MODULES**

The emphasis for your learning is directly rooted in management practice. The 'master' in the degree title signifies your 'mastery' of the art and science of management.

To achieve this level of capability the Masters in Project Management Program concentrates on strategic analysis, interdisciplinary skills, intellectual stimulation and independent judgement and covers core themes such as: critical engagement; embedding theory in practice and global impact awareness.

- **Teaching, learning and assessment methods**

- ✓ You learn through two inter-related methods. First, using a range of specially-written study materials, case studies, original texts, study guides and assignments and through a range of multi-media material and activities. Secondly, your learning is supported through an instructor.

- **Assessments**

- ✓ Assignments may be formative (for example at the beginning of a module to enable you to develop your confidence), but usually they are summative, i.e. they count towards your module result. Modules may also include computer-marked assignments or examination papers.
- ✓ Formative assessment in the form of informal self-assessed questions allow you progressively to assess your own progress and understanding.

- **Examinations**

- ✓ Most modules also include written examination but may involve an end -of-module assessment which could include an investigation-based report. Key skills will also be assessed in each end-of-module examination.
- ✓ You are expected to have work experience in management. As such, you should already have gained some of these skills. The Program will however allow you to demonstrate and develop them further.

## **Module 1: Project Fundamentals**

- Project Life Cycle
- Product Life Cycle
- Project Phases
- Phases & Project Life Cycle
- Process Groups
- PM Process Groups
- Assessment Test

## **Module 2: Project Management Overview**

- Characteristics of Project
- Responsibilities of Project Manager
- Project Management Competencies
- Portfolios and Program
- Project Stakeholders
- Stakeholders within Organisation
- Project Influencers
- Environment and Processes
- Organisational Culture Influence
- Organisational Structure Types
- Agile Considerations
- Decision tree analysis
- Assessment Test

## **Module 3: Process Groups**

- Project Management Processes
- Product Oriented Processes
- Process Group Characteristics
- Process Dependencies
- Managing Process Group Dependencies
- Initiation
- Planning
- Executing
- Monitoring and Controlling
- Closing
- Assessment Test

#### **Module 4: Project Communication Mgmt**

- Overview
- inputs to plan communication mgmt
- Communication requirements analysis
- Communication channels
- Communication models
- Communication methods and technologies
- Outputs of plan communication mgmt
- Inputs to manage communications
- Tools and techniques of manage communications
- Outputs of manage communications
- Monitor communication overview
- Data & documents for monitoring communications
- Other inputs to monitor communications
- Assessment Test

#### **Module 5: Project Cost Management**

- Project cost management process
- Plan cost management process
- Inputs to estimate costs
- Tools & technique for estimate costs
- Using the Bottom-up Technique to Estimate Cost
- Outputs of Estimate Costs
- Inputs to Determine Budget
- Tools & Techniques to Determine Budget
- Outputs of determine budget
- Inputs to control costs
- Tools & tech to control costs
- Earned value & cost performance
- To-complete Performance Index (TCPI)
- Outputs of Control Costs
- Calculating the Planned Value & Earned Value
- Comparing Schedule Performance against the Plan
- Comparing Cost Performance against the Plan
- Determining Project Performance
- Determining Project Performance, Scenario
- Determining Estimate at Completion, Scenarios 1 & 2
- Determining Estimate at Completion, Scenarios 3 & 4
- Assessment Test

## **Module 6: Project Integration Mgmt**

- Overview
- Project Charter & PM Plan
- Needs of Business
- Inputs to developing the Charter
- Techniques for developing Charter
- Elements of Project Charter
- Inputs to Project Management Plan
- Compiling the Project Management Plan
- Direct & Manage Project Work
- Inputs to Direct & Manage Project Work
- Techniques for Direct & Manage Project Work
- Outputs to Direct & Manage Project Work
- Manage Project Knowledge
- Monitoring & Controlling Project Work
- Inputs to Monitor & Control Project Work
- Project Baseline
- Integrated Change Control
- Configuration Management
- Inputs to perform integrated control
- Change Control Process
- Outputs of Perform Integrated Change Control
- Inputs to close project or process
- Close project or phase tools and techniques
- Outputs of the close project or phase process
- Concept of Lessons Learned
- Lessons Learned Process
- Gather Lessons Learned Information
- Conduct a Lessons Learned Meeting
- Analyse Lessons Learned Information
- Sharing & Adoption Lessons Learned
- Documenting Lessons Learned
- Managing Knowledge Base
- Tools for Continuous Improvement
- Business Strategy Overview
- Project Strategy
- Evolving Role of Project Manager
- Maintaining Strategic Alignment
- Business Environment
- Project Stakeholder Impact
- Project Benefits Analysis
- Managing Stakeholder Expectations
- Communicating about Project Charter

- Monitor & Control Project Work Outputs
- Assessment Test

### **Module 7: Project Procurement Management**

- Buyers & Sellers in Procurement management
- Introduction to contracts
- Inputs to plan procurement management
- Fixed price contracts
- Cost reimbursable & time-and-materials contracts
- Tools & techniques of plan procurement management
- Make-or-buy analysis
- Performing a make-or-buy analysis
- Bid & procurement documents
- Outputs of plan procurement management
- Inputs to conduct procurement
- Tools & techniques to conduct procurement
- Outputs of conduct procurement
- Inputs to control procurement
- Controlling project procurement
- Outputs of control procurement
- Assessment Test

### **Module 8: Project Quality Management**

- Overview
- Quality, grade, precision & accuracy
- project quality management process
- Inputs of plan quality management
- Plan Quality Management Tools & Techniques
- Cost of quality
- Cost benefit analysis
- Outputs of plan quality management
- Quality management plan
- Input to manage quality
- Quality Audits
- Process & root cause analysis
- Output of manage quality
- Inputs to control quality
- Techniques to control quality
- Representing data for quality control
- Outputs of control quality

- Determining when a process is out of control
- Quality management characteristics
- Quality control characteristics
- Quality mgmt & quality control relationship
- Assessment Test

### **Module 9: Six Sigma for Project Managers**

- Six Sigma Yellow Belt
- Six Sigma Green Belt
- Six Sigma Black Belt
- Assessment Test

### **Module 10: Project Resource Management**

- Overview
- Inputs to plan resource management
- Plan resource management tools & techniques
- RACI chart
- Outputs of plan resource management
- Estimate activity resource process
- Inputs to estimate resources
- Tools & techniques to estimate activity resource
- Bottom up estimating technique
- Estimate activity resource outputs
- Resource breakdown structure
- Inputs to acquire resources
- Tools & techniques to acquire resources
- Negotiating to acquire resources
- Outputs of acquiring resources
- Inputs to develop team
- Tools & techniques of develop team
- Team building
- Using recognition & rewards
- Outputs of develop team
- Inputs to manage team
- Tools & techniques for manage team
- Using interpersonal skills to manage team
- Outputs of manage team
- Inputs to control resources
- Effective techniques for controlling resources
- Outputs of control resource process
- Assessment Test

## Module 11: Project Risk Mgmt

- Overview
- Types of Project Risks
- Reducing the uncertainty risk
- understanding risk responses
- inputs to plan risk mgmt
- Tools and techniques to plan risk mgmt
- Risk management plan
- Sample risk mgmt plan
- Risk probability and impact matrix
- Inputs to identify risks
- Document analysis
- Brainstorming to gather data
- Using interviewing to identify risks
- Using root cause analysis to identify risks
- Using SWOT analysis to identify risks
- Using assumption and constraint analysis
- Using checklists to identify risks
- Outputs of identify risks
- Inputs to perform qualitative risk analysis
- Qualitative risk analysis tools & techniques
- Risk probability & impact assessment
- Outputs of perform qualitative risk analysis
- Inputs to perform quantitative risk analysis
- Gathering quantitative risk data
- Representing uncertainty
- Sensitivity analysis for quantitative data
- Decision tree analysis
- Simulations
- Risk report updates
- Inputs to plan risk responses
- Inputs to plan risk responses
- Strategies for negative risks or threats
- Contingency planning
- Outputs of plan risk responses
- Implement risk responses process
- Inputs to monitor risks
- Risk audits
- Data analysis for monitoring risks
- Determining appropriate risk responses
- Outputs of monitor risks
- Assessment Test

## **Module 12: Project Schedule Management**

- Project Schedule Management Process
- Plan Schedule Management Process
- Schedule Management Plan
- Inputs to define activities
- Tools & Techniques to define activities
- Defining activities for small & large projects
- Activity List & Attributes
- Milestone List
- Sequence activities process
- Inputs to sequence activities
- Types of dependencies
- Precedence diagrammatic method
- Inputs to activate estimate activity duration
- High level duration estimates
- Using parametric estimating for activity duration
- Using three-point estimating for activity duration
- Outputs of estimate activity duration
- Overview of Project Schedule
- Inputs to develop schedule
- Tools & Techniques of Dev schedule
- Critical Path Method
- CPM Determining start & finish dates
- Leads & lags and schedule compression
- Outputs of develop schedule
- Performing the forward pass
- Performing the backward pass
- Determining the total float
- Determining the free float
- Determining the critical path
- Creating a schedule network diagram from a table
- Inputs to control structure
- Tools and tech of control schedule
- Monitoring schedule performance
- Outputs of control schedule
- Use resource smoothing
- Crash the schedule
- Use Fast Tracking
- Assessment Test

## **Module 13: Project Scope Management**

- Defining Project Scope
- Plan Scope Management Process
- Inputs to Collect Requirements
- Tools & Techniques for collecting requirements
- Characteristics of Effective Requirements
- Outputs of Collective Requirements
- Techniques for Defining Scope
- Outputs of Defining Scope Process
- Components of Project Scope Statement
- Role of WBS
- WBS Structure
- Inputs to create WBS
- Decomposition Activities
- Principles of effective decomposition
- Verifying the WBS
- Finalizing the WBS
- Outputs to create WBS
- WBS Dictionary
- Validating Project Scope
- Inputs to validate Scope
- Validate Scope vs Quality
- Outputs of validate scope
- Control Scope Process
- Inputs to Control Scope Process
- Performing a Variance Analysis
- Outputs of Control Scope
- Assessment Test

## **Module 14: Project Stakeholder Management**

- Defining stakeholders
- Inputs to identify stakeholders
- Tools & techniques for identifying stakeholders
- Stakeholder register
- Inputs to plan stakeholder engagement
- Engaging stakeholders
- The stakeholder engagement plan
- Inputs to manage stakeholder engagement
- Techniques to manage stakeholder engagement
- Managing engagement with communication skills
- Managing engagement with interpersonal skills
- Outputs of manage stakeholder mgmt
- Inputs to monitor stakeholder mgmt

- Techniques for monitoring stakeholder engagement
- Outputs of monitoring stakeholder engagement
- Assessment Test

## **FINAL**

- MS Project as Practical Implementation for Project
- Case Studies
- Final Assessment