# Nottingham Trent University Course Specification

| | Basic Course Information | |
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| 1. | Awarding Institution: | Nottingham Trent University |
| 2. | School/Campus: | Science and Technology/ Clifton Campus |
| 3. | Final Award, Course Title and Modes of Study: | MSc Forensic Science FT/PT |
| 4. | Normal Duration: | Full time: 1 year<br>Part time: 2 year |
| 5. | UCAS Code: | |

## 6. Overview and general educational aims of the course

This course is designed to provide an insight into the role of the Forensic Expert using the experience and knowledge you will gain from in-depth studies into specific forensic disciplines of Toxicology, Bioarchaeology and Biometrics. It allows you to appreciate not only the knowledge the expert has, but also how they need to consider their ethics and values alongside the regulatory aspects of these disciplines, whilst equally recognising and considering the impact their evidence can have on a case. You will develop skills required to deliver evidence and withstand scrutiny under cross-examination and to clearly communicate findings and interpretation of evidence for a range of audiences.

There is emphasis on independent and peer learning. You will also be encouraged to explore and discuss contemporary Forensic issues, which will be further expanded by undertaking a personal project in which you will develop and highlight those research skills required of the Masters student. This project will be selected early on in the year and the supervisor will act as the personal tutor to you during your time studying your masters.

Teaching will be delivered by a range academics who have experience and research in various fields of Forensic Science and also by external speakers both current and former practitioners involved in Forensic work or research in specialist fields.

The course aims to:

- Provide you with the skills and knowledge underpinning a range of career options in forensic science within a realistic, scenario led environment
- Enable skills development in investigative techniques applicable to a range of scientific situations
- Create awareness of the ethical issues involved in the practice of forensic science.
- Develop your key intellectual and transferable skills
- Develop your capability for professional employment or doctoral level study in the field of forensic science and related disciplines
- Increase your independent learning ability required for continuing professional development

## 7. Course outcomes

Course outcomes describe what you should know and be able to do by the end of your course if you take advantage of the opportunities for learning that we provide.

**Knowledge and understanding**

By the end of the course you should be able to:

**CLO1.** Display a comprehensive understanding of the legal, ethical and professional considerations involved in Forensic Investigations. *

**CLO2.** Elucidate on issues governing best practice within Forensic Science.*

**CLO3.** Critically apply scientific principles and methods to interpret, analyse and evaluate evidence appropriately.*

**CLO4.** Apply analytical, logic and creative skills to perform unfamiliar tasks or solve complex problems within a forensic specialist area.*

**These Learning Outcomes are aligned to the QAA subject benchmark statements for Forensic Science (2012) and are developed to meet accreditation requirements for the Chartered Society of Forensic Sciences.*

**Skills, qualities and attributes**

By the end of the course you should be able to:

**CLO5.** Prepare and present complex scientific and technical reports to a variety of audiences.*

**CLO6.** Communicate effectively using a variety of approaches including, oral, written and computer based presentations.

**CLO7.** Accept accountability and demonstrate the ability to interact effectively with others and engage in team working.*

**CLO8.** Demonstrate ability to work independently and justify actions taken.

**CLO9.** Display the comprehensive set of skills required to plan, implement, evaluate, draw conclusions and report on a programme of research.

**These Learning Outcomes are aligned to the QAA subject benchmark statements for Forensic Science (2012) and are developed to meet accreditation requirements for the Chartered Society of Forensic Sciences.*

## 8. Learning and teaching methods

Most modules will include workshops and discussion-based sessions. The onus is on you to actively participate within sessions and to read around subject matter. Lectures are used to present core information; associated activities will support peer and self-directed learning. You are expected to undertake independent reading to supplement and consolidate what is being taught.

If you do have prior knowledge or come from a Forensic background you will be encouraged to share and aid your peers in acquisition of skills and understanding of subjects. You will be involved in directing your learning through choosing topics for Advanced Topics and in the Forensic Expert module.

Practical and workshop classes emphasise acquiring competence in the application of the fundamental principles of forensic science; these are focused around problem solving and interpretation. Teaching will be in facilities including the Crime Scene Training Facility, dedicated Forensic laboratories and Analytical Laboratories. The course encourages a practical hands-on approach in its teaching.

Teamwork is an essential part of being a forensic scientist and is therefore a fundamental part of this course. Many modules contain teamwork elements.

Analysis and problem solving skills are further developed in the Research Project module.

You will learn from experts and current practitioners, this ensures that your learning is continuously enhanced through exposure to real world perspectives in a rapidly developing scientific field.

In summary, the list of teaching and learning methods includes:

- Lectures, seminars & audio-visual presentations
- Laboratory classes and workshops
- Access to data analysis and IT packages
- Oral and poster presentations
- Self-directed study and set assignments
- Problem-based learning
- Case study reviews

You will be able to apply theoretical knowledge through practical sessions; working in analytical and forensic laboratories and in and around the Crime Scene Training Facility.

9. **Assessment methods**

The course uses a variety of assessment techniques to ensure that you can demonstrate that you have met the range of learning outcomes. Subject knowledge and understanding is mainly tested through unseen examinations, coursework essays, coursework/laboratory reports and project reports, presentations and courtroom skills cross-examinations. These also assess a range of transferable skills, including confidence in written and oral communication.

Simulated problems are used to assess problem solving skills and evidence interpretation – these are usually assessed through unseen examinations.
Laboratory experiments are used to test a range of practical skills and those outcomes associated with hypothesis testing and data capture and interpretation. Typical assessments include laboratory experiment write-ups, expert reports and presentations. Students are assessed using work based reports such as statements and case notes.

Portfolios are used to enable students to demonstrate progression of skills and encourage the use of reflective practice as part of professional development.

The projects assess an important range of skills relevant to the world of work, including technical and numerical skills, command of relevant software, technical skills presentations skills, team working, leadership and time and resource management. This is especially true of the research project.

As well as formal assessments, the course incorporates formative and diagnostic assessments – through these staff will provide you with more informal feedback on your progress and development.

In summary, the list of assessment methods includes:

- Unseen examinations
- Self/peer assessment
- Laboratory skills tests
- Laboratory and field reports
- Skills portfolios
- Essays, summaries and abstracts
- Data interpretation
- Oral, poster and electronic presentations

- Courtroom skills cross-examinations

## 10. Course structure and curriculum

The MSc is a modular course, and all modules are designed to meet course learning outcomes. Each module is worth 20 credit points unless specified otherwise. You must obtain 180 credit points to achieve the Masters qualification. Students obtaining 120 credit points will be eligible for a PGDip in Forensic Science and 60 credit points of taught modules is required for a PGCert in Forensic Science.

**Full Time Study** (20 credit points unless stated otherwise.)

**CHEM40271 Research Project (60cp):** Independent experimental research with supervision from academic staff

**FORE40003 Forensic Expert**: Professional awareness of the legal standards for presentation of expert evidence in court, including the duties and liabilities of the expert witness. Delivered by external speakers and academic staff from a range of expertise.

**PHYS4xxxx Forensic Databases & Biometrics**: Overview of identification, authentication and verification techniques. Introduction to the theory of database systems, the legal and moral implications of the use of databases.

**FORE40001 Analytical Toxicology**: Working knowledge of various drug separation and detection techniques. Application of various analytical approaches to the detection and quantitation of drugs and metabolites in biological fluids and tissues. Review of the use and abuse of substances used both as medicines and poisons.

**FORE40002 Bioarcheology**: Looking at recovery of bodies in missing persons and unexplained death scenarios include search, recording, recovery and evidential significance of plant, pollen, soils and other trace evidence. This module is delivered by a current practitioner and expert in the field of Bioarchaeology.

**FORE30002 Advance Topics in Forensic Science**: Research and development in Forensic Science, any current topics for the Forensic Industry including regulatory ones will be discussed and debated (e.g. DNA updated techniques, fingerprint identification bias, use of trace evidence in cases).

**CHEM40261 Research Methods and Independent Study**: Preparation for research project includes study skills required for Masters level research.

**Part Time Study**

The following 2 modules should be taken in year 1

**CHEM40261 Research Methods and Independent Study**
**FORE30002 Advance Topics in Forensic Science**

This is to enable part time students to develop independent work, critical thinking and presentation skills required for other modules. The remaining taught modules can be taken in year 1 or 2 of study depending on the needs and timetable suitability for the student. It is recommended that at least 60 credit points of modules are completed in year 1 to achieve PGCert level.

The CHEM40271 Research Project 60 (60cp) can be split across 2 years of study ensuring that you can achieve the required laboratory time to complete your chosen research. The project can also be completed in your second year of study.

## 11. Admission to the course

**Entry requirements.**

For current information regarding all entry requirements for this course, please see the 'Applying' tab on the NTU course information web page.

All non-standard entry qualifications will be looked at on a case-by-case basis. Relevant work experience will be considered for accreditation of prior learning.

## 12. Support for learning

All students at Nottingham Trent University have full access to Student Support Services. In addition, School based support networks are in place to offer you support, guidance and advice on academic and personal issues. Within the course, students experience the full support of the Forensics Team. The Academic Team Leader, with support from the Course Manager, Module Leader(s), takes responsibility for student support and guidance. The Module Leader will offer guidance and support to students taking each specific module.

Academic staff can be contacted by e-mail, telephone, letter, or in person.

As a new student you will experience an induction period at the commencement of the academic year. Induction will inform you about:

- Student Support Services at University, School and Course level
- University policies and procedures on academic systems
- Personal development planning
- Timetable issues, room allocations and location
- University, School and Course Handbooks
- Enrolment procedures
- Computing, IT and Library services
- Health and Safety procedures

During your first weeks, you will be assigned a project supervisor who will act as your personal tutor. They will inform you about the best way to get in touch with your Course Leader and Module tutors. Your group tutorials will help you to reflect on your approaches to study and make connections between modules, integrating material from across the curriculum and encouraging you to achieve your maximum potential. You will also have an opportunity to discuss and deal with any personal or course-related issues, which may be affecting your studies and get advice on what support the university can offer. Personal tutorials are used for personal development planning and skills development.

The University provides a wide range of student services, where you can get support and advice on issues such as finance, dyslexia and disability, and personal problems.
http://www.ntu.ac.uk/student_services/index.html

## 13. Graduate destinations/employability

MSc Forensic Science is a multi-discipline degree that can lead into many different careers. Career opportunities include work in:

- Forensic laboratories
- Crime scene investigation teams
- Law enforcement agencies (police, HM Revenue & Customs)
- Analytical laboratories
- Archaeological investigations
- Teaching
- Law
- Health and safety

Further options include PGCE and Doctorate level studies.
In addition to the expertise available within the School, the University has a comprehensive careers service open to all students to assist in securing employment (http://www.ntu.ac.uk/careers/).

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| 14. | **Course standards and quality** |
| All aspects of quality management within the School are in accordance with the University's Academic Standards and Quality Handbook. The Course Management Team, which includes the Course Manager and Module Leaders, oversees the operational arrangements for the course. In addition, the Course Committee, central to which are the student representatives, meets regularly throughout the year to review, evaluate and develop the course. Formal course monitoring takes place at the end of each module through the administration of questionnaires offering closed and open ended questions, which is in addition to informal feedback received from students throughout the year. Overarching responsibility for quality control lies with the School Academic Standards and Quality Committee whose remit is to provide guidance and support to academic courses. External Examiners offer further quality control through monitoring academic standards, moderation of assessment tasks and processes. Course monitoring is a continuous process by which a course team, primarily through course committees, keeps under review the effective operation and currency of its course. An interim 'health check' of the course takes place annually. Every three years, Periodic Course Review provides the opportunity for course teams and Schools to take stock by considering the full range of evidence available. | |
| 15. | **Assessment regulations**<br>This course is subject to the University's Common Assessment Regulations (located in Section 16 of the Quality Handbook). Any course specific assessment features are described below: |
| | **N/A** |
| 16. | **Additional information**<br>Collaborative partner(s):<br>Course referenced to national (QAA) Benchmark Statements: *QAA subject benchmark statements for Forensic Science (2012)*<br>Course recognised by:<br>Date this course specification approved: September 2018 |
| | Any additional information: |