

## Nottingham Trent University Course Specification

<b>Basic Course Information</b>		
1.	Awarding Institution:	Nottingham Trent university
2.	School/Campus:	Science and Technology Clifton campus
3.	Final Award, Course Title and Modes of Study:	MSci Forensic Science FT/SW
4.	Normal Duration:	Full time: 4 years Sandwich-5 years
5.	UCAS Code:	

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

This course will provide you with a deep knowledge and experience of techniques relevant to forensic science both at the scene and in the laboratory, and an understanding of legislation and legal procedures. Students are also able to undertake a year placement in a variety of laboratory/forensic roles to gain a Diploma in Professional Practice.

You will gain a critical awareness of and engagement with current research methods and techniques and a clear recognition of the constraints and opportunities of the environment in which professional forensic science is carried out.

The course aims to:

- provide you with the knowledge, understanding, attributes and skills that allow you to pursue a career related to forensic science;
- enable you to develop skills in investigative techniques which are applicable to a range of scientific situations;
- create an awareness of the moral and 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.

You will benefit from access to an on-campus Crime Scene Training Facility, which is fully equipped with a digital CCTV and audio system, and a range of specialist forensic laboratories. The forensics documents examination laboratory, the ballistics laboratory, the forensic evidence examination laboratory and the forensic imaging laboratory are all equipped with the same state-of-the-art equipment that is used by professional forensic practitioners.

### **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** \*Describe and discuss the essential facts, concepts and principles of chemistry, biology and physics that are required to assist with or support a forensic investigation or research;
- CLO2** Demonstrate an effective self-critical attitude of the protocols for securing and recording a crime scene and for the collection of trace and physical evidence;
- CLO3** \*Apply appropriate laboratory analytical techniques to a range of physical and trace evidence types;
- CLO4** Discuss and apply methods of acquiring, interpreting and analysing both numerical and observational data;
- CLO5** Identify and use appropriate practical, presentational and statistical methods;

- CLO6** \*Demonstrate an critical awareness of the Criminal Justice System and the principles of crime scene analysis  
**CLO7** \*Appraise the constraints and opportunities of the environment in which professional forensic science is carried out in.  
**CLO8** \*Explain the moral and ethical issues involved in the practice of forensic science

*\*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:

- CLO9** \*Interpret complex technical information and communicate it in a wide variety of professional situations.  
**CLO10** Develop critical skills in the interpretation of scientific knowledge and data;  
**CLO11** \*Apply scientific principles and methodologies in investigations;  
**CLO12** Use equipment and materials competently;  
**CLO13** \*Communicate effectively in written, graphical and oral formats;  
**CLO14** \*Prepare and present scientific and legal reports to professional standards;  
**CLO15** \*Cultivate the independent learning ability required for continuing professional development.  
**CLO16** Engagement and familiarity with recent and current research methods, results and publications  
**CLO17** Work independently and as part of a team developing the ability to work autonomously;  
**CLO18** Demonstrate the skills required to plan, implement, draw conclusions, evaluate and report on an original investigation or research project.

*\*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. Teaching and learning methods**

In the majority of modules, your teaching and learning is centred on lectures supported by smaller group seminars and practical classes. Generally each seminar class will support the academic content of more than one lecture. Seminars are more student-led than lectures and are focused around particular issues facing the profession. Both lectures and seminars develop your subject knowledge and understanding.

Practical and workshop classes emphasise acquiring competence in the application of the fundamental principles of forensic science and they are focused around problem solving and interpretation. Mathematics, statistics and relevant software are used through practical classes. Crime scene investigation simulation exercises based on real work problems are utilised to reflect the challenges facing a Crime Scene Examiner/Crime Scene Investigator.

Laboratories are used across all levels of the programme and are where you will learn most about hypothesis testing, experiments, data capture and interpretation.

Team work is an essential part of being a forensic scientist and is therefore a fundamental part of this course. Many modules contain teamwork elements, particularly those involving a crime scene investigation component.

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

The course emphasises independent learning as an outcome and it is structured to facilitate greater learner autonomy by the final year. You are encouraged to undertake independent reading to supplement and consolidate what is being taught.

The delivery of the course is enhanced by the use of external professional staff on a 'visiting lecturer' basis. 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, workshops and computing sessions
- Access to data analysis packages
- Crime scene simulation exercises
- Oral and poster presentations
- Self-directed study and set assignments
- Problem-based learning
- Access to information, data, research papers, case studies, collections and the internet
- Distance learning materials, including books, electronic multimedia & videos

## **9. Assessment methods**

The course uses a variety of assessment techniques to ensure that you can demonstrate the range of learning outcomes. Subject knowledge and understanding is mainly tested through unseen examinations, coursework essays, 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 and assessed crime scenes.

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, coursework reports and project 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 final year 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

- Computer-based assessment
- Self/peer assessment
- Laboratory skills
- Laboratory, field and crime scene reports
- Skills portfolios
- Essays, assignments, summaries and abstracts
- Data interpretation
- Oral, poster and electronic presentations
- Courtroom skills cross-examinations

## **10 Course structure and curriculum**

The MSci Forensic Science degree is a 4-year full time or 5-year sandwich course. Successful completion of the year of 'industrial' work experience leads to the award of a Diploma in Professional Practice. Which can be taken either end of Level 5 or Level 6.

An MSci Honours degree will be awarded to students who successfully complete 480 credit points of study, 120 credit points each year. A BSc Honours degree is awarded to students who successfully complete 360 credit points; 120 credit points at each of levels 4-6. A BSc Ordinary Degree is awarded to a student who successfully completes 300 credit points at levels 4-6. A Diploma of Higher Education is awarded to a student who successfully completes 240 credit points; a Certificate of Higher Education is awarded to students who successfully complete 120 credit points.

In order to proceed to year 3 of the MSci course, you must pass year 2 with at least 55% at the first attempt. If you do not achieve this standard, but satisfy the entry requirements for the final year of the BSc (Hons) Forensic Science course, then you will be transferred onto that course. If you do not manage to complete the final year of the MSci course satisfactorily, then you will be reassessed as a BSc (Hons) Forensic Science student, using the marks you have achieved up to that point, and resubmitting your project work as a BSc project, if appropriate.

The MSci Forensic Science degree is modular and addresses key aspects of Forensic Science. The modules selected on the degree are designed to meet the course learning outcomes.

Modules are 20credit points unless otherwise stated.

### **Level 4**

All year Core:

FORE10001 Introduction to Forensic Biology  
 CHEM10033 Forensic Chemistry  
 CHEM10141 The Forensic Process  
 CHEM10211 Introduction to Forensic Analysis  
 FOR10002 Technical Skills for Forensic Science  
 FOR10003 Professional Skills for Forensics

### **Level 5**

All year Core:

BIOL20231 Biological Techniques in Forensic Science  
FOR2000x Crime Scene Investigation and Forensic Photography  
FOR2000x Ethics and Law for Forensics  
FOR2000x Forensic Casework Examination  
CHEM20451 Forensic Analysis

**Options**

One From:

FOR2000x Introduction to Suspicious Death Investigations  
BIOL22321 Microbial Structures, Identification & Distribution  
FOR2000x Forensic Image Processing

***Sandwich Year (optional) –Diploma in Professional Practice***

**Level 6**

All Year Core:

FORE3xxxx Molecular Techniques for Identification  
CHEM30331 Drugs of Abuse  
CHEM30305 Research Methodology  
FOR3000x Advanced Topics in Forensic Science

**Option 1**

Choose 1 from:

CHEM30391 Advanced Crime Scene Investigation  
BIOL33521 Forensic Microbiology  
BIOL33511 Environmental Forensic Assessment

**Option 2**

Choose 1 from:

CELS30003 Communicating Science & Technology  
PHYS32712 Ballistics & Firearms  
BIOL33501 Forensic Archaeology & Anthropology

***Sandwich Year (optional) –Diploma in Professional Practice***

**Level 7**

All year core:

CHEM30261 Project 60(60cp)  
FOR4000x Forensic Expert

**Option**

Choose 2 from:

PHYS32722 Biometrics & Forensic Databases  
FOR4000x Analytical Toxicology  
FOR4000x Bioarcheology

**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.

The full UCAS entry profile for this course can be found at: <http://www.ucas.com/>

Non-standard entry qualifications will be examined by admissions tutor on a case by case basis.

## **12 Support for learning**

We will work with you to ensure that you settle into your new academic environment and that your studies go well, and you will find that there are lots of people to support you at Nottingham Trent University.

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, Course Leader(s), Module Leader(s), and Personal Tutor, 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 a minimum of a 3 day induction period at the commencement of your first 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 induction you will be assigned a Personal Tutor and informed about the best way to get in touch with your Course Leader and Module tutors. Every year, you will have regular time-tabled sessions with your Personal Tutor, in small groups. 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 can also be used for personal development planning and skills development.

Student Mentors are also used to provide you with learning support. Student Mentors are typically students at Level 2 and above of their course, who provide some form of mathematics, academic writing or module-specific support. Such support is usually available on a 'help desk' basis.

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](http://www.ntu.ac.uk/student_services/index.html)

## **13 Graduate destinations/employability**

Graduates from Forensics courses at Nottingham Trent have been successful in developing careers in a range of scientific roles. MSci 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/>).

#### **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. 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.

Accreditation is being sought from the Chartered Society of Forensic Sciences.

#### **15 Assessment regulations**

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:

#### **16 Additional Information**

Collaborative partner(s):

Course referenced to Quality Assurance Agency for Higher Education (QAA)

Benchmark Statements:

Course recognised by:

Date this course specification approved:

Any additional information:

