

## Course Specification

<b>Published Date:</b>	14-Sep-2020
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<b>Status:</b>	Validated

## Core Information

<b>Awarding Body / Institution:</b>	University of Wolverhampton		
<b>School / Institute:</b>	Wolverhampton School of Sciences		
<b>Course Code(s):</b>	FS006P01UV FS006P31UV	Full-time Part-time	12 Months 2 Years
<b>Course Title:</b>	MSc Forensic Genetics and Human Identification		
<b>Hierarchy of Awards:</b>	Master of Science Forensic Genetics and Human Identification Postgraduate Diploma Forensic Genetics and Human Identification Postgraduate Certificate Forensic Genetics and Human Identification Postgraduate Certificate Forensic Genetics and Human Identification University Statement of Credit University Statement of Credit		
<b>Language of Study:</b>	English		
<b>Date of DAG approval:</b>	01/Jun/2017		
<b>Last Review:</b>	2011/2		
<b>Course Specification valid from:</b>	2011/2		
<b>Course Specification valid to:</b>	2017/8		

## Academic Staff

<b>Course Leader:</b>	Dr Catherine Tobin
<b>Head of Department:</b>	Georgina Manning

# Course Information

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<b>Location of Delivery:</b>	University of Wolverhampton
<b>Category of Partnership:</b>	Not delivered in partnership
<b>Teaching Institution:</b>	University of Wolverhampton
<b>Open / Closed Course:</b>	This course is open to all suitably qualified candidates.

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## Entry Requirements:

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Entry requirements are subject to regular review. The entry requirements applicable to a particular academic year will be published on the University website (and externally as appropriate e.g. UCAS)

Applicants must hold a bachelor's degree at 2.2 or above (BSc or equivalent) in Forensic Science or a related subject including Biosciences (Molecular Biology, Genetics, Human Genetics), Physical Anthropology, Archaeology and Criminalistics.

## Selection of Candidates

Applications are reviewed by an admissions committee of departmental staff. Candidates are selected based on their academic qualifications and referee evaluations.

International student language requirements and application guidance can be found at [www.wlv.ac.uk/international/apply](http://www.wlv.ac.uk/international/apply)

## Distinctive Features of the Course:

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The Masters in Forensic Genetics and Human Identification is a comprehensive course on Human Identification and Mass Fatality Incident Analysis incorporating the full methodological repertoire of Forensic Genetics and DNA Analysis, Physical Anthropology and Human Identification based on biometric assessment of physical characteristics incorporated with advanced research techniques and associated professional skills.

With reference to its structure and combination of key topics, this course is quite unique in the national as well as international market, while being designed to generate a postgraduate level of competence in an important as well as exciting area of Forensic Science.

## Educational Aims of the Course:

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This MSc programme is a comprehensive course on human identification and mass fatality incident analysis incorporating the full methodological repertoire of forensic genetics and DNA analysis, physical anthropology and human identification based on biometric assessment of a variety of physical characteristics.

Lecture topics are discussed in seminars and reinforced in practical teaching sessions. During our methods units students learn advanced research techniques and topic related professional skills.

Subsequently, students carry out their independent research project in collaboration with a member of the forensic science faculty, based upon a comprehensive literature review and project design.

With this course we aim to:

- enable you as the student to achieve both subject specific and generic academic outcomes and develop a range of key skills fitting you for subsequent employment in exciting positions or further study in forensic science and related areas by provision of a progressive, coherent and challenging course emphasising advanced training on research skills.
- encourage and enable our students to make original and substantial contributions to knowledge and practice in the field through critical understanding of current advances and appropriate laboratory practices.

- allow students with diverse academic subject backgrounds and abilities at appropriate levels entry to the course and to achieve to the maximum of their ability.
- enable our students to develop professional attitudes and skills and to foster independent, life-long learning.
- make our students aware of the commercial, ethical, legal, political and socio-economic contexts of their studies.

#### Intakes:

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September

#### Major Source of Funding:

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Office for Students (OFS)

#### Tuition Fees:

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Tuition fees are reviewed on an annual basis. The fees applicable to a particular academic year will be published on the University website.

Year	Status	Mode	Amount
2020/1	Overseas	Full Time	£13350.00
2020/1	H	Full Time	£10650.00
2020/1	H	Part Time	£5325.00

#### PSRB:

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None

#### Course Structure:

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## September (Full-time)

Part time students study alongside full time students. However, they do not study more than 80 credits in each academic calendar year.

### Year 1

Module	Title	Credits	Period	Type
7FS002	Forensic Genetics	20	IN YR	Core
7FS004	Professional Skills in Forensic Science	20	IN YR	Core
7BC002	Molecular Genetics and Genomics	20	IN YR	Core
7FS003	Human Identification from Physical Characteristics	20	IN YR	Core
7FS001	Forensic Anthropology	20	IN YR	Core
7AB007	Research Methods	20	IN YR	Core
7AB005	Masters Research Project	60	CRYRA	Core

Please note: Optional modules might not run every year, the course team will decide on an annual basis which options will be running, based on student demand and academic factors, to create the best learning experience.

## Learning, Teaching and Assessment

### Academic Regulations Exemption:

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None

### Reference Points:

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QAA qualifications Framework for Higher Education 2001-descriptors for Masters level study.

[www.qaa.ac.uk/academicinfrastructure/fheq/ewni/](http://www.qaa.ac.uk/academicinfrastructure/fheq/ewni/)

QAA Subject Bench Mark Biosciences

QAA Subject Bench Mark Anthropology

The course is consistent with the legal requirements of the Equality Act (2010)

<http://www.legislation.gov.uk/ukpga/2010/15/contents> implemented through the University's policies in relation to transparency in matters related to equal access.

There is no QAA benchmark for forensic science and the specialist nature of this course would not be covered by any generic benchmark statement.

The Forensic science Society accredits postgraduate courses, but it is not clear that the specificity of the proposed course would meet the component standards of the accreditation scheme.

### Learning Outcomes:

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#### PGCert Course Learning Outcome 1 (PGCCL01)

Demonstrate a systematic understanding of knowledge, and a critical awareness of current problems and/or new insights, much of which is at, or informed by, the forefront of your academic discipline, field of study or area of professional practice with a conceptual understanding that enables the student: (a) to evaluate critically current research and advanced scholarship in the discipline (b) to evaluate methodologies and develop critiques of them and, where appropriate, to propose new hypotheses.

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#### PGCert Course Learning Outcome 2 (PGCCL02)

Demonstrate a comprehensive understanding of techniques applicable to your own research or advanced scholarship and ability to continue to advance your knowledge and understanding, and to develop new skills to a high level.

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#### PGCert Course Learning Outcome 3 (PGCCL03)

Demonstrate originality in the application of knowledge, together with a practical understanding of how established techniques of research and enquiry are used to create and interpret knowledge in the discipline.

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#### PGCert Course Learning Outcome 4 (PGCCL04)

Ability to deal with complex issues both systematically and creatively, make sound judgements in the absence of complete data, and communicate your conclusions clearly to specialist and non-specialist audiences.

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PGCert Course Learning Outcome 5 (PGCCL05)

Demonstrate self-direction and originality in tackling and solving problems, and act autonomously in planning and implementing tasks at a professional or equivalent level.

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PGCert Course Learning Outcome 6 (PGCCL06)

Demonstrate the qualities and transferable skills necessary for employment requiring: (a) the exercise of initiative and personal responsibility (b) decision-making in complex and unpredictable situations (c) the independent learning ability required for continuing professional development.

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PGDip Course Learning Outcome 1 (PGDCL01)

Demonstrate a systematic understanding of knowledge, and a critical awareness of current problems and/or new insights, much of which is at, or informed by, the forefront of your academic discipline, field of study or area of professional practice with a conceptual understanding that enables the student: (a) to evaluate critically current research and advanced scholarship in the discipline (b) to evaluate methodologies and develop critiques of them and, where appropriate, to propose new hypotheses.

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PGDip Course Learning Outcome 2 (PGDCL02)

Demonstrate a comprehensive understanding of techniques applicable to your own research or advanced scholarship and ability to continue to advance your knowledge and understanding, and to develop new skills to a high level.

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PGDip Course Learning Outcome 3 (PGDCL03)

Demonstrate originality in the application of knowledge, together with a practical understanding of how established techniques of research and enquiry are used to create and interpret knowledge in the discipline.

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PGDip Course Learning Outcome 4 (PGDCL04)

Ability to deal with complex issues both systematically and creatively, make sound judgements in the absence of complete data, and communicate your conclusions clearly to specialist and non-specialist audiences.

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PGDip Course Learning Outcome 5 (PGDCL05)

Demonstrate self-direction and originality in tackling and solving problems, and act autonomously in planning and implementing tasks at a professional or equivalent level.

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PGDip Course Learning Outcome 6 (PGDCL06)

Demonstrate the qualities and transferable skills necessary for employment requiring: (a) the exercise of initiative and personal responsibility (b) decision-making in complex and unpredictable situations (c) the independent learning ability required for continuing professional development.

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Masters Course Learning Outcome 1 (MACLO1)

Demonstrate a comprehensive theoretical and practical understanding, critical awareness and evaluation of methods of enquiry and analysis used to create knowledge in key areas of Forensic Genetics and Human Identification

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Masters Course Learning Outcome 2 (MACLO2)

Perform observations, tests and measurements in an accurate and systematic way, with appropriate use of sampling procedures, controls, replication and precision coupled with appropriate analysis and evaluation of

data

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**Masters Course Learning Outcome 3 (MACLO3)**

Develop and utilize skills in formulation of hypotheses, experimental design, statistical analysis and interpretation of data.

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**Masters Course Learning Outcome 4 (MACLO4)**

Critically evaluate current research and advanced scholarship in forensic genetics and human identification and systematically comprehend methods of effective exploitation and dissemination of research.

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**Masters Course Learning Outcome 5 (MACLO5)**

Demonstrate acquisition of communication skills required in the context of forensic genetics and human identification practice and advanced scholarship

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**Masters Course Learning Outcome 6 (MACLO6)**

Exhibit knowledge and understanding of the role of the forensic scientist as forensic practitioner and expert witness and critical evaluation of quality issues in forensic analysis.

**Overview of Assessment:**

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<b>Module</b>	<b>Title</b>	<b>Course Learning Outcomes</b>
7AB005	Masters Research Project	MACLO2, MACLO3, MACLO4, MACLO5
7AB007	Research Methods	MACLO3, MACLO5, PGCCLO3, PGCCLO5, PGDCLO3, PGDCLO5
7BC002	Molecular Genetics and Genomics	MACLO2, MACLO3, MACLO5, PGCCLO2, PGCCLO3, PGCCLO5, PGDCLO2, PGDCLO3, PGDCLO5
7FS001	Forensic Anthropology	MACLO1, MACLO2, MACLO4, MACLO5, MACLO6, PGCCLO1, PGCCLO2, PGCCLO4, PGCCLO5, PGCCLO6, PGDCLO1, PGDCLO2, PGDCLO4, PGDCLO5, PGDCLO6
7FS002	Forensic Genetics	MACLO1, MACLO2, MACLO3, MACLO4, MACLO5, MACLO6, PGCCLO1, PGCCLO2, PGCCLO3, PGCCLO4, PGCCLO5, PGCCLO6, PGDCLO1, PGDCLO2, PGDCLO3, PGDCLO4, PGDCLO5, PGDCLO6
7FS003	Human Identification from Physical Characteristics	MACLO1, MACLO2, MACLO5, MACLO6, PGCCLO1, PGCCLO2, PGCCLO5, PGCCLO6, PGDCLO1, PGDCLO2, PGDCLO5, PGDCLO6
7FS004	Professional Skills in Forensic Science	MACLO1, MACLO2, MACLO3, MACLO4, MACLO5, MACLO6, PGCCLO1, PGCCLO2, PGCCLO3, PGCCLO4, PGCCLO5, PGCCLO6, PGDCLO1, PGDCLO2, PGDCLO3, PGDCLO4, PGDCLO5, PGDCLO6

**Teaching, Learning and Assessment:**

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Lectures

Tutorials

Practicals

Seminars

Workshops

Mock court experience

Research plan + experimental design

Research project

Oral presentations

Analysis report preparation

Literature review

Formative tests

### Assessment Methods:

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At the University of Wolverhampton, a variety of modes of assessment will be used to support and test your learning and progress and to help you develop capabilities that are valued beyond your University studies and into your working life. Your course may include a variety of assessment activities:

Written examinations (including online examinations, open and closed book examinations and quizzes)  
Coursework (for example, essays, reports, portfolios, project proposals and briefs, CVs, poster presentation)  
Practical (for example, oral and video presentations, laboratory work, performances, practical skills assessment)

In the final year of your undergraduate degree, and at the end of your postgraduate degree, you are likely to be expected to write an extended piece of work or research, such as a dissertation or a practice-based piece of research.

### Student Support:

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Aside from lectures, practical-, seminar sessions and other time-tabled activities, student learning in the involved modules will be supported by highly utilized CANVAS pages and the use of library as well as online resources for recommended and independent study, respectively revision of information.

On line materials for each module are available (on CANVAS), as well as web-based information on a number of relevant topics, web-based literature databases for comprehensive literature research, and the online resources provided by the Learning Centres.

Further module-specific support is provided through the module team via face-to-face and electronic tutorials, scheduled drop-in sessions or SAMS appointments.

For the module 7BC002 (Molecular Genetics and Genomics) supportive bridging material, for students with a weak background in genetics, is available on CANVAS which includes an online formative test so students can estimate whether or not they need to do additional background reading.

The Learning Centre has study skills advisors who can give additional support. Likewise, the Student Gateway provides support if required.

The Faculty of Science and Engineering Student Support Office is a key additional source of advice and support for non-academic related matters, as is the International Centre in case of international participants.

### Employability in the Curriculum:

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Graduates who obtain the MSc in Forensic Genetics and Human Identification will be able to find employment in the following areas:

Forensic Laboratories like e.g.:

- LGC Forensics
- Orchid Cellmark

- Police Forces (laboratory-based analysis units)
- Human Identification Laboratories
- Veterinary and Agricultural Laboratories
- Research Laboratories including Forensic Research, Molecular Anthropology/Ancient DNA Research, Cancer Studies

The MSc described prepares the student for both, the research and the practitioner career pathway:

The MSc is characterised by its marked emphasis on advanced training in research skills and advanced methodology in a unique combination of key areas in Forensic Science, and should therefore form an apt preparation for PhD studies in Forensic Science and a number of related research areas.

For students already employed as Forensic Scientists the course will significantly enhance promotion prospects.

The combination of topics included in this MSc should prepare the graduates for the national as well as the international market.

