



International Diploma in Risk Management

2007/08 Syllabus – Core Modules

IND001: Module one: Principles of Risk

Module aims

Module One, *Principles of Risk*, considers the essential, underlying theory and concepts that should inform the design and operation of efficient and effective risk management processes. Much common practice does not adequately reflect this underlying theory. Common practice is often limited, pragmatic, expedient and overly simplistic. An understanding of this underlying theory enables informed critical reflection of current practices so that weaknesses and limitations can be identified.

Best practice is soundly based on underlying theory. This theory provides a generic understanding of factors that influence all aspects of risk management, and this understanding then informs appropriate cost effective design and operation of risk management processes.

To achieve these aims the specific objective is to provide an overview of the scope of formal risk management processes in organisations and an appreciation of the underlying generic issues and principles that need to be addressed for effective risk management.

Module syllabus

Unit One: Directions for risk management development. Possibilities in six dimensions - what, when, why, whichway, who, and wherewithal.

Unit Two: Definitions. Definitions of risk, threat, opportunity and uncertainty distinguished; relationship with performance objectives, implications for uncertainty management. Risk management, opportunity management and uncertainty management compared.

Unit Three: Formal risk management and process frameworks. Benefits of formal processes; standards and guidelines.

Unit Four: Application contexts and associated risk management issues. Operating, project, programme, strategy and corporate contexts.

Unit Five: Objectives for risk management applications. Distinguishing benefits and objectives for risk management. Objectives for process, application, performance and strategic capability; links between these objectives. Planning the scope and purpose of a risk management application.

Unit Six: Understanding uncertainty. Quantification of uncertainty (distinguishing targets, expectations and commitments); measures of risk (mean, variance, semi variance, cumulative probability distributions), interdependence between sources of uncertainty (e.g. virtuous and vicious circles).

Unit Seven: Risk evaluation. The importance of risk-performance trade-offs, and risk efficiency as a key criterion in evaluating alternative course of action. Risk aversion, loss aversion and framing of decision choices. Cost benefit analysis as a basic framework: scope and limitations. Four cultural biases towards risk evaluation (perception): the fatalist, the hierarchist, the individualist, the egalitarian.

Unit Eight: Multi-party issues. Risk ownership, risk allocation and related risk management implications.

Unit Nine: Building capability in risk management. Assessing risk management capability (benchmarking, risk maturity). Descriptors of capability: focus of attention, range of application contexts, nature and quality of risk management processes. Facilitators of risk management capability: scope of supporting risk management infrastructure, supporting organisational capabilities, organisation learning, organisation culture, human resource capability.

IND002: Module two: Risk and Organisations

Module aims

The aims of this Module are to take students through the different dimensions of risk and how risk influences organisations. This then leads to an understanding of how risks change for different organisations and how they respond. Through the use of analysis of corporate governance styles and the over-riding culture of a firm, and by reviewing case studies, create the ability in students to understand and assimilate the management approaches that result in a given response to risk.

The key learning message in Module Two is that students need to appreciate that the risk management techniques that are learned through the IRM Diploma course are highly practical but they do need to be adapted to the specific, real-world organisational setting in which the student will be applying that knowledge.

The case studies contained within the Module Two text are employed to illustrate real life examples of how risk issues are addressed. Students will gain experience of looking at each organisation's unique approach to risk management.

Module syllabus

Understanding how risks change for different organisations and how they respond. Why different organisations react differently.

Unit One: Understanding the risk environment. Regulatory environment; legal sensitivity; the effect of licensing and other constraints on business. Special hazardous activities (e.g. construction, healthcare, transport). Environmental factors; weather, pollution risks, political stability. Brand risk issues.

Understanding how these issues drive the 'risk emphases in an organisation.

Unit Two: Organisational structures and their impact on risk management.

Centrally controlled versus diversified organisations. Understanding the role of the centre in establishing risk management responses and in setting risk appetite and risk tolerance. Culture of devolution of responsibility with accountability.

Unit Three: Risk governance. How risk management functions are positioned within organisations; reporting lines; CRO function; Terms of Reference for risk/audit and other teams.

Understanding how all aspects of risk are managed in organisations – risk committees, risk roundtables.

How corporate governance requirements motivate directors towards risk management. Role of shareholders in influencing risk management. Importance of risk reporting, internally up through and across organisations and externally to stakeholders.

Unit Four: Acceptance of risk in organisations. How risk appetite drives an organisation's response to risk. What characterises an organisation's approach to the tolerance, aversion and appetite for risk. National cultures and their influence on the risk profile of an organisation. Business strategies in transferring and avoiding risks.

How Contingency Planning, Crisis Management and Recovery Planning play their part in managing risk.

IND003: Module three: Risk Decisions

Module aims

To provide a critical overview of how risk information and knowledge is created and used to support risk problem-structuring in support of tactical risk decision making, and to identify factors impacting the quality of risk decision making within organisations.

Module syllabus

Unit One: Decision making, an introduction. In this first unit students are introduced to decision theory and decision-making strategies.

Unit Two: Decision makers, risk thinking and decision making. Recognising that in most cases it is people that make non routine risk decisions, students will explore decision maker predispositions (personality, background, gender, values, attitudes, beliefs, education and experience) and their impact on the risk management process, risk decisions and behaviour.

Unit Three: Risk problem structuring and the creation of risk information and knowledge. In this unit students focus in detail on risk identification, estimation, evaluation and analysis generally. Both quantitative and qualitative methods and techniques are explored and explained.

Unit Four: Using technology to support risk decision making. Unit Four seeks to build upon the previous unit and identifies how technology (specifically databases,

spreadsheets, decision support and business intelligence software, and specific risk-decision software) can enable the risk management process.

Unit Five: Critical risk thinking and improved risk decision making. The final unit focuses on the outputs of the risk management process and sub-processes. In this final session students consider the challenges of communicating risk information to a variety of organisational stakeholders for a variety of purposes.

IND004: Module four: Risk Leadership

Module aims

The overarching aim of this module is: 'to provide a thorough understanding of the complex strategy making process and the relationships between corporate governance, management practice, moral/ethical considerations and risk management outcomes'. This will be accomplished by exposing the student to an organised series of readings that deal with different aspects of the strategic management process and understanding this in the context of prevailing corporate governance frameworks and values-based management practices. We will study the formal risk management requirements as expressed by various rule-based and principles-based corporate governance frameworks and contrast these with alternative ways of construing strategy formation in organisations. In particular, we want to consider the potential interaction between formal planned and controlled processes with responsive initiatives where strategy emerges when opportunities and threats are dealt with on an ad hoc basis as and when they arise. We will consider different explanations for potential benefits from effective risk management practices and relate this to alternative strategy making processes that eventually may constitute more effective integrative risk management practices. We will study experiences and lessons learned from high reliability organisations and thereby integrate different strategic, organisational, and cultural characteristics into the analyses of risk management effectiveness.

Module syllabus

Unit One: Strategic management and risk leadership in overview. Describe the formal strategic management process comprising: mission statement, external and internal analysis, strategy formulation and implementation, and strategic control.

Unit Two: Understanding the strategic environment. Outline the SWOT analytical approach and contrast the analyses of strengths, weaknesses, opportunities, and threats to formal risk analysis. Describe scenario planning and consider its potential advantages.

Unit Three: Corporate governance. Study different approaches to risk analysis and risk management:

- A multinational finance perspective.
- An international business perspective.
- An integrative risk management perspective.
- A strategic exposure perspective.

Unit Four: Strategic management processes. Discuss strategic controls in the context of management information systems and benchmarking.

Unit Five: Risk management frameworks. Strategic flexibility and real options perspectives in strategic decision making.

Unit Six: Strategic management in action. Alternative views on the strategy formation process:

- Emergent strategy and autonomy.
- Lower level development efforts and resource commitments.
- Participatory and dispersed decision making.

Unit Seven: Strategic management and risk management - a closer look. Strategic response capabilities and responsive organisations.

Unit Eight: Strategic management and risk management - an even closer look. Risk management rationales and the risk-return relationship.

Unit Nine: Strategic management challenges. Integrating risk management and strategic management.

Unit Ten: Risk leadership and ethics. Challenges arising from ethical dimensions of strategy, governance and risk management.

IND005: Module five: Risk Solutions

Module aims

To provide a critical overview of the implementation of risk management responses, within an organisational setting. In particular the module will provide a thorough introduction to a range of risk management tools, techniques, systems and processes for managing organisational risk.

The module will also outline how a risk management programme can be developed to manage the implementation of risk responses.

Module syllabus

Unit One: Structured approaches to managing risk. To explain the business benefits associated with adopting a proactive and structured approach to managing organisation risks. To explore how an organisation implementing an enterprise-wide approach to managing risk needs to adopt a range of techniques to address specific risks. To identify the consequences of not managing risks successfully through case studies of the impact of significant organisational threats and the failure to seize significant business opportunities.

Unit Two: Risk management strategies. To identify a range of potential strategies for managing risk including resilience, flexibility, robustness and controls. To critically evaluate the benefits and limitations of each alternative strategy. To understand where regulatory pressures (such as Basel II, Solvency II, Sarbanes Oxley etc) impose constraints on an organisation in terms of the approaches available.

Unit Three: Internal controls. To explain the fundamental purpose of internal controls and how a sound system is established. Determine how controls provide reasonable

assurance regarding the effectiveness of organisational operations, procedures and compliance with external regulatory requirements.

Unit Four: Hierarchy of risk responses. To outline a range of potential risk responses and explain why these fit into a natural hierarchy. To explore how there may not be a single possible response to a specific risk and how risk responses need to be tailored to each risk issue.

Unit Five: Eliminate and control risk. To explain how strategies associated with eliminating risk at source are implemented by reference to concepts such as 'Inherent Safety' and learning from other organisations, mistakes. To explain how strategies associated with modifying the probability of occurrence of outcomes are developed by reference to a range of approaches including:

- Risk control as applied to property loss control, fire safety and physical security.
- Health, safety and environmental management.
- Financial fraud risk management.
- IT security risk management.
- Portfolio management of opportunities (private equity portfolios, pharmaceutical product pipelines).

To explain how strategies associated with modifying the consequences of an event should it occur are developed by reference to a range of approaches including:

- Crisis management and communication.
- Business Continuity Management.

Unit Six: Risk financing. To explain how strategies associated with transferring the consequences of events are developed by reference to a range of approaches including:

- Contractual risk transfer.
- Outsourcing of services.
- Insurance.
- Securitisation and catastrophe bonds.
- Derivatives and treasury risk management solutions.
- Blended solutions such as risk retention and Alternative Risk Financing (ARF).

To briefly review the mechanisms of application as well as the strengths and limitations of each.

Unit Seven: Managing uncertainty and capturing opportunities. To explain how strategies associated with developing resilient and flexible organisations are developed by reference to a range of approaches including information system networks. To explain how strategies associated with seeking out risk are developed in particularly with reference to deriving business benefit and opportunities from operating with high levels of risk. Consider issues such as:

- Managing organisational change.
- Corporate social responsibility.
- Evaluating merger and acquisition opportunities.

Unit Eight: Risk management decisions. To explain how to evaluate a range of potential risk responses including an introduction to the use of cost/benefit analysis

techniques. To understand how an organisation managing a range of enterprise risks needs to adopt techniques capable of facilitating management decision making when resources available to manage risks are finite.

Unit Nine: Risk management programmes. To explain how the range of risk responses reviewed to date can be brought together within an overall risk management programme. To identify the different elements of a risk management system (Policy, Objectives, Roles and Responsibilities, Risk Assessment, Risk Controls, Monitoring, Auditing and Reporting) and how these are implemented in practice. To explore how an organisation can implement risk management programme. To identify ways of sustaining the development of a risk management programme over time including techniques such as Continuity Improvement.

Unit Ten: Risk management culture. To explore the cultural aspects of implementing a risk management programme including how to select approaches that are appropriate to a particular organisation's culture. To understand how to translate a risk management Policy and Strategy into a series of medium term (3-5 year) risk management Objectives and hence implement a risk management Improvement Programme. To understand what can happen if a risk management programme is not adapted to an organisation's culture. To explore how to manage and monitor a risk management improvement programme across a large or complex organisation. To understand the need to develop and embed risk management skills and understanding in the organisation to support the implementation of a risk management programme. To introduce the concept of a 'learning organisation'. To explore the value of monitoring and auditing programme progress as a way of evaluating the effectiveness of risk responses and encouraging continuous improvement.