

Faculty of Science School of Computing Sciences Undergraduate Courses

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Welcome to the School of Computing Sciences

Studying Computing Science is an excellent choice! Not only are the employment prospects in computing excellent, but the degree also opens doors into business, research, teaching and many other areas. In fact, it may well be the ideal degree to study. As a computer science student you will be taught problem solving skills, learn to explain and justify your reasoning, present your work clearly and attractively, and last but not least, relate to the needs of computer users. Graduates from any of our degree programmes will find they have acquired knowledge and abilities that make them highly employable in a huge variety of professions.

Computing is a fast moving subject. In the last forty years, we have moved from one computer per 100,000 people to more than one computer per individual with computers embedded in cars, telephones, TVs and other electronic devices. In your lifetime, you can anticipate each person owning thousands of processors. These will all be pervasive and users will hardly be aware of their existence. They will be in domestic appliances, clothes, building structures, perhaps even in paint! We can expect to have computers based on chemical and biological processes. You are about to enter a most dynamic, challenging and exciting profession. At the University of East Anglia (UEA), our degree programmes are all led by our research. We aim to prepare you with the learning skills and vision to cope with this challenging new world.

In the School of Computing Sciences, we are looking for communicators, people who are lively, intelligent and can work in teams. We will encourage you to develop your skills, knowledge and, by no means least, have fun. Being a student is great, being a Computing Sciences student at UEA is better still!

Professor Vincent Moulton, Head of School

Why Study Computing Sciences at the University of East Anglia?

We are one of the largest and most experienced Schools of Computing Sciences in the UK, expertly blending excellent teaching, research, facilities and exciting course modules to offer a dynamic programme targeted at the job market.

We have always promoted interdisciplinary study and the nature of contemporary computer applications demands such an open perspective to effectively address problems in disparate application areas. The degree programmes we offer and the expertise of academics within the School reflect these concerns. Research activity informs both the design and content of modules and the emphasis of the degree programmes themselves. This ensures that undergraduate studies are delivered at the cutting-edge of a rapidly progressing discipline.

Our degree programmes reflect the ever-changing nature of the industry and current research with the provision of a general computing science programme in which students may elect to defer making initial decisions about which subject areas specifically interest them. We also offer a set of more specialist programmes where students can fast-track on the application area which holds the most fascination for them.

An exciting first year project: learn how to program a robot.



Research Excellence

In the most recent Research Assessment Exercise (RAE), 85 per cent of our research activity was rated as internationally excellent or world leading.

We are particularly strong in imaging, computer graphics, speech processing, data mining, machine learning and statistics, business modelling and optimisation, biological modelling and bioinformatics. By working alongside internationally renowned researchers, you will benefit not only from up-to-the-minute results and ideas, but also learn to research, evaluate and enquire. These are the key skills needed for the 21st century.

The School continues to accommodate new application areas within its research as is evidenced by our expansion to include such areas as medical imaging and bio-computing. This enables us to provide our undergraduates with a contemporary education and to successfully send graduates out into computing and related professions.

Student Satisfaction

The 2011 National Student Survey ranked us in the top 10 for student satisfaction out of all the universities and institutions in England offering computing science courses. Why? Because we believe we offer a fully-rounded experience to our students, encompassing both foreign and industrial placements as well as campus-based lab studies.

Facilities

Our laboratory facilities are excellent. We have six general purpose computing laboratories that contain up-to-date workstations running 64-bit Windows 7. We also have specialised computer graphics labs with haptic feedback devices and stereoscopic monitors, and an electronics lab (the Lewin Lab) that contains equipment such as oscilloscopes, signal generators, spectrum analysers and Lego robots. Our newest lab is the Apple Macintosh Lab which is fitted out with iMacs, iPads and iPod touch devices. In addition to our own labs the University has 450 PCs that are available on 24-hour access.

A Supportive Environment

On your arrival at UEA you will be assigned an adviser who will provide guidance for your academic career and module choices and provide a sympathetic ear in times of personal difficulty. We have an 'open door' policy so that students can see their adviser (or other members of staff) at any mutually convenient time. If you study abroad for a year you will also be assigned an adviser at your host institution during your year away.

The University also provides a wealth of specialist support services. Whatever the issue, be it financial, personal, academic or administrative – the Dean of Students' Office and the Students' Union have experienced and sympathetic people, support groups and advice centres to help you.

Careers and Employability

Graduates from the School of Computing Sciences enjoy the most favourable prospects of any graduates. Over 90 per cent of our graduates secure computer-relevant positions with companies or continue their studies at postgraduate level in academia.

Our graduates have gone on to become computer sales executives earning £100,000 a year, whilst others have secured positions with established companies such as IBM, Aviva Logica, as Program Systems Analysts, Web Designers, IT Managers. Others have followed an entrepreneurial path and established their own companies, while some graduates chose to continue their studies at postgraduate level and enter academia professionally.

A good degree on a high quality programme is a significant asset, which greatly assists in securing an appropriate position. Parts of your degree programme seek to extend general and transferable skills through coursework, group work and seminar presentations.

We view the almost universal success of our graduates to secure personally fulfilling careers subsequent to their studies as a strong confirmation of the relevance and quality of the degree programmes we offer. By choosing a degree programme in the School of Computing Sciences you will follow a tried-and-tested route to a highly-valued qualification.

Careers Support

Of course, the employment market is very competitive, and we endeavour to ensure that all our students receive advice and training to prepare them for the transition to employment or further study.

The UEA Careers and Employability Service supports students to reflect on their skills and aspirations and relate these to potential jobs and careers. They also give advice and run invaluable workshops on finding vacancies, interview techniques and how you can write your CV effectively for a job or higher-degree applications.

www.uea.ac.uk/careers



Our Graduate's Experience

Since graduating in 2008, Edward has built on the skills and knowledge he gained on his course to carve out a successful career in eCommerce. Just one of the many graduates that have seen the benefit of studying at UEA.

Edward Johnson

Graduated

BSc Business Information Systems

Company

Brandbank

Occupation

Business Project Manager

Tell us about your career so far

After graduating, I worked for a project management consultancy as a graduate consultant. This role saw me consulting on client projects, lecturing at education events, designing education course material and managing the delivery of business projects.

I then moved to a Digital Agency in London, working as a Project Manager. This role entailed multi-project management across a number of clients, such as Kingsmill, Ryvita, Jordans Cereals, Samsung, Kettle Chips and Aviva - delivering website projects. After a year at the agency I had the opportunity to join Brandbank, a firm who provide product data and multi-media digital content to eCommerce Platforms – working with major retailers such as Tesco, Sainsbury's, Asda and Waitrose to provide the required digital content for their eShops and business processes.

Why did you decide to study at UEA?

UEA was the first university to offer the Business Information Systems degree in the country, and were regarded as the best university for my chosen subject. Although I was Norwich based before university and the thought of moving away was exciting and appealing, the facilities and reputation at UEA made it a very easy decision to stay in Norwich to study.

What was it like studying at UEA?

The course was well built and the modules I studied interlinked very well. The course was hard work, but a lot of fun too. The School really builds a sense of community, and it was great to learn with others around you who have similar ambitions.

The support throughout the degree from lecturers was outstanding; they always had time for me, which was particularly important in the final year when completing my dissertation.

What did you think about your lecturers, teaching and the facilities?

I could not fault the staff and facilities at UEA. The lecturers knew their subject areas exceptionally well and were able to impart this knowledge in a way that made it easy to understand. The support was great, and all of the lecturers had a real passion for teaching their specialist areas. The Careers Centre was also incredible. I must have spent hours with them, firstly getting help to decide what I wanted to do with my skill set and then with actually getting a job. Everyone at UEA really couldn't do enough for the students.

Has your course helped you in your career so far?

My degree has significantly helped in my career to date. The course content was relevant to my chosen career, on the IT side I was able to go into project meetings understanding the technical elements of the conversation, on the business side I studied accountancy, business management and other core business principles which have translated directly into my role as a project manager.

Looking back to your time at university, what advice would you give to new students?

It will become very apparent during your degree which modules you like more than others and the ones you are really good at, so have this in mind when thinking about jobs for the future!

I found by working really hard on the coursework, it not only gave me good marks for specific pieces of work, but it really helped cement my understanding of the material to do well in exams – it cut down on the last minute revision needed.

Finally, use the Careers Centre as much as you need - they are really helpful and know how you should place yourself in the job market.



Teaching

The most recent teaching Quality Assurance Assessment awarded the School the highest possible rating in each category, confirming that we offer the very best standard of teaching and learning as assessed by an outside and independent organisation. Our degree programmes are designed to a high standard and are accredited by the British Computer Society.

The School has 30 members of faculty, 100 research assistants and research students, supported by a team of administrators and technical support staff. All faculty and researchers are actively engaged in research projects. Numerous faculty members have qualifications in complementary disciplines ranging from physics, mathematics and biology to management, music and linguistics.

Our Approach

All our degree courses have a flexible structure that enables you to choose subjects that interest you and that are aligned with your career aspirations.

The majority of course modules are taught through lectures (in groups ranging from 15 to 150 students), seminars (in smaller groups of 10 to 15 students) and practical laboratories (in groups of no more than 16 students). Project reporting, group assignments, role-playing and seminar presentations develop your portfolio of transferable skills. Independent research skills are developed throughout your degree programme, culminating in a final year project. Students have on average 15 hours of time-tabled contact time per week with teaching staff, though this may vary depending on module choices. Additionally, we advise students to allocate at least 25 hours per week for self-study, coursework assignments and projects.

A significant proportion of our work is concerned with real-world problems and applications and we have excellent links with industry both for our teaching and research programmes. We also have a range of industry-based speakers who regularly contribute to teaching.

Research-Led Teaching

The School achieves a balanced approach to teaching and research in which undergraduate teaching is an essential component and research informs the development of the degree programme content. Within the School, teaching and research complement and enhance each other.

Our teaching staff work to provide the latest and best information, and commonly are authors of relevant textbooks and research papers. The School has an excellent research record which has included award-winning projects in graphics, vision and multi-media. The strength of our research benefits our undergraduates as lecturers are both up-to-date and enthusiastic about their subjects.

We aim to enhance and inform your interest in computing sciences by providing skills, knowledge, understanding and practical experience. You will acquire both a detailed and wide-ranging perspective of your subject.

Teaching in small seminar groups is often more effective than teaching large groups in lecture theatres.



"In my time at UEA, my adviser, the faculty and the department have all been immensely supportive."

James Sudbury, BSc Computing Science

Study Abroad and Year in Industry Options

Our degrees that offer a year in industry or abroad are an excellent opportunity for our students to develop their experience and skills as well as be a personally enjoyable time.

Year in Industry

The aims of the Year in Industry are to relate academic study to the 'real' world of industry and commerce and to provide experience in the application of engineering, information technology and computing and furthermore to experience aspects of industrial practice that cannot be taught in the classroom. The industrial placement also motivates the development of intellectual skills and develops the personal attributes required of a professional graduate.

How it Works

The Year in Industry BSc degree programmes are four years in length with the work placement taking place during the third year. They are a minimum of nine months full-time employment and a maximum of 14 months.

Throughout the work placement, you keep in close contact with an assigned mentor at UEA and your mentor will also visit you at least once during the year. You will also be supported by an industrial supervisor.

We expect students to seek their own work placements, although the School has industrial collaborators aplenty to help you with your choice. Not only will this ensure that you work within your preferred field of computing sciences, it will also provide you with the essential job-hunting skills you will require after graduation. We will, of course, offer our guidance whilst students are identifying and negotiating placement opportunities.*

Financial Benefits

A big attraction to this type of course, apart from the enhanced career prospects, is that students spending a year in industry as part of their degree will only pay £900 tuition fees for that year (2012 figures). There is also a realistic chance of being paid by the placement provider during the year which is a great way to help fund your continued studies.

For the latest on financial arrangements for our Year in Industry students please visit

www.uea.ac.uk/finance

Study Abroad

Studying at a university in another country is both a personal and an academic journey as you study in departments where different aspects of computing sciences are taught, within an entirely new location and culture.

If you select one of the four-year study abroad degrees, your third year is spent at an exchange university in Australia, Canada or the United States of America. On the three year BSc Computing Science with a year abroad, you spend your second year overseas. We take into account your field of interest and aim to place you at your preferred location and establishment. We regularly review our exchange institutions to make sure that they offer a broad and up to date programme to our students.

Funding a Year Abroad

The advantage of our exchange programmes to Australasia and North America is that you do not pay tuition fees to your exchange institution. These costs are covered by the tuition fees you pay here and is just half of the standard tuition fee during the year abroad.

Typical additional costs include transport to and from your overseas destination and living costs, including medical insurance.

North America

We have a number of reciprocal exchange programmes with universities in the United States and Canada. Those currently involved in the exchange programme are Victoria and Carleton in Canada, and University of Colorado at Boulder and University of California at Davis in the US.

Australasia

Our Year in Australasia exchange programmes are the latest addition to the School of Computing Sciences portfolio. We currently have exchange programmes with Monash University and Deakin University in Melbourne, Curtin in Perth and UTS in Sydney.

To take a year abroad you must maintain a good standard of academic performance during the first and second years of your degree programme.





Mala Gupta

BSc Computing Science

A levels Sociology Physics Mathematics Originally from London

Why did you choose to study Computing Science at UEA?

The School of Computing Sciences boasted brilliant facilities, and the lecturers were very helpful and encouraging.

Please tell us what you really enjoy about your course?

What I have really enjoyed about studying computing sciences is the lab sessions, as they have helped me apply the theoretical aspects of what I've learned to practical computer-based engineering.

Lab sessions and seminars provide a lot of contact time, and there is always an informal atmosphere where interesting discussions between lecturers and students can be held. All lecturers have drop-in hours, and I have found it really useful to get one-to-one guidance directly from my lecturers.

Having the same adviser for three years has made my experience as a Computing Science student a lot easier, as they are there to listen to my concerns and support and direct me.

What advice would you give to new students about university life?

I think you should take part in as many sports societies as you can, as it helps you unwind and get some fresh air during exam periods or stressful deadlines. Even if sport isn't your forte, there are many other societies to join, and they are a great way to meet people with similar interests to you.

Indian Society Holi Festival celebrations and the Cheerleading Society were just some of the activities that Mala has got involved with outside of her studies.

As Mala Gupta comes to the end of her studies at UEA, she has appreciated the support she has received from the lecturers on her course. She has also been able to secure a graduate IT position for when she finishes her degree.

What are your career plans or goals for the future?

I have been fortunate enough to have been offered a graduate job within the IT industry, and for the moment my aim is to learn and gain as much experience as possible before I venture into the world of work. My plans for the future possibly involve returning to UEA to study a postgraduate degree, in order to help me specialise in one field.

How did you find living on campus?

In my first year I lived in Britton House in an en suite room. Living on campus made it really easy to socialise with other people and it only took me five minutes to get to lectures in the morning, which was handy for an extra lie-in! I would definitely recommend living on campus in your first year, as it's an experience you'll never forget.

How easy did you find it settling in and making friends?

When I started at UEA I felt at ease straight away as everyone is so friendly and welcoming. I was slightly nervous about how well I was going to settle in, but I shouldn't have been – as soon as you've broken the ice with a few people, it's like you've known each other forever.

Do you take part in any sports at UEA?

I was part of the Cheerleading society in my first year and Tennis society in my second year. Both societies were fun and gave me a sense that I was learning a lot in a very short space of time. Joining a sports club is brilliant, as you get to meet loads of new friends, and have lots of fun keeping fit at the same time. There are often sports socials, and events so that you all feel like one big family.



Can you tell us about any other student societies you take part in?

I was vice-president of the Indian Society, which was a great experience as I got to meet lots of people from different backgrounds. Being part of a society meant that there were lots of events that you could attend and the annual International Party. During this party, all of the cultural societies perform their cultural acts on stage and have stands where you could have a taste of traditional food.

How would you describe Norwich?

Norwich is a city of literature and has beautiful architecture, from its cathedral to castle. It also offers a great night life, restaurants, a choice of cinemas and has one of the top shopping facilities from high street brands to cute boutiques. Norwich is also very close to Great Yarmouth on the coast which is brilliant to go to on a hot sunny day, and catching a train or bus there is very easy.

Computing Science

The degrees in general computing science, and their specialist variants, aim to prepare students to engage with fast changing computer technology and to master the fundamentals of computing science.

For further information

T 01603 591515 E admissions@uea.ac.uk www.uea.ac.uk/cmp

MComp Computing Science
UCAS code G407
A level (typical offer): AAB
International baccalaureate:
33 (incl 3 HL subjects at grade 6)
Special entry requirements: At least one
A level (or equivalent) in Mathematics
(preferred), Computing, Physics,
Electronics, Economics, Biology or
Chemistry. GCSE Mathematics grade B
Length of course: 4 years

With a year Abroad UCAS code G408 Entry requirements: as G407, in addition, A level Mathematics is required Length of course: 4 years

BSc Computing Science UCAS code G400

With a year in Industry UCAS code G401

A level (typical offer): ABB
International baccalaureate:
32 (incl 3 HL subjects at grade 6)
Special entry requirements: At least
one A level (or equivalent) in Mathematics
(preferred), Computing, Physics,
Electronics, Economics, Biology or
Chemistry. GCSE Mathematics grade B
Length of course: 3 years for G400,
4 years for G401

With a year Abroad UCAS code G404 Entry requirements

Entry requirements: as G400, in addition, A level Mathematics is required Length of course: 3 years

Typical offer grades are for guidance only – please refer to www.uea.ac.uk/cmp/courses for more detailed and up-to-date course information.

The Degree Structure

The first year introduces compulsory material in computing science. Thereafter you can continue with mainstream computer science with an increasing element of choice that relates to your interests and career aspirations in subjects such as internet technologies, artificial intelligence, databases, computer graphics, computer speech and vision, operating systems, architectures and computer networking, etc. The final year project brings together the threads of the course in a substantial individual assignment.

Year 1

You will take compulsory modules which introduce you to the fundamentals of computing science. All of these modules are taught through a combination of lectures and laboratory classes, the latter involving practical projects. You must pass the two core modules in order to be able to progress to the second year. In addition to the five computing modules, you will also take one of two modules in mathematics relevant to computing science. The mathematics module you will take depends upon your previous mathematical background.

A number of more specialist computing courses have the same first year programme as the BSc Computing Science degree and it is therefore possible to transfer to one of these other courses should your interests and career aspirations have moved in that direction during your first year.

Year 2

The second year moves from the computing fundamentals taught in the first year to state of the art generic computing subjects. This is accomplished through compulsory study in software engineering, data structures and algorithms and theoretical computing, which are all vital subjects to build a majority of competitive computing applications. You will choose further modules from a wide range of options allowing you to tailor your degree programme in a more specialist direction.

If you are studying for the BSc degree you may choose to follow one of our year abroad programmes, in which case you will spend your second year studying a comparable programme at one of our overseas partner universities.

Final Year

This year provides an opportunity to study specific areas in more depth while undertaking a major individual project. Apart from the compulsory project, all other modules are optional. The three computing options allow you to pursue your particular interests in more depth.

Our programmes offer a broad selection of modules reflecting the interdisciplinary nature of computing. Course modules can be chosen according to the student's preferences thus creating a unique and personalised profile.

The Individual Project

Most of our degree programmes allow you to undertake a final year project that accounts for one third of the final year. You will work on a unique project of which the exact subject and its specification is negotiated between you and the member of faculty who acts as your project supervisor. This allows you the opportunity to study some aspect of your degree programme in greater depth and within a context where you either tackle a significant commercial or research problem and explore possible solutions. The project may well be the most exciting, challenging and stimulating part of your degree.

The Four Year MComp Degree

This MComp allows significantly greater depth of study than is possible in a three-year degree. The first two years are similar to the BSc Computing Science where you will study a range of computing subjects. In the first year you will be introduced to the compulsory material that underpins computer science, including programming in Java.

In the third and fourth years you will undertake both individual and group projects and study specialist subjects at both undergraduate and Master's level that relate to your interests and career aspirations. As with all our degrees, flexibility is important and you can choose the area of your projects and specialism from a wide range of computing science subjects. The fourth year is more distinctive because you will undertake a major project where you will need to utilise all the research techniques gained over the last three years. Whilst working on the project you will also need to pick modules to complement your area of research.

The degree has been accredited by the British Computing Society (BCS) which provides external validation to ensure that the content of the degree is up to date and is organised and taught professionally.

Please note that course profiles may be reviewed and changed for future years of study. Full course profiles for the current academic year, including details of compulsory and optional modules, are available for each programme at:

www.uea.ac.uk/cmp/courses

Example Course Modules

Year 1 - compulsory

- Programming
- Mathematics for Computing
- Computing Fundamentals
- The Computing Revolution
- Computing Systems I
- Computing Systems II.

Years 2 and 3 - compulsory

- Data Structures and Algorithms
- Software Engineering I
- Theoretical Computing
- Computing Sciences Project

Years 2 and 3 - optional

- Database Systems
- Digital Systems Design
- Embedded Systems
- Further Mathematics
- Graphics
- Information Retrieval
- Introduction to Computational Biology
- Introduction to Medical Physics.

Year 4 (MComp) - compulsory

- MComp Project
- Research Methods

Year 4 (MComp) - optional

- Internet and Multimedia Techniques
- E-Business Systems Development
- Information Retrieval and NLP
- Human Computer Interaction
- Artificial Intelligence and Algorithms
- Systems Engineering Issues
- Computer Games Development.



Computer Graphics

This exciting degree combines the study of computing science with specialist topics in computer graphics, introducing students to contemporary issues at the frontier of the subject.

For further information

T 01603 591515 E admissions@uea.ac.uk www.uea.ac.uk/cmp

MComp Computer Graphics
UCAS code G413
A level (typical offer): AAB
International baccalaureate:
33 (incl 3 HL subjects at grade 6)
Special entry requirements:
At least one A level (or equivalent) in
Mathematics (preferred), Computing,
Physics, Electronics, Economics,
Biology or Chemistry
GCSE Mathematics grade B
Length of course: 4 years

BSc Computer Graphics
UCAS code G405
A level (typical offer): ABB
International baccalaureate:
32 (incl 3 HL subjects at grade 6)
Special entry requirements:
At least one A level (or equivalent) in
Mathematics (preferred), Computing,
Physics, Electronics, Economics,
Biology or Chemistry
GCSE Mathematics grade B
Length of course: 3 years

Typical offer grades are for guidance only – please refer to www.uea.ac.uk/cmp/courses for more detailed and up-to-date course information.

Computer Graphics is one of the fastest growing areas of computing today. Over the last decade algorithms and hardware have developed at an astonishing pace. It is now possible to render millions of textured polygons at interactive rates on consumer level hardware by utilising modern techniques. This degree is in response to the need for suitably skilled specialists who can design and understand graphics systems rather than simply drive them.

Research-led Teaching

The School of Computing Sciences has an active research group in Computer Graphics. Research currently being undertaken includes Augmented and Virtual Reality, Urban Modelling, Physics Modelling and Simulation, Haptics, Computer Assisted Surgery and Crowd Simulation. To reflect our graphics research, we provide a three-year BSc and a four-year MComp in Computer Graphics which will expose you to contemporary issues at the frontiers of the field.

Both the MComp and BSc programmes offer a research project in the third year, which is extended to a more intensive project for the former course in the fourth year. This project enables you to research and implement advanced techniques in computer graphics often linked with one of the School's research and development projects.

Crowd simulation in Virtual Norwich - courtesy of the School of Computing Sciences' Urban Modelling Group.



Course Structure

Studying computer graphics at UEA will give you an in depth knowledge of both foundation and advanced techniques. The first year of the course is in common with the BSc in Computing Science (see page 10) and introduces basic computing skills. In the second year lectures will cover two and three dimensional graphics fundamentals. Students will be able to exploit the techniques learnt through the development of two and three dimensional real-time simulations. In the third year you will undertake a substantial graphics project as well as taking two further modules in computer graphics.

State of the art 3D Graphics on portable devices is becoming the norm.



Links with Industry and Business

Our academic faculty has strong links with industry and business, particularly with leading games companies, which enables the degree to provide you with the knowledge to solve real-world problems. Many of the projects and coursework that you will take part in use data or scenarios that come from real industry and business applications. During the degree you will get first hand experience on topics such as real-time simulation, rendering techniques, haptics (or force feedback), games programming and collision detection. You will learn about graphical hardware (GPUs) which have evolved from fixed graphics pipelines to more flexible programmable pipelines. Differentiating yourself from the competition in job interviews is vital and experience with industrial strength tools and packages is often lacking from many degree courses. At UEA you will work on projects using established tools of the graphics industry including 3DSMAX, OpenGL, and C++.

Please note that course profiles may be reviewed and changed for future years of study. Full course profiles for the current academic year, including details of compulsory and optional modules, are available for each programme at:

www.uea.ac.uk/cmp/courses

Example Course Modules

Year 1 - compulsory

- Programming I
- Mathematics for Computing
- Computing Fundamentals
- The Computing Revolution
- Computer Systems.

Years 2 and 3 - compulsory

- Data Structures and Algorithms
- Graphics I and II
- Sound and Image
- Software Engineering
- Advanced Graphics

Years 2 and 3 – optional

- Computer Vision (For Digital Photography)
- Advanced Statistics
- Machine Learning
- Networks
- Architectures and Operating Systems.

Year 4 (MComp) - compulsory

- Research Project
- Research Methods
- Computer Games Laboratory
- Computer Games Development

Year 4 (MComp) - optional

- Artificial Intelligence and Algorithms
- Internet and Multimedia Techniques
- Systems Engineering Issues
- Data Mining
- Distributed Computing
- Computer Networks.

Computer Systems Engineering

This hands-on course is designed for students who have an interest in computing systems from a software, as well as a hardware, perspective.

For further information

T 01603 591515 E admissions@uea.ac.uk www.uea.ac.uk/cmp

BEng Computer Systems Engineering UCAS code HG65

With a year in Industry UCAS code HG6M

A level (typical offer): ABB
International baccalaureate:
32 (incl 3 HL subjects at grade 6)
Special entry requirements:
At least one A level (or equivalent) in
Mathematics (preferred), Computing,
Physics, Electronics, Economics,
Biology or Chemistry
GCSE Mathematics grade B
Length of course: 3 years for HG65,
4 years for HG6M

Typical offer grades are for guidance only – please refer to www.uea.ac.uk/cmp/courses for more detailed and up-to-date course information.

The BEng in Computer Systems Engineering is designed for students who have an interest in computing systems from both software and hardware perspectives. In this degree you will be taught computer programming but also low-level design right down to the electronic component level. You are also given some flexibility to either extend your knowledge of computing systems or to study some of the wider aspects of computing science. As one of the main aspects of this degree is to study computing systems, a significant proportion of your time will be spent looking at hardware, and for this we have excellent laboratory facilities where you will spend time carrying out practical work.

The Course Structure

In the first year, you take a set of modules that are designed to give you a thorough grounding in the essentials of computing and computing systems, as well as the mathematics that you will require to understand and analyse these systems. You will also study the hardware and software technology which underpins simple electronic systems. The second year extends the first year fundamentals to include detailed knowledge of analogue electronics and digital systems which underlie modern networked systems. In the third year, specialist modules including Computer Networks and Embedded Systems complete a thorough knowledge of the structure of contemporary processor and system architecture. The final year project provides an opportunity for you to put all that you have learnt into practice and showcase the engineering skills you have acquired.

Showing video images on a vector display requires some clever programming.



The same oscilloscope monitor as in the image to the left but displaying the usual electrical signals.



Facilities

We support your learning through the provision of a range of up-to-date computing and electronics laboratories. We spend a substantial amount of time on undergraduate equipment and support six undergraduate teaching areas with modern computers running both Windows and Linux operating systems. The Lewin Laboratory has additional test equipment such as oscilloscopes, signal generators, meters, logic-analysers, spectrum analysers for making measurements on hardware systems.

Links with Industry and Business

Our academic faculty has strong links with industry and business which enables the degree to provide you with the knowledge to solve real-world problems. Many of the projects and coursework that you will take part in use data or scenarios that come from real industry and business applications.

British Computing Society Accreditation

The degree has been accredited by the British Computing Society (BCS) to ensure that the content of the degree is up to date, organised and taught professionally.

A Year in Industry

You may choose to follow our four-year programme which incorporates an additional placement (third year) in industry, where you will have the opportunity to gain valuable work experience in a field related to computer systems engineering. You will return to the University in your fourth year to complete the final year of your degree. Your year in industry will count towards your degree. Please see page 7 for more details.

Please note that course profiles may be reviewed and changed for future years of study. Full course profiles for the current academic year, including details of compulsory and optional modules, are available for each programme at:

www.uea.ac.uk/cmp/courses

Example Course Modules

Year 1 - compulsory

- Programming
- Mathematics for Computing
- Computing Fundamentals
- Computing Technology
- Computer Systems.

Years 2 and 3 - compulsory

- Sound and Image
- Architectures and Operating Systems
- Software Engineering
- Embedded Systems
- Project

Years 2 and 3 – optional

- Systems Engineering
- Sound and Image II
- Artificial Intelligence
- Database Systems.



Computing Science, Imaging and Multimedia

For further information

T 01603 591515 E admissions@uea.ac.uk www.uea.ac.uk/cmp

BSc Computing Science,
Imaging and Multimedia
UCAS code G450
A level (typical offer): ABB
International baccalaureate:
32 (incl 3 HL subjects at grade 6)
Special entry requirements:
At least one A level (or equivalent) in
Mathematics (preferred), Computing,
Physics, Electronics or Economics
GCSE Mathematics grade B
Length of course: 3 years

Typical offer grades are for guidance only – please refer to www.uea.ac.uk/cmp/courses for more detailed and up-to-date course information.

"I recommend this course to anyone who enjoys filming and computing and for those that would like to work in television or in the gaming industry. It fulfils technical gaps that are not covered in typical film and television degrees and offers a different perspective to those developing graphics applications."

Manuel Marquez, BSc in Computing Science, Imaging and Multimedia Graduate

This degree allows you to combine an interest in video and sound with computing science. The course benefits from the expertise of highly research-active academic staff within the School of Computing Sciences in areas such as computer graphics, speech and audio processing and computer vision. The first year teaches compulsory computing science subjects, alongside subjects in the field of film and TV.

Year 1

The first year of the Computing Science, Imaging and Multimedia course is very similar to the general Computing Science (G400) course (see page 10), apart from one module (Analysing Film and Television) which is provided by the School of Film and Television Studies. This has the advantage that you still have the opportunity to change your course if you wish to do so after the first year.

Year 2

From the second year onwards more specific modules are taught in relation to imaging and multimedia. These include computer graphics, where your coursework task will involve the development of a 2D computer game, and software engineering to ensure that you have solid programming skills as demanded by the digital games, entertainment, special effects and media industries. You will also be taught the basics of sound and image processing and you will further your knowledge in film studies through some exciting film production projects in the television studio or outside. Further optional modules will allow you to either specialise in computing science subjects such as computer graphics or sound and image processing, or related subject areas, such as film and television.



Year 3

You will have the flexibility to pursue your chosen specialisms from the wide range of optional modules available. You will undertake a year long imaging and multimedia or computer graphics project providing you with experience of independent project work, both from a technical and organisational perspective.

Examples of projects in key fields may include: computer graphics (eg modelling a 3D game using advanced user interfaces such as haptic feedback devices and stereoscopic displays), computer animation (eg create a life-like virtual model of Norwich or another big city and populate it with virtual people and cars), computer vision (eg analysis and restoration of film archives using graphics and vision techniques), multimedia (eg making your own movie with special effects) or sound and image processing (eg converting from music notation to MIDI representation and/or automatically identifying the type of music being played) or even a mixture of all of these!

Additionally, more advanced modules on the earlier mentioned topics are on offer. For example, if you wish to carry on with computer graphics, your next challenge will be to develop 3D computer graphics simulations or games. Or you can carry on where you left off in the second year and do a more advanced studio or film project and develop a video, documentary or TV production.

Our Links with Industry

Our academic faculty has strong links with many imaging and multimedia companies across the UK and we use these contacts to help shape the degree content through coursework and projects based on realistic problems these companies face. It is a fact that many of our graduates have moved into employment within these companies who operate in the fields of computer games development, special effects for the movie industry, broadcasting, the media and electronic publishers.

Please note that course profiles may be reviewed and changed for future years of study. Full course profiles for the current academic year, including details of compulsory and optional modules, are available for each programme at:

www.uea.ac.uk/cmp/courses

Particle systems are used to simulate smoke in CGI (Computer Generated Imagery).



Example Course Modules

Year 1 - compulsory

- Computing Fundamentals
- Computer Systems
- Programming for Applications
- Analysing Film and Television
- Mathematics for Computing.

Years 2 and 3 - compulsory

- Graphics
- Sound and Image
- Software Engineering
- Computing Project

Years 2 and 3 - optional

- Artificial Intelligence
- Film Theory
- Electro-acoustic Composition
- Creative Music Technology
- Documentary Video Production
- Architectures and Operating Systems
- Circuits and Systems
- Data Structures and Algorithms
- TV Studio Production
- Professional Video Production
- Video Project
- Advanced Graphics
- Computer Vision for Digital Photography
- Networks
- Popular Music
- Animation
- Database Systems
- Physics of Music.

Software Engineering

This specialist degree provides a solid understanding of the key technologies needed for a career in software engineering as well as learning skills that are directly applicable to real world applications.

For further information

T 01603 591515 E admissions@uea.ac.uk www.uea.ac.uk/cmp

BSc Software Engineering
UCAS code G600
A level (typical offer): ABB
International baccalaureate:
32 (incl 3 HL subjects at grade 6)
Special entry requirements:
At least one A level (or equivalent)
in Mathematics, Computing, Science
or Economics
GCSE Mathematics grade B
Length of course: 3 years

Typical offer grades are for guidance only – please refer to www.uea.ac.uk/cmp/courses for more detailed and up-to-date course information.

Software Engineering is one of the most important subject areas in the development of today's commercial computing applications. Its main purpose is to build quality professional software solutions in a timely and a sustainable fashion. This encompasses a wide range of activities starting from initial conversations with the customer, followed by software design and implementation, to finally arrive at a commercial software product, after several iterations of the earlier stages. The developed product most frequently follows a cycle of upgrades over the years, known in the field as 'maintenance', which is as crucial to the success of the product as the initial development stages.

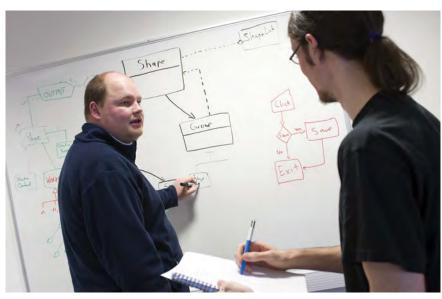
Teaching and Assessment

Material covered in lectures is complemented by practical laboratory classes and workshops. A significant part of the assessment for this degree is based on projects that cover various aspects of up to date software engineering methodologies. Projects frequently involve group work, which enables you to develop and enhance your ability to work in teams and to efficiently communicate your computing and engineering solutions to realistic industry-driven problems.

Links with Business and Industry

The School of Computing Sciences has links with business and industry which are exploited in the degree, by setting real-world problems and using real data in practical projects and coursework.





"The main reason I chose my course was the facilities in the School of Computing Sciences; the PC labs, amongst other rooms, were very well equipped."

Ross Johnson, BSc Software Engineering

Year 1

The first year of the Software Engineering course is the same as the BSc Computing Science course (see page 10). Here you will get an overview of computing technology, learn the Java programming language, and use it to build web applications. Fundamentals of databases and networking, as well as the legal, ethical and organisational context of developing and working with computing systems, are also introduced.

Year 2

In the second year you will expand your knowledge of software engineering, database systems, systems analysis, and data structures and algorithms. You will also be able to tailor your degree to your specific interests and career aspirations by choosing subjects from a range of software engineering and computing modules.

Year 3

This year will provide you with knowledge of engineering principles that enable you to design and develop large-scale, commercial software systems whilst also undertaking a final year project focused on software engineering. The project will be under the individual direction of one of the School's lecturers. Projects from a wide range of topics in software engineering and computing are available. You will be guided and encouraged to use various skills learnt during the three year course, to prepare you for independent, professional and creative work in software engineering.

Please note that course profiles may be reviewed and changed for future years of study. Full course profiles for the current academic year, including details of compulsory and optional modules, are available for each programme at:

www.uea.ac.uk/cmp/courses



Example Course Modules

Year 1 - compulsory

- Computing Fundamentals
- Computing Systems
- The Computing Revolution
- Programming
- Mathematics for Computing.

Year 2 - compulsory

- Data Structures and Algorithms
- Software Engineering
- Systems Analysis
- Database Systems

Year 2 - optional

- Theoretical Computing
- Architectures and Operating Systems
- Digital Systems Design
- Artificial Intelligence
- Circuits and Systems.

Year 3 - compulsory

- Systems Engineering
- Software Engineering II
- Computing Project

Year 3 - optional

- Machine Learning
- Networks
- Information Retrieval
- Embedded Systems
- Sound and Image.

Computing for Business

Computers are a critical asset for the business environment hence there is an increasing demand for computing specialists with business and management skills.

For further information

T 01603 591515 E admissions@uea.ac.uk www.uea.ac.uk/cmp

BSc Computing for Business UCAS code GN51

With a year in Industry UCAS code G511

A level (typical offer): ABB International baccalaureate: 32 (incl 3 HL subjects at grade 6) Special entry requirements: At least one A level (or equivalent) in Mathematics, Computing, Economics or business related subjects GCSE Mathematics grade C Length of course: 3 years for GN51, 4 years for G511

Typical offer grades are for guidance only – please refer to www.uea.ac.uk/cmp/courses for more detailed and up-to-date course information.

The Computing for Business degree is aimed at students who want to develop a career in a commercial computing environment. Students will acquire a wide range of techniques and tools for use in the construction of sophisticated information systems with particular emphasis on software for business. The majority of the modules are taught in the School of Computing Sciences, but some of the more specialist business modules are taught by the Norwich Business School.

There is also considerable room for tailoring the degree to your own interests and career aspirations. The Norwich Business School has expertise in a wide range of topics including marketing, strategy, supply-chain management and the application of information technology. You will be able to integrate these within the context of computing for business. In addition students are provided throughout with opportunities to practise and improve the skills needed to work in the business computing area, for example, by writing reports, taking part in discussions and giving oral presentations.

Assessment

A significant proportion of the assessment for this degree is made up of project work – both individually and in groups. In the final year, a large, individually supervised project provides the experience of tackling a problem that is likely to have originated within a business environment. The project is selected so as to suit the student's interests and aspirations.

Our Industry Links

Our academic faculty has considerable experience of working in collaboration with external companies, specialising in the areas of web design, usability testing, databases, computer networks and information retrieval. These links with business and industry are also exploited in the degree by setting real world problems and using real data in practical projects and coursework.



User requirement analysis is the first step towards designing successful business solutions. Talking to clients early on is therefore of utmost importance.

Year 1

During the first year of the programme you will undertake a range of compulsory modules, specifically designed to provide you with a solid foundation in computing systems, computer programming, systems architecture, and introduction to business.

Years 2 and 3

In these years you study further commercially oriented computing modules and learn about the workings of organisations. There are a number of compulsory modules in topics that are essential to the degree, such as system analysis, database techniques, software engineering, and organisational behaviour. You are free to choose further computing and business modules that suit your interests and your career aspirations.

In the final year you will carry out a year-long supervised project, providing you with first-hand experience of independent project work, both from a technical and an organisational standpoint.



A Year in Industry

You may choose to follow our four-year programme which incorporates an additional placement (third year) in industry, where you will have the opportunity to gain valuable work experience in the field of business computing, so increasing your employability even further. You will return to the University in the fourth year to complete the final year of your degree. Your year in industry will count towards your degree. See page 7 for more information.

Accreditation

The degree is accredited by the BCS (The Chartered Institute for IT), meaning that you will have fulfilled the academic requirement for registration as a Chartered IT Professional (CITP) and partially fulfilled those for becoming a Chartered Engineer (CEng). This external validation ensures that the content of the degree is up to date and that high quality teaching and learning standards are maintained.

Please note that course profiles may be reviewed and changed for future years of study. Full course profiles for the current academic year, including details of compulsory and optional modules, are available for each programme at:

www.uea.ac.uk/cmp/courses

Example Course Modules

Year 1 - compulsory

- Computing Fundamentals I
- Computing Systems I
- Introduction to Business
- Programming
- The Computing Revolution.

Years 2 to 4 - compulsory

- Software Engineering
- Systems Analysis
- Database Systems
- Introduction to Organisational Behaviour
- Computing Project

Years 2 to 4 – Computing options

- Artificial Intelligence
- Architectures and Operating Systems
- Graphics
- Sound and Image
- Information Retrieval
- Networks

Years 2 to 4 - Business options

- Accounting for Non-specialists
- Introduction to Financial and Management Accounting
- Principles of Marketing
- Operations Strategy and Management
- Behavioural Aspects of Marketing
- Management Consulting and Development
- Entrepreneurship and Small Business.

Business Information Systems

"The main reason for choosing my course was it's reputation among potential employers and I thought this would help my chances of employment after graduating."

Lorna Unwin, BSc Business Information Systems

For further information

T 01603 591515
E admissions@uea.ac.uk
www.uea.ac.uk/cmp

BSc Business Information Systems UCAS code GN54
A level (typical offer): ABB
International baccalaureate:
32 (incl 3 HL subjects at grade 6)
Special entry requirements:
At least one A level (or equivalent) in Mathematics, Computing, Economics or Business related subjects
GCSE Mathematics grade C

Length of course: 3 years

Typical offer grades are for guidance only – please refer to www.uea.ac.uk/cmp/courses for more detailed and up-to-date course information.

This broad degree programme combines topics in computing, information systems and business. It is designed for students who either envisage a career designing and implementing computerised systems in a business environment, or who wish to become managers with a full knowledge of the potential of information systems within a business setting. Our many links with businesses confirm that graduates with this mix of skills and experience are precisely the sort of employees that are needed in a modern business environment. It is no longer sufficient to study business or computing; successful businesses need people who can do both. Graduates from this type of programme are highly sought after and most gain related employment in IT or management consultancy, programming or business analysis.

The course is taught jointly by the School of Computing Sciences and Norwich Business School who have expertise in marketing, strategy, supply chain management and application of information technology. Students will be able to put these theories into practice within the context of computing for business.



Year 1

The course has a customised first year that develops your understanding of business and information systems. It ensures a thorough grounding in a range of important subjects including Business, Organisational Behaviour, and Computing Systems. Opportunities are given to work both individually and with others on a range of practical topics. You are provided throughout with opportunities to practise and improve the skills needed to work in the Business Information Systems area, for example, by writing reports, leading discussions and conducting oral presentations.



Years 2 and 3

In these years you can choose the balance between computing and business that is most suitable for your career plans. You will explore further the central topics of Systems Analysis, Design and Databases and in the final year, learn more about Organisational Information Systems and many important subjects such as Quality Assurance, Project Management and Process Improvement. In addition, you will carry out a final year individual project in an area suited to your interests and aspirations. This exciting project enables students to integrate and practise things learned so far. It aims to ensure that they have the skills needed to provide the systems that best serve the information needs of business. Examples of recent projects undertaken by students include The Impacts of Computing within a Small Business, Website Development for a Local Golf Club and Repairman Job Allocation and Scheduling.

For the remainder of the second and third years, you are able to choose a balance between computing and business modules that is most suited to your career plans.

Please note that course profiles may be reviewed and changed for future years of study. Full course profiles for the current academic year, including details of compulsory and optional modules, are available for each programme at:

www.uea.ac.uk/cmp/courses

Example Course Modules

Year 1 - compulsory

- Programming for Applications
- Introduction to Business
- Introduction to Organisational Behaviour
- Introduction to Financial and Management Accounting
- Information Systems and Business Research
- Computer Systems I.

Years 2 and 3 - compulsory

- Systems Analysis
- Database Systems
- Organisational Information Systems
- Systems Engineering
- Business Information Systems Project

Years 2 and 3 – optional

- Software Engineering
- Further Computing Systems
- Applied Statistics
- Financial Accounting
- Legal Issues in Business
- Management Accounting
- Principles of Marketing
- Operations Strategy and Management
- Networks
- Information Retrieval
- Advanced Management Accounting
- Entrepreneurship and Small Business
- Behavioural Aspects of Marketing
- Management Consulting and Development.

Applied Computing Science with a Foundation Year

For further information

T 01603 591515 E admissions@uea.ac.uk www.uea.ac.uk/cmp

BSc Applied Computing Science with a Foundation Year
UCAS code G414
A level (typical offer): CCC
International baccalaureate:
28 (incl 3 HL subjects at grade 5)
Special entry requirements:
GCSE Mathematics grade C
Length of course: 4 years

Typical offer grades are for guidance only – please refer to www.uea.ac.uk/cmp/courses for more detailed and up-to-date course information.

This degree has been designed specifically to meet the requirements of students looking to embark on an undergraduate computing degree but who initially lack the academic qualifications to start immediately on one of our programmes.

The Foundation Year

The foundation year (year 0) of this programme provides a strong platform in fundamentals of computing and essential mathematics. Following successful completion of this year, if students have met the required progression criteria, they have the opportunity to transfer to the first year of any of our computing degree programmes. A higher attainment is expected for entry to the MComp and to the programmes with a year abroad.

Students on the programme come from a wide range of backgrounds including:

- Students who have studied relevant subjects to an appropriate level but did not achieve the necessary grades
- Students with work experience who may not have formal qualifications in relevant areas.

We encourage applications from students with A level, Access, BTEC, or professional qualifications, and will consider a variety of alternatives as equivalent to our stated entry requirements.

"The foundation year provided me with good fundamental knowledge in areas such as mathematics and programming and was very useful for the following years of my degree."

Sarah Hilder, UEA graduate and current PhD student



Embedded systems are the new hardware. Easy to program with applications ranging from simple games for entertainment to professional systems.

The foundation year can be regarded as a preparatory year for the standard computing programmes and aims to achieve several objectives:

- Give an understanding of what computer systems and software development is about
- Give a practical introduction to programming in a high-level language
- Raise mathematics to a standard that will enable confident progression to what is effectively the first year of another computing programme
- Develop study skills through a small group project that will involve research writing and organisational and presentational skills
- Give an introduction to the essentials of computing for business.

After the Foundation Year

After assessment at the end of year 0, and subject to successful completion, you will transfer to year 1 of one of the Computing Science programmes listed on the previous pages: see these programmes for a description of the subjects you can study during these years.

Please note that course profiles may be reviewed and changed for future years of study. Full course profiles for the current academic year, including details of compulsory and optional modules, are available for each programme at:

www.uea.ac.uk/cmp/courses

Example Course Modules

Year 0 - compulsory

- Introduction to Computing for Business
- Study Skills for Foundation Students
- Foundations of Computing
- Introductory Computing
- Mathematics.



Life at UEA

The University of East Anglia is an internationally renowned university based on a spacious campus that provides top quality academic, social and cultural facilities to more than 13,000 students. The latest National Student Survey showed once again that our students are among the most satisfied in the country. The University has been in the top 10 English mainstream universities for student satisfaction ever since the survey began seven years ago. We came third for facilities and third overall in the Times Higher Education Student Experience Survey 2011, and the Guardian University Guide 2012 placed us in the top 20 UK institutions.

"This excellent university is among the best on virtually any grounds you care to mention."

The Virgin Guide to British Universities 2012



An Ideal Location

Built on 130 hectares of beautiful parkland on the outskirts of the historic city of Norwich, our campus is one of the most innovative in the country, combining natural beauty with architectural flair. The campus has won more than 20 architectural awards and ongoing multi-million pound investment continues to enhance teaching and research facilities. Virtually no part of our campus is more than a few minutes' walk from anywhere else, and almost every student need is catered for on site - there's a large food shop, a newsagent, a post office, two banks, two launderettes, a Waterstone's bookshop, restaurants, bars and even a travel agent. There are good public transport links into the city, which has a mainline railway station with regular services to London and all other parts of the country. Norwich also has an international airport.

Accommodation

First year undergraduates, who live outside a 12 mile radius of Norwich and who have selected UEA as their firm choice are guaranteed one of our 3,500 study bedrooms (many en suite). You will need to apply by the deadline which is published on our web site. Our accommodation has achieved the joint highest score in the Times Higher Education Student Experience 2011 and The Architects' Journal has voted our original residences – the Ziggurats – in the top ten examples of university architecture in the country.

www.uea.ac.uk/accommodation

"Students get the chance to live in either an architectural masterpiece or some of the best modern facilities of any university." The Sunday Times University Guide 2011



Learning Resources

Our library contains more than 800,000 books and journals, as well as extensive collections of specialist materials. It is open seven days a week, and until midnight six days a week during semesters. We provide a wide range of IT services including campus internet access via a wireless network and in student residences. Specialist equipment such as scanners, colour printers and work stations specially equipped to meet the needs of users with mobility problems or visual impairment are also offered.

www.uea.ac.uk/is

Student Support

We offer a wide-range of advice and guidance to any student who wishes to make the most of the opportunities available to them whilst at UEA or who is experiencing difficulties. From counselling to childcare, money matters to our chaplaincy, it's good to know there's help available whenever you might need it. We have financial advisers, an international student advisory team, learning enhancement tutors, an excellent nursery and a disability team. We also have a purpose built campus Medical Centre, a Boots pharmacy and a dental service offering NHS treatment to students and their families.

www.uea.ac.uk/services/students

Sporting Facilities

The University's £30 million Sportspark is now the biggest indoor sports centre in Britain, boasting a state of the art Olympic sized swimming pool, athletics track, climbing wall, superbly equipped gym and an extensive range of sports and leisure activities, from dance classes to five-a-side football.

www.sportspark.co.uk

Arts and Culture

We are home to the Sainsbury Centre for Visual Arts which provides access to permanent exhibitions of world art and a diverse range of touring exhibitions unrivalled by other universities. UEA also hosts an International Literary Festival which has included famous names such as Ian McEwan and Kazuo Ishiguro – both alumni of UEA's Creative Writing course.

www.scva.ac.uk

www.uea.ac.uk/litfest

Gigs

The Independent says our Student Union gig roster is "like pop music's roll of honour, with the biggest names performing each year and other students' unions wondering how on earth we manage it". The LCR plays host to a wide range of popular bands, with around 60 gigs on campus each year. Regular club nights cover a wide spectrum of tastes and ensure there is something for every music fan. Recent high profile performers include Coldplay, Bombay Bicycle Club, Ed Sheeran, Rizzle Kicks, Wretch 32, Professor Green, Kaiser Chiefs, Example, Noah and the Whale.

www.ueastudent.com

Financing Your Studies

We are committed to ensuring that tuition fees do not act as a barrier to those aspiring to come to a world leading university and have developed a funding package to reward those with excellent qualifications and assist those from lower income backgrounds. For up to date information on financial matters including our tuition fees, maintenance grants, student loans, scholarships and bursaries please see:

www.uea.ac.uk/finance

"The Sainsbury Centre for Visual Arts is perhaps the greatest resource of its type on any British campus." The Times Good University Guide 2012



"UEA's LCR (Kaiser Chiefs pictured) has been voted the best student venue in the country by the music industry's Live! Magazine. Each year more than fifty live bands grace its stage." The Virgin Guide to British Universities 2012

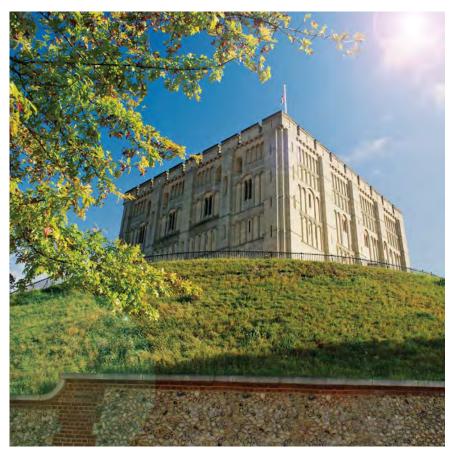


"The excellent sporting facilities are based around the £30 million Sportspark, which boasts an Olympic-sized swimming pool, fitness and aerobics centres, athletics track, climbing wall, courts and pitches." The Times Good University Guide 2012



Norwich and the Region

Norwich doesn't shout about itself too much but what a city – and what a region. It's got it all – and some – and is just waiting to be explored! Norwich, a thriving cosmopolitan city with a noble heritage, is surrounded by glorious countryside including the Norfolk Broads. The Norfolk coastline, with everything from glorious sandy beaches to mysterious creeks, is easily accessible too, so you'll have plenty of time for rest and relaxation – if your studies allow! The city's landmark Norman Cathedral and Castle, cobbled streets lined with charming half-timbered houses and over 30 medieval churches are complemented by vibrant new developments including the Forum, which houses the Millennium Library and hosts regular concerts, comedy nights and craft fairs. So you've got that charming mix of historical atmosphere and those vital modern day must haves!



Shopping

Norwich boasts a rewarding blend of independent stores, small specialist shops, major high street chains and the country's largest six-day open-air market, all set amidst a maze of pretty medieval lanes and alleys.

It's no wonder then, that it was voted one of the top ten places to shop in the UK and with Norwich Lanes, a particular hot spot for quirky buys, gaining more popularity, the city is a shopaholic's paradise.

With much of it pedestrianised and being very compact, it is a joy to simply walk around, maybe stopping in one of those fab cafés for a reviving hot chocolate.

Nightlife

In addition to the University's renowned LCR venue which hosts regular club nights, the city centre caters for all music tastes, from mainstream rock and pop and r & b to alternative indie, and underground dance. There are more than 300 pubs and bars in the city, each with its own special vibe. The Golden Triangle has an excellent selection of pubs which are well established within the student community, offering regular quiz evenings, film nights and good food. If you choose to stick around over the summer, there are several great music festivals which take place in the region, including the increasingly popular Latitude which sees everything from poetry to rock gods on offer – often with mud thrown in for free!

The Waterfront is UEA's very own live music venue and nightclub situated in Norwich's city centre.



"I think Norfolk is the most beautiful and perfect place on Earth."

Stephen Fry, actor, writer and UEA Honorary Graduate

Norwich is England's first UNESCO City of Literature.



Norwich was nominated to become the UK's City of Culture 2013, and it's easy to see why. The city has six theatres with the Theatre Royal regularly staging West End productions, three cinemas, including a great art house cinema, a number of established museums and a host of art galleries, from the renowned Norwich Gallery to artist led galleries Outpost and Stew.

The Norfolk and Norwich Festival, held each May, is internationally acclaimed, attracting performers and visitors of all ages. Its programme covers everything from classical ensembles to French-Canadian acrobats and the Open Studios scheme, also part of the Festival, sees local artists opening up their studios for an exclusive peek inside fascinating stuff!

The carnival and firework display for the Lord Mayor's celebration every July is also not to be missed while the Royal Norfolk Show, at the end of June every year, is the country's largest two-day county show which celebrates all that is great about this diverse county from its agricultural heritage to its gourmet food producers.

Travel

Norwich has excellent public transport with trains every 30 minutes to London. Norwich International Airport is only 15 minutes from the city centre and has links worldwide via four daily flights to Amsterdam. National Express and Megabus also operate services directly from the University.

Art and Culture

There is a wide range of foodie options in Norwich, providing everything from all day breakfasts to your local curry house. A number of more formal restaurants are still very affordable, and have student friendly discounts and menu options. There is also a great range of independent cafés offering everything from posh sarnies to smoothies with old fashioned afternoon tea becoming a firm favourite! Look out for all the great delis and farm shops for fresh, seasonal produce (Norfolk produces everything from juicy mussels to organic chocolate) so you will

And the county has many micro breweries so you can sample Nelson's Revenge or even one called Headcracker and Norwich's annual Beer Festival, every October, sees people queuing round the block to get in! But don't worry, the local apple juice is delicious too.

Perfect Location

never starve!

Food and Drink

One of the best things about the University of East Anglia is its location, situated on the edge of both the city and countryside. The Norfolk coastline is home to world famous bird reserves and beautiful beaches, as well as ever-changing countryside interlaced with sleepy medieval villages, bustling market towns and stately homes. One of England's most beautiful national parks, The Broads, is also right on our doorstep for sailing, walking and cycling while paintballing, ice skating, amusement parks, a trip to the zoo or a day at the races are all within easy striking distance of the University.





"Norwich... has been voted one of the best small cities in the world."

The Times Good University Guide 2011

Applying to UEA

Applications

All applications for full-time undergraduate degree courses must be made through the Universities and Colleges Admissions Service (UCAS). The UCAS code name and number for the University of East Anglia is EANGL E14. Please visit their website to apply and for further information regarding the application process.

www.ucas.com

International Applicants

We welcome applications from students outside the UK. The School of Computing Sciences offers a high quality educational experience for international undergraduates, visiting students, exchange students and postgraduates. There are over 2,500 non-UK students studying at the University of East Anglia from more than 100 countries, including Australia, China, Cyprus, France, Gambia, Mexico, India, Kenya, Spain, USA and Vietnam. For further information about all aspects of life as an international student at UEA including English language requirements and help improving your English, please see:

Our stunning campus, just 15 minutes from the centre of Norwich, has won over 20 awards for architecture.

www.uea.ac.uk/international www.intohigher.com/uea

UEA is in the top ten of the Guardian's People and Planet Green League 2011, which ranks universities according to their policies and commitment to environmental management.



Students with Disabilities

We welcome applications from students with disabilities. The Disability Team aims to offer information, advice and the co-ordination of support required by students both before and during their studies. The more information we have in advance of your arrival, the easier it is for us to make any necessary preparations. This can include any reasonable adjustments which are required for your studies or accommodation. We would be happy to arrange an informal visit to the University for you. For more information see:

www.uea.ac.uk/services/students/disability

Mature Applicants

We extend a welcome to students who are returning to study, who may have alternative qualifications. Students who come with alternative educational backgrounds add a very valuable dimension to the undergraduate teaching programme in the School. Staff and students alike appreciate and value their motivation, skills and experience.

We operate a flexible admissions policy in order to take account of prospective students who do not come to us directly from sixth form, and are always pleased to advise you on the most suitable way forward if you lack formal qualifications. Please contact us for an informal chat. See:

www.uea.ac.uk/study/undergraduate/mature



Visiting Us

We are always delighted to meet prospective students, either before or after their applications through UCAS. The best way to assess a university is to visit and experience what it has to offer. We warmly invite you to come and meet us.

Open Days

These give you the chance to find out about student life here, courses we offer, student finance and graduate careers. You will be able to talk to lecturers and current students as well as taking a tour around campus. For more information and upcoming dates see: www.uea.ac.uk/opendayinfo

Visit Days

Each year we hold a series of Visit Days, where applicants to our courses are invited to visit the University to learn more about the course they have applied for, meet current students and staff and tour our campus. Applicant Visit Days are usually held between November to March each year. If you wish your parents to accompany you, we have a programme specifically developed for their interests including finance and welfare issues. For more information see:

www.uea.ac.uk/visitdays

Individual Visits

You are very welcome to visit the School at other times – just call us to make arrangements.

Norfolk is the safest place in the country according to recent statistics issued by the Home Office 2012.





Disclaimer

We have taken great care in compiling the information contained in this brochure, which we believe to be accurate at the time of going to press. However, the provision of courses, facilities and other arrangements described in the brochure are regularly reviewed and may, with good reason, be subject to change without notice. Applicants for undergraduate programmes will be notified immediately of any material changes likely to have a bearing on their application, such as cancellation of, or major modification to, degree programmes or modules offered; changes to the delivery or location of courses, changes to accommodation provision, changes to entry requirements; or changes to fees and charges to be levied by the University.

Should industrial action or other circumstances beyond the control of the University occur, and this interferes with the University's ability to deliver programmes or other services in accordance with the descriptions provided, the University will use all reasonable endeavours to minimise disruption as far as it is practicable to do so. Provided the University complies with its obligations set out above, it shall not be liable to students or applicants, for any loss, costs, charges or expenses arising out of the information set out in this brochure, changes to that information or any disruption or interference of the type described above. The University operates an Admissions Complaints Procedure. If you feel that you have a well founded complaint regarding your application, please contact your Admissions Office in the first instance.

*Year in Industry Programmes

Please note that we cannot guarantee any student a work placement as this decision rests with potential employers and students will be expected to source these placements themselves. Limited support will be available from the University. If you have not successfully secured a work placement by the end of your second year you will be transferred onto the equivalent three-year degree programme.

Equal Opportunities

The University of East Anglia operates an equal opportunities admissions policy, It aims to ensure that no applicant will receive less favourable treatment on the grounds of sex, age, marital status, race, colour, nationality, ethnic origin, sexual orientation, or political or religious belief. The University welcomes applications from candidates with disabilities. Information contained in this prospectus may also be made available in other formats, to ensure access for everyone. Please call (+44) (0)1603 593753 to discuss.

Ethical Investment Policy

The University of East Anglia operates an Ethical Investment Policy.



The University of East Anglia is a Fair Trade university.

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UEA Achievements

"Happier students than those at UEA are hard to find... due in great part to the sheer quality of the teaching and the distinctiveness of the surroundings."

The Sunday Times University Guide 2011

"Top 10 for student satisfaction for the last seven years." National Student Survey 2011

"This excellent university is among the best on virtually any grounds you care to mention." The Virgin Guide to British Universities 2012

"A top 20 university."
Guardian University Guide 2012







Further Information

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