

BSc (Hons) Computer Science and Digitisation



In partnership with:



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BSc (Hons) Computer Science and Digitisation

This three/four year course will help students develop their managerial, intellectual and practical skills and provide them with key knowledge required to work in computer science.

This course is an innovative programme where computer science and the emerging digitisation technologies and challenges are perfectly in balance to form new business leaders in the computer science field. This course aims to provide students with a comprehensive understanding of computer science. You will learn the skills needed to support the products and the services emerging within the global industry of computer science. Upon completion, students will be able to identify, analyse and make recommendations for a range of computer science issues and pursue their entrepreneurial goals.

Key Facts

Duration: 3 years / 4 years with International Route

Campus: Berlin | **Intakes:** Feb, May, October

Awarded by: University for the Creative Arts (UCA)



“I have developed immensely in a positive way, all thanks to BSBI and this will aid my career path and help me make proper choices.”

Sandra Akunna Ejiofor, BSBI student



The curriculum recognizes that diversity enriches our studies, whether from diversified cultural backgrounds or a range of different social experiences. Our curriculum is designed to provide a wide range of perspectives on the computer science industries in a global context and to be an inclusive learning environment where explicit consideration is given to the diversity of our students.

Foundation Year

International Route

- Introduction to Creative Business and Management
- English for Academic Purposes, Research and Study Skills
- Marketing, Communication and Branding
- Creative Business Project

Year 1

- Fundamentals of Computer Science
- Mathematics for Computer Science
- International Business Administration
- Computer Science-Algorithms and Problem Solving Using Python
- Statistics for Data Analysis
- Database Design and Implementation

Year 2

- Machine Learning and Visualisation
- Predictive Analysis-Classifications, Regression, Clustering
- Digital Economy and Transformation
- Computer Science for Digital Engineering (with C++; CAD)
- Modelling and Planning
- Operations Planning and Project Management

Year 3

- Simulation Techniques
- Advanced Simulation Techniques

You will have the opportunity to follow one of 4 innovative pathways.

- Dissertation

In your third semester, you will select a specific pathway to help you specialise in your chosen field. Students will be able to choose from the following pathways:

UX Design

- Principles of UX Design
- Applications and Use of UX Design

Cyber Security

- Understanding the Threats and Organizing Cyber Management Priorities
- Critical Infrastructure Protection and Risk Exposure

AI, Data Science & Analytics

- Visualization and Story Telling Using Tableau
- Big Data Analytics Using AI

Software Development

- Natural Language Processing Using Python
- Enterprise Data Warehouse and Database Management Systems

What will you experience?

The course is delivered 100% on-campus with full access to state-of-the art facilities. Students will also have additional access to course and reading materials via the University for the Creative Arts platform.

The latest technology will be incorporated during the course to enhance learning and encourage collaborative working. Industry guest speakers, company visits and placements will also be embedded throughout the course to enrich your university experience and prepare you for professional practice.

Why study this course?

You will earn a bachelor's degree with 120 UK credits per year (equivalent to 60 ECTS per year). This helps student mobility in the EU when it comes to transferring credits from one higher education institution to another.

Who should take this course?

This programme is perfect for anyone with a desire to pursue a career in the field of computer science and digitisation. This will enable students to develop the specialist knowledge required for a successful professional career. Applicants should have a valid school leaving certificate, an English language certificate and be over 18 years old.

Career Progression

The curriculum has been designed with contemporary and practical elements. The latest technology is used to enhance learning and collaborative work. Students will work alongside research-active staff on the latest research developments, while industry guest speakers and live briefs provide networking and development opportunities. This is embedded throughout the course to enrich the creative and digitisation practice and contribute to the experience at university and preparation for professional practice. Employability is a core ethos of the course and is evidenced in the course overall philosophical aims, approach to teaching and learning, as well as underpinned by co-curriculum activities, where you will gain transferable skills which are adding value to your employability and enterprising ventures.

Our memberships:



Upon successfully completing the BSc (Hons) Computer Science and Digitisation, you will be able to:

Knowledge

- Understand how the specific features of computer science work together to combine programming and operations within a global context.
- Discuss and apply coherent and detailed knowledge of Computer Science and Digitisation.
- Debate current professional opinion and research about trends in Computer Science and changes that may affect its development in the near or mid-term future.

Skills

- Initiate and carry out projects – exercising initiative and personal responsibility – to enable Computer Science related businesses to achieve defined strategic goals.
- Apply high-quality managerial and professional skills to create compelling, professional communications to both specialist and non-specialist audiences.

- Plan and manage their own ongoing professional development making appropriate use of professional opportunities, networks, publications and research sources.

Application

- Use in-depth information to analyze complex problems and suggest creative (sometimes original) solutions appropriate to professional practice in Computer Science.
- Manage operations, innovations and people management to identify and respond to changing briefs in a range of Computer Science delivery contexts.
- Evaluate critical arguments and information (that may be incomplete) to frame appropriate questions and make judgments regarding solutions to problems related to Computer Science.
- Apply a range of methods and techniques to review, consolidate, and extend their knowledge, skills and attitudes to support decision-making within the respective industries.

Entry Requirements

BSc (Hons)

Minimum age: 18 years old
(titles awarded upon completion of at least 12 years of schooling)

Academic qualifications: A school leaving certificate that allows you to pursue higher education in Germany (e.g. Abitur, Fachhochschulreife, Matura or International Baccalaureate), or International school leaving certificates, or BTEC/National Diploma, or Advanced Vocational Certificate of Education.

English Language

- Official English Tests
 - IELTS – minimum OS 6.0 (with min 5.5 in each component)
 - Password test – minimum OS 6.0 (with min 5.5 in each component)
 - TOEFL IBT OS 80 (Listening 17, Reading 18, Speaking 20, Writing 17)
 - Cambridge English Advanced (CAE) or Cambridge English Proficiency OS 69 (min 162 in each component)
 - LanguageCert International ESOL SELT OS B2 Communicator High Pass (min 33 in each component)
- Applicants who have achieved ECCTIS UK recognised High-School Certificate within the last 2 years where the medium of instruction was entirely in English (teaching and assessment). Medium of instruction letter can also be accepted if the applicant have graduated within the last 5 years but must be supported by a Duolingo test.
- Canadian nationals who have completed a bachelor's degree at an English-speaking university must submit a Medium of Instruction Letter.
- West African Certificates (WAEC AND NECO only) as a stand-alone with a minimum of C6 in English and issued within the last 5 years. Kenya Certificate of Secondary Education (KCSE) is also accepted with an overall grade C or above. For Tanzania and Cameroon, we request an IELTS (or equivalent certificate).
- WAEC/NECO must be enhanced by a successful (50%+) Internal English Assessment if issued more than 5 years ago.

*If you do not meet the above academic requirements, applicants with professional qualifications and/or 4 or more years of full-time work experience will be considered on an individual basis.

Admissions Process

Applying to study with BSBI has never been easier! Here's how it works:

1. Create an account here: start.berlinsbi.com/login
2. Select the programme and intake you would like to apply for.
3. Complete all sections of the online application.
4. Submit your application.
5. Our admissions team will liaise with you with regards to the next steps.

Once you have been accepted, you need to apply for a German student visa as soon as possible. To do this, you must:

- Make an appointment with the German embassy in your country and complete an application form (the administrative fees for this are usually around €60)
- Ensure that you provide all the correct documents to avoid being refused entry into the country. Your visa confirmation will take on average two to three months, depending on your country.

It should be noted that the student visa or 'Visum zu Studienwecken' only lasts for three to six months. For more information about the visa requirements you need to study in Germany visit: berlinsbi.com/international-student-guide

Fees: €7,000/year (EU) | €9,450/year (International)

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Berlin School of Business and Innovation (BSBI) is in partnership with the University for the Creative Arts (UCA). As a result of this partnership, BSBI is able to offer this programme. UCA is an acclaimed creative institution in the UK that ranks highly in all three of the major UK league tables. The university has also been ranked 13th out of all UK universities in The Guardian League Table 2020.

The information in this publication is correct at the time of printing and subject to change at any time. For the latest information, please visit: berlinsbi.com