# Programme Specification and Curriculum Map for MSc / PG Dip Digital Inclusion

1. Programme title	Digital Inclusion
2. Awarding institution	Middlesex University
3. Teaching institution	Middlesex University
4. Programme accredited by	N/A
5. Final qualification	MSc / PG Dip
6. Academic year	2009/2010
7. Language of study	English
8. Mode of study	Full- time and part-time

## 9. Criteria for admission to the programme

We welcome applications from graduates with a good honours degree, or equivalent qualification, in an appropriate subject. We also consider candidates with other relevant qualifications and individuals with a minimum of three years' work experience. Those without formal qualifications need to demonstrate relevant work experience and the ability to study at postgraduate level.

## 10. Aims of the programme

The programme aims to enable students to have the relevant knowledge, personal and professional skills & competencies to design, develop, implement, evaluate and manage a wide range of ICT systems products and services that adhere to the principles of social inclusion and to understand the ethical underpinnings for this work.

### 11. Programme outcomes

## A. Knowledge and understanding

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

- A1. Core theories and current trends in Digital Inclusion research and best practice A2. Design methods, design processes and design constraints
- A3. Guidelines, standards and legislation that relate to the design of accessible and usable ICT systems and services
- A4. Ethical and social context of Digital Inclusion and participation in the information society
- A5. Statistical and demographic data and common research measures

## Teaching/learning methods

Students gain knowledge and understanding through lectures, seminars and e-learning exercises which are used to introduce examples of best practice cases studies, contemporary research developments, and the context, content and scope of national, European and International legislation, standards and guidelines.

#### **Assessment Method**

Students' knowledge and understanding is assessed by the use of a series of practical and theoretical activities which focus on the underlying principals of digital inclusion and enable the student to engage successfully with new knowledge in this field and at its borders.

The assessment structure ensures that the students' knowledge is assessed using formative and summative methods that encourage reflection in all five of the modules.

## B. Cognitive (thinking) skills

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

B1.Demonstrate application of key user issues of digital inclusion and human rights B2.Select suitable research methods that reflect the needs of vulnerable users B3.Demonstrate understanding of the opportunities, limitations and interdisciplinary challenges of Design for All and Assistive Technologies B4. Identify potential opportunities for the application of Design for All principles

## Teaching/learning methods

Students learn cognitive skills through the use of critical evaluation techniques to investigate current theory, practice, regulation, legislation and standards with respect to their applicability in real world situations and with respect to their actual use and testability.

#### **Assessment Method**

Students' thinking skills are assessed by the use of a series of practical and theoretical activities that assess the ability to critically review current digital inclusion theory and practice and its relationship with related fields, draw conclusions and make recommendations.

The assessments allow opportunities for formative and summative assessment and reflection.

#### C. Practical skills

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

C1. Conduct effective user research to identify context of use and user requirements of older and disabled people and others at risk of exclusion C2. Create physical and screen based prototypes

C3.Identify and utilise relevant national, European and International legislation, standards and best practice guidelines in a real world context

C4. Apply appropriate formative and summative evaluation methods and report on results

C5. Plan, design and develop Digital Inclusion solutions placing the problem and its solution within the context of the body of knowledge and best practice

#### Teaching/learning methods

Students learn practical skills through group and individual design problem solving activities and practical and theoretical activities. In addition students will create guidelines, rules or methods to support the use of relevant legislation and standardisation.

#### **Assessment Method**

Students' practical skills are assessed by their ability to successfully complete a series of practical and theoretical activities. In these the student will combine the use of appropriate ethical research approaches with practical knowledge of digital inclusion techniques, evaluation methods, and problem solving skills in order to propose innovative solutions that meet the needs of the users.

#### D. Graduate Skills

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

D1. Work as part of a research and design team

D2. Effectively communicate research findings verbally and in writing

D3. Work autonomously to complete a piece of research

D4. Demonstrate a personal commitment to professional standards, recognising obligations to society, the profession and the environment

## Teaching/learning methods

Students acquire graduate skills through a range of group and individual problem solving activities. Students study topics autonomously with the support of a supervisor. Some parts of the syllabus, including project management and literature searching, will be supported using small tutorial groups.

#### Assessment method

Students' graduate skills are assessed by their contribution to series of practical and theoretical activities which provide opportunities for individual and group work. and effective communication through written reports including a number submitted using alternative media, in addition to face to face presentations.

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

## 12. 1 Overall structure of the programme

This programme is taught using blended learning combining both face to face teaching and e-learning and both teaching methods will be supported by a range of e-learning technologies.

For all modules the students will attend Middlesex University for an intensive one week teaching block followed by a ten week period of supported e-learning and assessment.

#### Part Time - MSc

This describes a typical structure followed by MSc students starting September 2009. Alternative start dates are subject to student numbers and may result in modules being taken in a different order. Students opting for a certificate or diploma would be encouraged to take CMT 4700 and one or three other modules to the required credit level.

Year One - Autumn Term

Fundamentals of Digital Inclusion CMT4700

Year One - Winter Term

Design for All regulation, legislation and standardisation CMT4710

Year Two - Autumn Term

Inclusive Design and User Experience CMT4715

Winter Term

Accessible Web Design CMT4705

Spring, Summer and Autumn Term

Digital Inclusion Thesis CMT 4720

#### Full Time - MSc

This describes a typical structure followed by MSc students starting September 2010 when both year 1 and year 2 modules will be running.

Alternative start dates are subject to student numbers and may result in modules being taken in a different order.

#### Autumn Term

Fundamentals of Digital Inclusion CMT4700 And

Design for All regulation, legislation and standardisation CMT4710

#### Winter Term

Accessible Web Design CMT4705 and Inclusive Design and User Experience CMT4715

## Spring Term and Summer Term

Digital Inclusion Thesis CMT 4720

## Part Time - PG Dip

This describes a typical structure followed by PG Dip students starting September 2009. Alternative start dates are subject to student numbers and may result in modules being taken in a different order. Students opting for a certificate or diploma would be encouraged to take CMT 4700 and one or three other modules to the required credit level.

### Year One - Autumn Term

Fundamentals of Digital Inclusion CMT4700

#### Year One - Winter Term

Design for All regulation, legislation and standardisation CMT4710

#### Year Two - Autumn Term

Inclusive Design and User Experience CMT4715

#### Winter Term

Accessible Web Design CMT4705

## Full Time - PG Dip

This describes a typical structure followed by PG Dip students starting September 2010 when both year 1 and year 2 modules will be running.

Alternative start dates are subject to student numbers and may result in modules being taken in a different order.

#### Autumn Term

Fundamentals of Digital Inclusion CMT4700 And

Design for All regulation, legislation and standardisation CMT4710

#### Winter Term

Accessible Web Design CMT4705 and Inclusive Design and User Experience CMT4715

Students who choose to start on the PG Dip may choose to transfer to the MSc and take the project if they pass all their four modules.

#### **Exit awards**

Students who choose to leave the programme having successfully completed three modules will be awarded PG Cert Digital Inclusion.

Students who choose to leave the programme having successfully completed the first four modules but not completed the project will be awarded PG Dip Digital Inclusion.

12.2 Levels and modules		
Level 4		
COMPULSORY <sup>1</sup>	OPTIONAL <sup>2</sup>	PROGRESSION REQUIREMENTS
Students must take all of the following: CMT4700 CMT4705 CMT4710 CMT4715 CMT4720	None	Students must pass all modules before they can progress to the final project, CMT4720.

<sup>1</sup> Compulsory modules are those that must be taken, that is, the qualification cannot be awarded unless these modules have been successfully completed. Each of these modules makes a unique contribution to the learning objectives of the programme.

<sup>&</sup>lt;sup>2</sup> Optional modules are those from which a specified minimum number must be taken, that is, the qualification cannot be awarded unless this specified minimum number of optional modules has been successfully completed. Each of the possible combinations of optional modules will make a similarly unique contribution to the achievement of the learning objectives of the programme.

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

See Curriculum Map attached.

## 14. Information about assessment regulations

The programme is subject to Middlesex University assessment regulations. Details of module assessment can be found in Module Narratives.

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

Placement opportunities are being actively sought for the students in industry and user originations. These will be used for their final projects in order to widen their knowledge of the role and usefulness of digital inclusion methodology and practises.

## 16. Future careers (if applicable)

EU policy on eInclusion and eAccessibility is intended to ensure equality of access to the benefits of the new ICT technologies and full participation by all citizens. It is therefore essential that the design of new systems and services takes account of the needs of all citizens and responds to opportunities to develop new system that are fully inclusive. The proposed Masters level course Design for All in ICT is intended to create a professional workforce which is able to apply existing principles and practices, to problem solve and to research and develop new solutions in this changing domain.

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

The on-line element of the course will be supported by the Centre for Educational Technology (CET) (part of the Centre for Learning and Quality Enhancement (CLQE)), The Centre for Educational Technology brings together expertise on e-Learning from across the University. Support will take the form of one-to-one and/or group support to members of the teaching team in the areas of academic development (advice on the range and appropriate use of learning technologies) and e-learning support (provision of administrative and technical support and/or training).

## 18. JACS code (or other relevant coding system)

## 19. Relevant QAA subject benchmark group(s)

G440

There is no specific QAA benchmark statement for postgraduate studies in this area but both the Business and Management and the Engineering QAA benchmark have been studied for suitable information to develop this programme by creating professional competence in experienced individuals who wish to build on their experience through the adoption of a critical perspective on practice.

## 20. Reference points

The following reference points were used in designing the programme:

- QAA Framework for Higher Education Qualifications in England, Wales and Northern Ireland
- QAA Computing subject benchmark statement
- The Middlesex University Learning, Teaching and Assessment Strategy, University level M descriptors.
- University Policy, Regulations and Guidelines
- Middlesex University and School of Engineering and Information Science Teaching Learning and Assessment policies and strategies
- The European Qualifications Framework (EQF), Master's programme EQF level 7.

#### 21. Other information

**Blended learning:** This programme is delivered by blended learning. Students must be able to attend the one week of face to face teaching at the start of each module and to continue their studies online. The student will be expected to have local access to a computer and internet connection and to take an active part in online discussions and activities. All course work will be submitted online.

**Ethical policy:** The programme will follow the established research ethics policies of Middlesex University. In every module, relevant training and guidance will be provided in applying appropriate techniques to students work and their responsibilities when working with vulnerable people.

**European links:** The development of this programme made specific use of the information on programme and course content created by the IDCnet: Inclusive Design Curriculum Network and also by the curricula created by the IST Coordination Action "Design for All for elnclusion - DfA@elnclusion".

IDCnet was a Thematic Network financed by the <u>Information Society Technologies</u> <u>Programme of the European Commission</u> (IST-2001-38786). IDCnet was to integrate information and identify core knowledge sets and skills for model curricula in Design for All for Information and Communication Products, Systems and Services. IDCnet situated its activities in the multidisciplinary area of design, especially design for, and supported by, information and communication technologies.

The DfA@eInclusion Coordination Action (CA) aims to contribute towards the advancement of eInclusion in Europe through fostering design for all. Towards this end, DfA@eInclusion will continue, extend and enhance previous efforts targeted to the creation of a sound Design for All (DfA) interdisciplinary theoretical framework of reference and a set of proven engineering practices, by addressing a number of topics including the enhancement of existing partnerships between academic, research, user, and industrial communities to promote e-inclusion through adopting and promoting effective DfA practices. All project partners are also the National Contact Centres of EDeAN: European Design for all eAccessibility Network in their countries.

For more information on the results of the IDCnet and DfA@eInclusion projects please see the EDeAN web page http://www.edean.org/

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.

## **Curriculum map for MSc / PG Dip Digital Inclusion**

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.

## **Programme learning outcomes**

Know	rledge and understanding	Pract	ical skills
A1	Core theories and current trends in Digital Inclusion research and best practice	C1	Conduct effective user research to identify context of use and user requirements of older and disabled people and others at risk of exclusion
A2	Design methods, design processes and design constraints	C2	Create physical and screen based prototypes
A3	Guidelines, standards and legislation that relate to the design of accessible and usable ICT systems and services	СЗ	Identify and utilise relevant national, European and International legislation, standards and best practice guidelines in a real world context
A4	Ethical and social context of Digital Inclusion and participation in the information society	C4	Apply appropriate formative and summative evaluation methods and report on results
A5	Statistical and demographic data and common research measures	C5	Plan, design and develop Digital Inclusion solutions placing the problem and its solution within the context of the body of knowledge and best practice
Cogn	itive skills		
B1	Demonstrate application of key user issues of digital inclusion and human rights	Grad	uate Skills
B2	Select suitable research methods that reflect the needs of vulnerable users	D1	Work as part of a research and design team
В3	Demonstrate understanding of the opportunities, limitations and interdisciplinary challenges of Design for All and Assistive Technologies	D2	Effectively communicate research findings verbally and in writing
B4	Identify potential opportunities for the application of Design for All principles	D3	Work autonomously to complete a piece of research .
		D4	Demonstrate a personal commitment to professional standards, recognising obligations to society, the profession and the environment

Prog	ramme	outcom	es																		
A1	A2	А3	A4	A5	B1	B2	В3	B4	C1	C2	C3	C4	C5	D1	D2	D3	D4				
High	est leve	l achiev	ed by	all grad	uates																
4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4				

Module Title	Module Code	Pro	gran	nme	outc	ome	3														
	by Level	A1	A2	А3	A4	A5	B1	B2	В3	B4	C1	C2	СЗ	C4	C5	D1	D2	D3	D4		
Fundamentals of Digital Inclusion	CMT4700	$\sqrt{}$		<b>V</b>	<b>V</b>				<b>V</b>		<b>V</b>		$\sqrt{}$			<b>V</b>					
Design for All, regulation, legislation and standardisation	CMT4710			1			1						1					<b>V</b>			
Accessible Web Design	CMT4705		<b>V</b>	<b>V</b>				<b>V</b>			<b>V</b>		<b>V</b>			$\sqrt{}$					
Inclusive Design and User Experience	CMT4715		<b>V</b>			1		<b>V</b>			1	٧		٧			1				
Digital Inclusion Thesis (MSc only)	CMT4720							<b>V</b>		$\sqrt{}$					<b>V</b>		$\sqrt{}$	<b>V</b>	$\sqrt{}$		