

## Programme Specification

### Risk and Safety Management Degree Apprenticeship and M.Sc Occupational Health, Safety and Environmental Management/Occupational Health, Safety and Well-being Management



<b>Programme title</b>	<b>Risk and Safety Management Degree Apprenticeship and M.Sc Occupational Health, Safety and Environmental Management/Occupational Health, Safety and Well-being Management</b>
<b>Awarding institution</b>	Middlesex University
<b>Teaching institution</b>	Middlesex University
<b>Programme accredited by</b>	Institution of Occupational Safety and Health (IOSH) Aligned with and specifically designed to deliver the knowledge, skills, professional behaviours and values required by the level 6 Environmental Health Practitioner Degree Apprenticeship Standard (ST0465) as approved by the Institute for Apprenticeships
<b>Final qualification</b>	MSc. Occupational Health, Safety and Environmental Management or MSc Occupational Health, Safety and Well-being Management
<b>Year of Validation</b>	2019
<b>Year of amendment</b>	2020
<b>Language of study</b>	English
<b>Mode of study</b>	Full and Part Time

#### 9. Criteria for admission to the programme

Employers of apprentices will set their selection criteria for their candidates which should include evidence that applicants have capacity to work at level 6+ in preparation for the masters award track.

The normal requirement is a Good honours degree, 2.2 or above or equivalent qualification in any discipline or Professional Diploma (level 6) e.g. NEBOSH or British Safety Council.

Applicants are required to pass level 2 Functional Skills or attained at least a GCSE grade C in English and maths.

Equivalent work based experience may be considered at the discretion of the programme team and employer and may require submission of a piece of work to demonstrate experience and readiness to study at level 6+. Employers who are considering candidates who do not have level 6 qualifications (as set out above) should discuss their suitability with the programme leader.

#### 10. Aims of the programme

This programme is vocationally orientated and designed to provide graduates with the skills necessary to establish the context of the problem, identify all hazards including those with the potential to cause a major accident or incident, analyses the associated risk, evaluate the risk against acceptance criteria and propose ways of treating the risk such that it is eliminated or reduced and maintained as low as reasonably practicable. Alongside this the graduates will develop the knowledge, skills and behaviours to monitor and review actual risk and safety performance and communicate risk to relevant stakeholders and consult on risk issues with a range of professionals, staff/colleagues, stakeholders, leaders and managers.

The programme is designed to produce high quality practitioners, whose skill profile ensures that they can be efficiently and effectively employed in a variety of contexts. Graduates will have received a coherent body of theoretical and applied professional knowledge, transferable skill development, and a fundamental competency in the field of risk and safety management and which fosters the development

of an informed, critical and imaginative attitude to professional practice. This has entailed the development of a programme that concentrates on the acquisition of knowledge, together with the skills to appraise and evaluate such theoretical knowledge in a practical context, together with the incorporation of the ethical dimension of practice.

The programme offers a balanced approach to managing risk, safety and health in a range of settings and is designed to meet the changing face of professional practice.

The programme aims, on successful completion, to:

Facilitate development of competence in practice through alignment with professional standards in occupational safety and health and specifically those from the Institution of Occupational Safety & Health and their requirements for Initial Professional Development, together with the IFA standards for the Risk and Safety Management Professional Degree Apprenticeship in relation to:

- a) Risk assessment techniques
- b) Risk management principles and practice
- c) Understand the chosen industrial sector: structure, purpose(s) and operation and how risk management is used and how it interacts with other disciplines within operating companies, supply chain and dependent sectors.
- d) Current and future key focus areas within the sector

Provide students the skills and expertise to enable them to anticipate, recognise, measure, evaluate, apply and communicate solutions to minimise the risks arising from occupational health and safety conditions coupled with specialist skills in environmental management, through taking a whole systems lifecycle view of product and/or facility including evaluation of stakeholder needs from concept/feasibility phase to design and operation, modification and decommissioning.

Provide a critical awareness of the inter-relationship between organisational culture, safety culture/climate and translation to individual psychology and behaviour in relation to health and safety together with the skills to lead change and understand the role of influence, authority, leadership, communication, safety philosophy and followership within the workplace

Develop the ability to critically appraise strategic and operational risk, as it relates to occupational health and safety, in a variety of complex occupational situations, including high risk industries, multisite and internationally operating organisations and design and implement management solutions to mitigate these risks.

Develop a coherent body of theoretical and applied professional knowledge, coupled with criticality in application to practice in an international operations and trade context.

Foster the ability to integrate theoretical/practice based research and scientific data, with technical and managerial skills and interpretation of legislative and regulatory approaches and provisions from a range of locales so as to create practicable and applicable safety and health related solutions in complex settings.

Develop refined communication skills providing the ability to communicate using a variety of media to specialist, senior executives and non-specialist on matters pertaining to occupational health and safety matters.

Cultivate professional skills in the assessment/evaluation and in the provision of advice, guidance and solutions to the management of environmental impacts of businesses in a range of contexts.

MSc:

Undertaking a major piece of research at masters' level involving the design, planning, implementation and critical evaluation of an area of occupational safety and health using appropriate methodologies, data collection and evaluation.

The professional body for Occupational Safety & Health (IOSH) have provided high level learning objectives from which the programme outcomes of this MSc have been aligned. These are included here and have been embedded with the programme outcomes below.

- a) deal with highly complex occupational safety and health issues, make sound judgments using the evidence available and then communicate their decisions to specialist and non-specialist audiences
- b) act autonomously to plan and implement tasks in a professional way
- c) advance their knowledge and understanding of risks and risk management as applied to occupational safety and health
- d) show a comprehensive understanding of research techniques and use original thought to increase and apply their knowledge.

## 11. Programme outcomes

### A. Knowledge and understanding

On completion of this programme the successful student will have knowledge and understanding of :

1. The inter-relationship of legislative, regulatory, organisational, technical, cultural and scientific perspectives as applied to occupational health and safety in a wide range of complex situations and in a range of regions and locales
2. The influence and importance of the overarching organisational culture, coupled with a wide range of management and leadership strategies to create, implement, review use and control safe and healthy systems of work.
3. Hazard analysis, risk analysis, risk management, risk modelling, risk acceptability risk communication and risk decision making
4. Workplace, work-equipment, chemical physical, and biological hazards in the workplace, together with their potential to act synergistically to impact detrimentally on health coupled with knowledge of approaches to the assessment and management of such hazards
5. Strategic, organisational and personal factors that influence risk perception, behaviour and risk response.
6. The role of evidence and evidenced based practice and approaches, techniques available to undertake valid appraisal of research outputs.
7. Regulation, legislation and regulatory approaches used within the occupational safety and health setting.

#### For the Health and Well-being pathway

8. The risk arising from “unhealthy” workplaces and the application of a range of tools to measure, evaluate and control such risks
9. The inter-relationship between active communication and consultation, active listening, positive culture and leadership in the creation of health workplaces

#### For the Environmental Management Pathway

8. The core components of environmental management systems and their role in pollution prevention together with the role of legislation and environmental regulators
9. The risk arising from common commercial and industrial processes and the application of Best Available Technology (BAT) in the context of industrial environmental management and control.

#### For both pathways:

10. Research approaches, techniques and methodology for occupational health and safety related research.

### Teaching/learning methods

Students gain knowledge and understanding through attendance at lectures, seminars, and through a variety of directed and self-directed learning activities e.g. group projects, case study analysis, critical literature appraisal coupled with work based learning and mentorship in a vocational setting. The use of case studies (with examples co-created with employers) that reflect actual workplace environments are used to enable students to relate knowledge to practice situations in which they are likely to operate in the future. Use is made of the dedicated environmental and occupational health teaching space to offer demonstrations of equipment and monitoring tools, together with university wide facilities such as the theatre, product design studio etc. This is will be augmented by field based task and practice. Use of e-learning strategies is also integrated into the teaching and learning strategies through the use of professional on line data bases. Online learning will also be used to encourage independent study and formative assessment through the use of interactive exercises and quizzes, links to external sources of information and Pod cast presentations and lecture notes are available to the student for downloading.

### Assessment Method

Students' knowledge and understanding is assessed by a combination of coursework, and case studies designed to reflect current working, cultural and physical environments likely to be experienced by students in their future professional activities. Practice is also assessed through the development of a portfolio of practice, developing the skills for end point assessment. Presentations will also be used as a formative assessment with written feedback given rapidly to progress learning and understanding. In addition an examination is used to appraise understanding of the principles of occupational hygiene and toxicology.

In order to gain the award title in Environmental Management or Well-being Management the project topic must focus in a related field.

**B. Skills**

On completion of this programme the successful student will be able to:

1. Select, apply and evaluate, autonomously, a range of inspection and investigation techniques
2. Evaluate the design and results of audits/investigations
3. Integrate internal and external evidence to be able to develop action plans and programmes for safety and health improvement.
4. Make decisions, recommendations and articulate solutions on a proposed course of action in relation to OHSE problems to managers, safety representatives,

**Teaching/learning methods**

Students learn cognitive and practical skills through interactive participation in modules, case study analysis of practical workplace problems relevant to current working practices, group and mini seminars and Workshops will help students articulate ideas, reflect on their understanding and learn from others in a constructive environment. E-learning facilities available on My Learning plus other such

enforcement bodies and wider community in a professional manner and using a range of media solutions

5. Critically appraise legislation, guidance and complex data and successfully communicate their implications to a wide range of personnel and audiences
6. Critically and continually reflect on own practice, and that of others and select from a range of options the best mechanism to influence others to achieve best practice
7. Problem-solve at both an individual problem level and within the context of a range of problems, and prioritise a range of options and select appropriate communication formats to convey solutions.
8. Critically appraise risk perception influences of human and organisational behaviour, risk management and risk analysis
9. Work within teams to problem solve and improve safety and health practice and act as a team leader and specialist adviser to improve safety and health practice
10. Select and manage information in relation to safety and health

#### For the Environmental Management Pathway

11. Exhibit applied competence in the use of management techniques in the assessment, evaluation and solution giving to commercial environmental aspects of environmental performance improvement.

#### For the Health and Well-Being Pathway

11. Exhibit applied competence in the use of a range of tools to measure and evaluate Well-Being at work and in the application of solutions to a range of workplace stressors

For both pathways

12. Plan and construct a substantial academic investigation within clear ethical dimensions, and be able to conduct thorough analysis and thereafter be able to effectively convey the findings.

interactive exercises and quizzes will help develop cognitive skills.

The modules have been designed to encourage practical work as appropriate, for example workplace inspections and risk assessments, practical workplace visits to view and identify a range of hazardous working environments. The use of the interactive workplace environment allows students the opportunity to view work equipment and machinery type hazards and handle and use a variety of occupational hygiene and noise monitoring equipment. The work based modules in which the student explore their immersion within the workplace are key elements in the skills development phase

#### Assessment Method

Students' cognitive skills are assessed by essay, case study, written examination, practical portfolio, and on the M.Sc. by the research proposal and research project. The assessment of cognitive skills are integrated into the examinations through the use of part-seen elements of the exams which relate to scenarios commonly experienced by health and safety professionals.

**In order to gain the award title in Environmental Management or Well-being Management the project topic must focus in a related field.**

## 12. Programme structure (levels, modules, credits and progression requirements)

### 12.1 Overall structure of the programme

The programme is designed for students with and without a first degree.

#### Year 1 Term 1

Nebosh cert L4 (90c)

#### Year 1 Term 2

#### Term 3

PRS4222 Philosophy and leadership of occupational safety and health improvement 45 Credits

PRS4512 Occ Hygiene and health 15C

PRS4950 Professional Practice (0c)

#### Year 2 Term 1

PRS4212 Management of workplace safety 15 credits

#### Year 2 Term 2

PRS4552 Health and Safety within high risk industries 15 Credits

#### Term 3

PRS4951 Advanced Professional Practice -----

#### Year 3 Term 1

PRS4499 Research Methods and MSc Project (60 Credits)

#### Year 3 Term 2

#### Term 3

PRS4434 Factors affecting risk and strategic risk intervention 15 Credits

Option module PRS4700 Environmental Assessment & Management (15c) OR

PRS4464 Management of Health and Well-being (15c)

----- PRS4951 Advanced Professional Practice (0c)

End Point Assessment

**To obtain the M.Sc. Occupational Health, Safety and Environmental Management or Well-being management a student will need to have achieved 180 credits of learning at level 7 including a 60 credit project aligned to the pathway award title**

Students on the apprenticeship route study over a calendar year. There are breaks at Christmas and Easter. Assessments are carried out throughout the year in all terms.

The programme is divided into study units called modules. Each module has a credit value of 15, 30 45 or 60 credits. Each credit equates to approximately 10 hours of learning so that a 15 credit module equates to 150 hours of learning.

## 12.2 Levels and modules

Level 7

COMPULSORY	OPTIONAL	PROGRESSION REQUIREMENT
<p><b>All Students must take:</b></p> <p>PRS4222 Philosophy and leadership of occupational safety and health improvement</p> <p>PRS4434 Factors affecting risk and strategic risk intervention</p> <p>PRS4212 Management of workplace safety</p> <p>PRS4512 Occupational Hygiene and Health,</p> <p>PRS4552 Health and Safety within high risk industries</p> <p>PRS4499 Research Methods and MSc Project</p> <p>PRS4950 Professional Practice</p> <p>PRS4951 Advanced Professional Practice</p>	<p>PRS4700 Environmental Assessment and Management</p> <p>Or</p> <p>PRS4464 Management of health and well-being</p>	

## 12.3 Non-compensatable modules

<b>Module level</b>	<b>Module code</b>
7	PRS4222
7	PRS4212
7	PRS4434
7	PRS4512
7	PRS4552
7	PRS4700
7	PRS4464
7	PRS4950
7	PRS4951
7	PRS4499

## 13. A curriculum map relating learning outcomes to modules

**See Curriculum Map attached**

## 14. Information about assessment regulations

The regulations for assessment are common to the University.

Each module has one or more pieces of assessment. A minimum of 40% is required on each piece of assessment to pass. Within modules, where there is more than one component to a module assessment, and all pieces of work are at pass grade, the marks are aggregated and a grade given using the Middlesex University 20 point scale.

There are opportunities for re-assessment in failed components of work and specific details are given in the module handbooks. Where a student has failed a piece of work, the mark for the resubmitted work is capped at 40%.



Students must adhere to module assessment deadlines. Where a student cannot meet the deadline for extenuating reasons (for example illness, accidents, bereavement, family problems), an extension can be formally requested. Failure to participate in assessment without permission will result in a fail grade for the piece of assessment. Self-deferral is not permitted.

#### 15. Placement opportunities, requirements and support (if applicable)

NA. The apprenticeship pathway integrates work based experience within the award

#### 16. Future careers (if applicable)

The MSc Occupational Health, Safety and Environmental Management/Well-being Management (Apprenticeship) produces graduates with a wide range of professional, graduate and transferable skills. Within the programme students are able to direct their learning to all aspects of professional practice so that on completion of the award they are able to offer employers broad knowledge and skills applied to practice. The award has been matched to the needs of a variety of stakeholders and in particular in relation to the strategic management and operational practice of the high reliability organisational sector

#### 17. Particular support for learning (if applicable)

Specialist environmental and occupational laboratory/teaching space, Barbour Index, specialist external lecturers, specialist safety and health equipment and materials.

**18. JACS code (or other relevant coding system)** B920

**19. Relevant QAA subject benchmark group(s)** Health Studies, Bio-sciences

#### 20. Reference points

The following reference points were used in designing the programme:

- Middlesex University Learning Framework – Programme Design Guidance 2012
- Middlesex University Guide and Regulations 2018/19
- QAA Qualifications Framework 2014
- QAA Guidelines for Programme Specifications 2006
- Institute of Occupational Safety and Health standards COR3998 A and B
- IEMA environmental management accreditation approval
- IFA level 7 Risk and Safety Management Professional Degree Apprenticeship (ST0465)

#### 21. Other information

Indicators of quality:

Progression statistics and good awards

Students feedback

External examiners reports

Student employability

Students are encouraged to attend the professional body events in London. There are also a limited number of off campus visits to enhance knowledge and application. The costs for all of these events is limited to the price of a London travel card. There are no additional compulsory costs associated with this programme.

Please note programme specifications provide a concise summary of the main features of the programme and the learning outcomes that a typical student might reasonably be expected to achieve if s/he takes full advantage of the learning opportunities that are provided. More detailed information about the programme can be found in the student programme handbook and the University Regulations.

### Appendix 1A: Curriculum Map M.Sc./PGDiploma Occupational Health, Safety and Environmental Management

This section shows the highest level at which programme outcomes are to be achieved by all graduates, and maps programme learning outcomes against the modules in which they are assessed.

Knowledge and understanding		Skills	
A1	The inter-relationship of legislative, regulatory, organisational, technical, cultural and scientific perspectives as applied to occupational health and safety in a wide range of complex situations and in a range of regions and locales	B1	Select, apply and evaluate, autonomously, a range of inspection and investigation techniques.
A2	The influence and importance of the overarching organisational culture, coupled with a wide range of management and leadership strategies to create, implement, review use and control safe and healthy systems of work.	B2	Evaluate the design and results of audits/investigations
A3	Hazard analysis, risk management, risk modelling, risk acceptability risk communication and risk decision making	B3	Integrate internal and external evidence to be able to develop action plans and programmes for safety and health improvement
A4	Workplace, work-equipment, chemical physical, and biological hazards in the workplace, together with their potential to act synergistically to impact detrimentally on health coupled with knowledge of approaches to the assessment and management of such hazards	B4	Make decisions, recommendations and articulate solutions on a proposed course of action in relation to OHSE problems to managers, safety representatives, enforcement bodies and wider community in a professional manner and using a range of media solutions
A5	Strategic, organisational and personal factors that influence risk perception, behaviour and risk response.	B5	Critically appraise legislation, guidance and complex data and successfully communicate their implications to a wide range of personnel and audiences
A6	The role of evidence and evidenced based practice and approaches, techniques available to undertake valid appraisal of research outputs.	B6	Critically and continually reflect on own practice, and that of others and select from a range of options the best mechanism to influence others to achieve best practice
A7	Regulation, legislation and regulatory approaches used within the occupational safety and health setting.	B7	Problem-solve at both an individual problem level and within the context of a range of problems, and prioritise a range of options and select appropriate communication formats to convey solutions.
A8	The core component of environmental management systems and their role in pollution prevention together with the role of legislation and environmental regulators	B8	Critically appraise risk perception influences of human and organisational behaviour, risk management and risk analysis
A9	The risk arising from common commercial and industrial processes and the application of Best Available Technology (BAT) in the context of industrial environmental management and control	B9	Work within teams to problem solve and improve safety and health practice and act as a team leader and specialist adviser to improve safety and health practice
A10	For the M.Sc. Research approaches, techniques and methodology for occupational health and safety related research	B10	Select and manage information in relation to safety and health
		B11	Exhibit applied competence in the use of management techniques in the assessment, evaluation and solution giving to commercial environmental aspects of environmental performance improvement.
		B12	For the M.Sc. Plan and construct a substantial academic investigation within clear ethical dimensions, and be able to conduct thorough analysis and thereafter be able to effectively convey the findings.

Programme outcomes																					
A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12
Highest level achieved by all graduates																					
7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7

Module Title	Module Code and Level	Programme outcomes																					
		A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12
Philosophy and leadership of occupational safety and health improvement	PRS4222	X	X			X	X	X								X	X	X	X				
Factors affecting risk and strategic risk intervention	PRS 4434			X																			
Management of workplace safety	PRS4212			X	X			X				X	X	X	X								
Occupational Hygiene and Health	PRS4512			X	X		X	X				X	X	X	X					X			
Health and Safety within high risk industries	PRS 4552			X	X													X			X		
Environmental Assessment and management	PRS4700			X					X	X			X	X	X						X	X	
Research Methods and MSc Project	PRS4499																						X
Professional Practice	PRS4950	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X					
Advanced Professional Practice	PRS4951	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X					

### Appendix 1B: Curriculum Map M.Sc./PGDiploma Occupational Health, Safety and Well-Being Management

This section shows the highest level at which programme outcomes are to be achieved by all graduates, and maps programme learning outcomes against the modules in which they are assessed.

Knowledge and understanding		Skills	
A1	The inter-relationship of legislative, regulatory, organisational, technical, cultural and scientific perspectives as applied to occupational health and safety in a wide range of complex situations and in a range of regions and locales	B1	Select, apply and evaluate, autonomously, a range of inspection and investigation techniques.
A2	The influence and importance of the overarching organisational culture, coupled with a wide range of management and leadership strategies to create, implement, review use and control safe and healthy systems of work.	B2	Evaluate the design and results of audits/investigations
A3	Hazard analysis, risk management, risk modelling, risk acceptability risk communication and risk decision making	B3	Integrate internal and external evidence to be able to develop action plans and programmes for safety and health improvement
A4	Workplace, work-equipment, chemical physical, and biological hazards in the workplace, together with their potential to act synergistically to impact detrimentally on health coupled with knowledge of approaches to the assessment and management of such hazards	B4	Make decisions, recommendations and articulate solutions on a proposed course of action in relation to OHSE problems to managers, safety representatives, enforcement bodies and wider community in a professional manner and using a range of media solutions
A5	Strategic, organisational and personal factors that influence risk perception, behaviour and risk response.	B5	Critically appraise legislation, guidance and complex data and successfully communicate their implications to a wide range of personnel and audiences
A6	The role of evidence and evidenced based practice and approaches, techniques available to undertake valid appraisal of research outputs.	B6	Critically and continually reflect on own practice, and that of others and select from a range of options the best mechanism to influence others to achieve best practice
A7	Regulation, legislation and regulatory approaches used within the occupational safety and health setting.	B7	Problem-solve at both an individual problem level and within the context of a range of problems, and prioritise a range of options and select appropriate communication formats to convey solutions.
A8	The risk arising from “unhealthy” workplaces and the application of a range of tools to measure, evaluate and control such risks	B8	Critically appraise risk perception influences of human and organisational behaviour, risk management and risk analysis
A9	The inter-relationship between active communication and consultation, active listening, positive culture and leadership in the creation of health workplaces	B9	Work within teams to problem solve and improve safety and health practice and act as a team leader and specialist adviser to improve safety and health practice
A10	For the M.Sc. Research approaches, techniques and methodology for occupational health and safety related research	B10	Select and manage information in relation to safety and health
		B11	Exhibit applied competence in the use of a range of tools to measure and evaluate Well-Being at work and in the application of solutions to a range of workplace stressors
		B12	For the M.Sc. Plan and construct a substantial academic investigation within clear ethical dimensions, and be able to conduct thorough analysis and thereafter be able to effectively convey the findings.

Programme outcomes																					
A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12
Highest level achieved by all graduates																					
7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7

Module Title	Module Code and Level	Programme outcomes																					
		A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12
Philosophy and leadership of occupational safety and health improvement	PRS4222	X	X			X	X	X								X	X	X	X				
Factors affecting risk and strategic risk intervention	PRS 4434			X																			
Management of workplace safety	PRS4212			X	X			X				X	X	X	X								
Occupational Hygiene and Health	PRS4512			X	X			X	X			X	X	X	X					X			
Health and Safety within high risk industries	PRS 4552			X	X														X		X		
Management of Health and Well-being	PRS4464			X						X	X			X	X	X					X	X	
Research Methods and MSc Project	PRS4499																						X
Professional Practice	PRS4950	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X					
Advanced Professional Practice	PRS4951	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X				

