Students will first be admitted to a Masters programme within the School of Computer and Information Technology at Beijing Jiaotong University, where they will undertake one year of study.

The University of York will favourably consider admitting such Beijing Jiaotong students to its full-time, year-long MSc Safety-Critical Systems Engineering programme. Admission will be subject to students:

- Having achieved a good undergraduate honours degree in Computer Science or a related discipline with an average of 80% (equivalent to a 2:1 in the United Kingdom).
- Having achieved a minimum of 21 credits with an average of not less than 80% in the first year of Masters study at Beijing Jiaotong University.
- Having demonstrated proficiency in English language by attaining an IELTS score of a minimum of 6.5 overall and 6.0 in each component (or equivalent English language qualification, as described on the University of York’s website), within the previous two years before admission to the University of York.

If students are successful in fulfilling the requirements of the MSc Safety-Critical Systems Engineering programme as set out by the University of York, they will receive an MSc award. Beijing Jiaotong University agrees to recognise this award as equivalent to the second year of the Masters study at Beijing Jiaotong. Having completed the MSc programme at the University of York, students will then return to Beijing Jiaotong to complete their final year of Masters at Beijing Jiaotong. Beijing Jiaotong will recognise in official documentation provided to students that credit undertaken at the University of York has contributed to the Masters award at Beijing Jiaotong.

**MSc SAFETY-CRITICAL SYSTEMS ENGINEERING (SCSE) AT YORK**

The discipline of SCSE is the process of systematically analysing systems to evaluate safety risks, with the aim of influencing design in order to produce safer products. In mature industries, such as civil aerospace and nuclear power, the discipline has been remarkably successful, although there have been notable exceptions to the generally good safety record, eg Fukushima. These techniques are now being extended to the Automotive, Maritime and service domains. Modern systems are highly complex and integrated. They contain computer control and information systems that contribute significantly to the functions and services being provided by the systems. The MSc in Safety-Critical Systems Engineering is a one-year, full-time course, that gives a unique opportunity to tap into the latest research and latest industrial best practice in the field of SCSE.

You will undertake a number of modules, alongside industrial practitioners, that consider the engineering and assurance of safety-critical systems. You will also undertake a substantial research project to produce research results of your own.

The course will provide you with:

- a thorough grounding and practical experience in the use of state-of-the-art techniques for development and operation of safety critical systems
- an understanding of the principles behind these techniques so that you can make sound engineering judgements during the design, deployment and operation of such a system.
- an ability to contribute to the development of safety critical control systems by ensuring that proper consideration is given to safety issues as part of the systems engineering process.
- an ability to effectively communicate with technical and non-technical stakeholders about system safety problems and their solutions in a clear and organised manner.

On completing the course, you will be equipped to play leading and professional roles in safety-critical systems engineering related aspects of industry and commerce.

**ASSESSMENT**

All the taught modules you take will be assessed by open assessment. Your project assessment will be made up of a dissertation and a talk about your project.
INTERNATIONAL STUDENTS

The Department of Computer Science at York is truly multicultural, and our international students form an important part of our community. We welcome students from all over the world. We realise that you are a long way from home, and sometimes you may require additional support services. We offer:

- Dedicated support services
- A supportive and friendly environment
- A dedicated member of our academic staff
- A college structure
- An exceptional educational experience
- A range of English language courses.

PERSONAL SUPERVISION

Every Masters student has a supervisor, who is a member of our academic staff. Your supervisor will meet with you regularly and guide you through your studies, and is someone you can turn to for any help. When you undertake your project, towards the end of your taught course, you will be allocated a supervisor associated with your chosen topic.

OPPORTUNITIES FOR FURTHER STUDY AND EMPLOYMENT

Our graduates go on to work in a range of sectors including: information and communication; manufacturing and construction; finance and legal; public and other administration; education; media and advertising; professional services; scientific and technical. Typical roles include: software engineer; programmer; data analyst; consultant; scientist; web developer; software developer; project manager; and software architect.

CONNECTIONS WITH INDUSTRY

The Department of Computer Science has a long history of successful collaboration with industry. This ranges from ensuring our teaching is relevant to emerging trends, to working with leading businesses across a range of industries. We regularly consult with an Industrial Advisory Board. This ensures that our students are at the forefront of industrial developments.

OUR RESEARCH

The Department of Computer Science at York is one of the leading research centres in Computer Science in the UK. We carry out fundamental research, which is setting the agenda in the discipline; we also work extensively with industry, translating research results into usable solutions.

THE UNIVERSITY AND THE CITY OF YORK

The University of York is a research-intensive university and a proud member of the elite Russell Group of universities. We are a leading UK university for academic excellence; ranked 10th for research impact (REF 2014), 14th in Complete University Guide 2015 and 16th in the Guardian University Guide 2015. York is regularly voted as one of the best places to live in the UK. Our beautiful historic city is vibrant, student-friendly and a great mix of heritage and contemporary and provide you with a great experience outside of the lecture theatre. Further details york.ac.uk/study/student-life/york-yorkshire

TUITION FEES

Whilst studying at the University of York students admitted under the terms of this collaboration will pay the standard international tuition fees for laboratory-based courses at the University of York as required by the University of York, but will benefit from a ten per cent discount on such fees.

KEY REASONS TO STUDY IN COMPUTER SCIENCE AT THE UNIVERSITY OF YORK

- We are a UK top Computer Science department, with excellence in both teaching and research.
- The majority of our research is world-leading or internationally excellent, so you can study with leading academics in the field. The Department ranked 7th overall in the latest Research Excellence Framework (REF 2014), and 5th for research impact.
- Low staff:student ratio, so that you get more quality time with our academic staff.
- Excellent career prospects – 90 per cent of our graduates go into work or on to further study within six months of leaving York.
- Our purpose-built facilities include up-to-date computer labs that are accessible 24 hours a day, seven days a week.

HOW TO APPLY

Students will apply to the University of York using the standard online University of York application form and process. We have an online system that allows you to save your application form at any point in the process, and then log back in to add more details at any time.

Students of Beijing Jiaotong University should apply to the University of York by the end of June of a given year to commence studies at York in September of that year. The maximum number of students that can be admitted each year from Beijing Jiaotong University to the University of York is fifteen, so students should consider an early application. Details of how to apply can be found at york.ac.uk/study/postgraduate/apply