Introduction to the School of Psychology

How the mind functions and how it affects our behaviour are age-old questions, and at the same time, these are two of the biggest scientific questions of our time. Both traditional scientific methods and modern neuroscience techniques provide us with exciting new answers, facilitating advances in psychology, medicine, and engineering. Our programmes are designed to not only provide you with essential knowledge and skills in scientific research, but also to let you take part in the exciting world of cutting-edge psychological research.

We are one of the largest and most active Psychology departments in the UK with an excellent reputation for teaching and research. Over half of our research was recently recognised as being ‘world leading’, ranked fifth in the Research Excellence Framework (REF) 2014. Our wide-ranging research makes an impact by giving a greater understanding of the relationship between brain, mind and behaviour.

FACILITIES AND RESOURCES

Our extensive facilities include laboratories specially equipped for work in cognition, memory, psychophysics, visual perception, auditory perception, language production, reading, human motor performance, cognitive neuropsychology, cognitive neuroscience, food, drink and nutritional psychology, physiological psychology, psychopharmacology, social psychology, and developmental psychology. We have research dedicated brain imaging facilities (eg, MRI, NIRS, TMS, EEG). There are dedicated brain imaging workstations for work in perception and cognitive science, including a computational modelling and brain analysis suite.

EXTENSIVE LINKS

There are excellent research opportunities provided by our links with local hospitals, prisons and clinics, local schools and nurseries, other University departments, industrial companies, and departments of local and national government – both in the UK and overseas. Psychology is a major partner in various Regional Research Networks (eg, stroke, epilepsy, sleep, dementia), providing the opportunity to work with various clinical populations.

RESEARCH

The School currently has a live research grant portfolio of £14.1 million generating an annual income of around £3.8 million.

We currently host five specialised research and teaching centres and institutes:
- Centre for Human Brain Health
- Institute for Mental Health
- Centre for Applied Psychology
- Cerebra Centre for Neurodevelopmental Disorders
- Centre for Computational Neuroscience and Cognitive Robotics

Research in each of the Centres contributes to the School’s research themes. Our research is grouped thematically, namely, Memory and Attention; Language, Interaction and Social Cognition; Perception, Cognition and Action; and Mental Health and Wellbeing. There are also a number of other well-established research groups, with strong links to clinical groups, notably in psychosis, neurodevelopmental disorders and addictions. Research may be carried out in areas where members of staff are willing to offer supervision.
TEACHING

Teaching activity is aligned to the School’s centres and research themes. Key examples include:

- The Centre for Applied Psychology specialises in the delivery of teaching and research courses that lead directly or indirectly to careers in applied psychology such as clinical psychology, forensic psychology, cognitive behavioural therapy and compassion focused therapy.
- The Centre for Human Brain Health, and Centre for Computational Neuroscience and Cognitive Robotics provide training in cutting edge imaging and computational methods.
- The Cerebra Centre focuses on the problems experienced by children and adults with intellectual disability, autism spectrum disorders and genetic syndromes.

For more information please visit [www.birmingham.ac.uk/psychology](http://www.birmingham.ac.uk/psychology)
Brain Imaging and Cognitive Neuroscience
MSc

Course content
Brain imaging and cognitive neuroscience have become central aspects of all areas of Psychology. This course is aimed at students who are interested in these new and emerging techniques. The course will provide students with a critical understanding of cognitive neuroscience and specific skills in brain imaging techniques (eg, fMRI, EEG) and programming. Students will have access to state-of-the-art equipment for brain imaging, brain electrophysiology and stimulation, and eye movement recording.

This programme contains specialised modules on the theory and methods of brain imaging and current advances in cognitive neuroscience linked to these methods. It offers an excellent opportunity for training in the latest imaging research methods and practical applications, with one-to-one contact with research-active staff from the School of Psychology. The course also offers opportunities to be part of front-line psychological science using the latest neuroscience technologies and methods.

Modules
You will take a series of taught modules to develop your skills in experimental design and analysis, critical thinking and reading, oral presentation and scientific writing.

You will also undertake a substantial research project, usually linked to current research in the School of Psychology, to produce a research dissertation and a conference-style poster presentation.

Modules include:
- Design and Analysis 1 and 2
- Matlab Programming
- Fundamentals in Brain Imaging
- Advanced Brain Imaging
- Applications of Brain Imaging Techniques in Cognitive Neuroscience
- Introduction to Neuroscientific Methods
- Proposing Research
- Research Project
- Application of Electrophysiological Approaches in Cognitive Neuroscience

Assessment
Students are assessed by a variety of methods including essays and reports, oral and poster presentations and peer assessments.

Fees and funding
A variety of scholarships are available. Please consult the University's postgraduate funding database www.birmingham.ac.uk/pgfunding

The course prepares you for professional training and further academic study. At the end of the programme you will be equipped either for further research study (for example, a PhD) or for a career in the development and evaluation of cognitive, computational and/or neuroscientific models. This includes neuromarketing, medical imaging processing, or research assistance in medical science.

FACT FILE

Start date: September
Duration: One year full-time, two years part-time
Study mode: On campus
Fees for 2018/19: UK/EU – £9,000 full-time, £4,500 part-time; International – £19,170 full-time
Entry requirements: 2:1 Honours degree in Psychology or related discipline, plus 2:1 research dissertation

CAREERS

LEARN MORE

School of Psychology
Postgraduate Admissions
Tel: +44 (0)121 414 4906/2864
Email: pg-psychology-admissions@contacts.bham.ac.uk
www.birmingham.ac.uk/bicn-msc
**Computational Neuroscience and Cognitive Robotics**

**MSc**

**Course content**

This programme is designed for those who are interested in applying knowledge of neural systems and brain function to research into human cognition, the sensory and motor systems, as well as the design of bio-inspired and biologically plausible robotic systems. It aims to mesh two active and rapidly developing fields, computational neuroscience and cognitive robotics, to generate novel 21st-century strategies and solutions.

From modelling human cognition to programming robots to be able to act in their environment, the course crosses the boundaries of several disciplines, including biology, neuroscience, psychology, engineering and computer science.

You will have access to state-of-the-art equipment for brain imaging, brain electrophysiology and stimulation, eye movement recording, psychophysics, and human-computer interaction as well as systems for advanced data analysis, autonomous agents, humanoid robots, and artificial vision systems.

**Modules**

This course has a strong research accent with hands-on modules, research training and practical applications.

**Modules include:**
- Foundation/Cognitive Neuroscience and Cognitive Robotics issues
- Intelligent Robotics
- Fundamentals in Brain Imaging and Cognitive Neuroscience
- Introduction to Computational Methods
- Matlab Programming
- Neural Computation
- Robot Vision
- Mind, Brain and Models
- Proposing Research
- Research Project

[www.birmingham.ac.uk/cncr-mods](http://www.birmingham.ac.uk/cncr-mods)

**Assessment**

Material is delivered through lectures, workshops, seminars and hands-on training in state-of-the-art laboratories. A significant part of the course involves being part of a research group and conducting an independent research project. You will spend approximately half of the academic year in research-related activities: project planning and preparation and a longer piece of individual research during the summer leading to a research dissertation and conference-style poster presentation.

You will be assigned to supervisors who will help you to develop a research proposal and supervise your research work. With the help and advice of your supervisors, you will design your personal development plan and course structure. This individualised training scheme will be optimised to your career aims, research interests, knowledge, and skills.
As Psychology reaches out to tackle the big questions facing society today, skills and experience in psychological research are becoming more and more in demand. Our MSc in Psychology offers students an exciting path, giving them the opportunity to deepen their specific interests whilst at the same time developing the technical and transferable skills they need to succeed in a wide range of research-related positions. It is aimed at students who wish to engage with research and want to further their practical research skills.

Students have the opportunity to build their knowledge in at least one area of contemporary psychology, usually linked to current research within the School of Psychology, such as child development, memory, language, learning, motor control, motivation, visual perception, social psychology, appetite, abnormal development, mental health, resilience and neuropsychology.

Students undertake a substantial research project, with the opportunity for one-to-one contact with research-active staff in the School of Psychology. The course also offers opportunities to be part of front-line psychological science using the latest technologies and methods.

Modules
The course comprises of a series of taught modules designed to promote development of skills experimental design and analysis, research skills, critical thinking and reading, oral presentation, and scientific writing.

Students also take one specialist Psychology module, with topics reflecting the areas of research expertise in the School. In addition, students can opt to undertake a public engagement project, in which they design and conduct an activity to share psychological research with the public.

Core modules include:
- Design and Analysis 1 and 2
- Current Research in Psychology
- Foundations in Critical Thinking
- Proposing Research
- Introduction to Neuroscientific Methods
- Research Project

www.birmingham.ac.uk/psymsc-mods

Assessment
Students are assessed by a variety of methods including essays and reports, oral and poster presentations, and peer assessments.

Fees and funding
A variety of scholarships are available. Please consult the University’s postgraduate funding database www.birmingham.ac.uk/pgfunding

A surprisingly wide range of careers are open to students graduating with an MSc in Psychology. Potential positions may involve health or education programme development, evaluation positions, or consumer product (or services) research and testing. Our students are excellent candidates for research-related employment in both private and public sector organisations as the MSc develops key skills that are highly attractive to employers, namely analytical and statistical skills, as well as presentation and report writing skills. This MSc is also excellent preparation for PhD or other advanced degree positions.
Where will Psychology take you?

Below is an overview of the kinds of employment sectors, organisations and professions that recent psychology postgraduates have entered, based on responses to 'destinations of leavers' surveys conducted six months after graduation.

Range of employment sectors
- Higher education
- Hospital activities
- Human health activities
- Justice and judicial activities
- Medical and dental practice activities
- Other social work activities without accommodation
- Research and experimental development in social sciences and humanities
- Scientific research and development
- Specialist medical practice activities

Range of employers
- Birmingham and Solihull Mental Health NHS Foundation Trust
- Birmingham Children’s Hospital NHS Foundation Trust
- Birmingham Healthy Mind
- Compton Hospice
- Dudley and Walsall Mental Health Partnership NHS Trust
- G-map (therapeutic assessment and intervention service)
- HM Prison Service
- King’s College, London
- Ministry of Defence
- Ministry of Justice
- National Health Service Partnerships in Care
- University of Birmingham
- Wolverhampton City NHS Primary Care Trust

Range of occupations
- Asset Servicing Analyst
- Assistant Clinical Psychologist
- Assistant Psychologist
- Care Officer
- Clinical Psychologist
- Clinical Studies Officer
- Cognitive Behaviour Therapist
- Criminal Justice Drug Worker
- Forensic Psychologist
- Lecturer
- Occupational Therapist
- Probation Service Officer
- Psychological Therapist
- Research Fellow
- Substance Misuse Clinician
- Life Skills Coach

I have had a fairly clear idea for a long time about my goal to pursue a career in Psychology. As time progressed, I became more certain of the area I wanted to make my expertise, as is possibly the case with most postgraduate students. I have always been very passionate about Psychology and stopping at a Bachelors degree was not an option since I felt it would not enable me to find a job to suit the level of involvement that I wanted.

I am gaining first-hand experience of the challenges and agonies that go into the creation of beautiful papers that someone might like to publish. I have learnt how to deal with people more effectively and to manage my time efficiently. My presentation skills have definitely been well oiled, as have my group work and communication skills. Overall, I feel I am emerging as a more confident and focused individual through this course and I am excited and feel well equipped to take on my next challenge.

MALVIKA IYER,
MRes Clinical Psychology alumna

MALVIKA IYER,
MRes Clinical Psychology alumna

www.pg.bham.ac.uk/ask
‘After meeting my co-supervisors, it was obvious that (they) would make fantastic supervisors with their ideas and experience in their related fields. I was also very impressed with the University itself; the most aesthetically pleasing university I have ever been to and a fantastic atmosphere on campus all year round.

It is fantastic to have such a good relationship with the people I work with and to know that if I have any problems I can sound them out and received honest and great advice on how to move forward.’

CHARLES PHILLIPS
Doctoral Researcher in Psychology
This leaflet was written several months in advance of the start of the academic year. It is intended to provide prospective students with a general picture of the programmes and courses offered by the School. Please note that not all programmes or all courses are offered every year. Also, because our research is constantly exploring new areas and directions of study, some courses may be dropped and new ones offered in their place.