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About this handbook

This handbook gives you essential information about your School and the University.

Other helpful sources of information are available at www.essex.ac.uk/myessex and https://www1.essex.ac.uk/students/new/.

Our friendly departmental staff are also here to help and you can find their contact details in this handbook.

At our three uniquely intimate campuses we celebrate diversity and challenge inequality. Whatever your background, race or sexual orientation, you’re part of a vibrant community that lives, learns and plays together.
SECTION 1 - INTRODUCTION

Welcome

Welcome to the School of Computer Science and Electronic Engineering and thank you for choosing to study with us.

I would like to extend a very warm welcome on behalf of the School of Computer Science and Electronic Engineering (CSEE) to all of you who are starting, or, perhaps returning to, their undergraduate studies. I am delighted to greet those of you who are new to the country and have chosen to undertake your studies in the UK and the University of Essex. It is a particular pleasure to lead a School with an international outlook, in a truly international university.

Wherever you are from, I am sure that you will find a new home and put down strong roots in the ancient town of Colchester.

The strength of any department is the knowledge, skill and originality of its academic staff. At Essex, you will have the chance to study with a very distinguished group of academics, experts in their respective areas of computer science and electronic engineering, who carry out high quality research with both national and international recognition for their work. You have a remarkable opportunity to study and learn under their guidance following modules that are informed by their expertise and skills. Please take this opportunity to develop your own knowledge of, and competence in, computer science or electronic engineering or any of the areas that they both support – these attributes will undoubtedly take you forward as you later embark on a fulfilling career in whichever sector your choose.

An academic department such as CSEE would not be able to operate without the invaluable support of the administrative and technical staff. They are here to help and support you in your studies and they will often be the first point of contact for some of your queries.

There has never been a better time to study in this area: the rate of technological advancement is truly amazing but the potential rewards for those who can master the technology are great. Indeed, for the last several years more than 90% of our graduates have gone straight into a graduate-level job or graduate study. I am sure that you will find this year both stimulating and challenging. I wish you every success in your studies with us and I look forward to meeting you all personally during the year.

CSEE- making something wonderful

Professor Anthony Vickers
Head of School
Room: 1N1.3.2
Telephone: 2876
1.1 TERM DATES, CALENDAR AND ACADEMIC WEEK NUMBERS

Information relating to the University’s term dates for students can be found at https://www.essex.ac.uk/governance/key-dates

The University uses a week numbering system that covers the 52 weeks of a calendar year, beginning with Welcome Week as Week 1. Autumn term teaching takes place during Weeks 2-11, Spring term teaching takes place during Weeks 16-25 and the Summer term is Weeks 30-39. You can find the University week Structure / calendar here: http://www.essex.ac.uk/students/course-admin/timetables.aspx

The official University teaching day runs from 9am to 6pm, Monday to Friday. You must be available during these times every week in term time.

1.2 TIMETABLES

Information about teaching timetables and your individual timetable can be found at www.essex.ac.uk/students

1.3 myEssex – THE STUDENT PORTAL

myEssex is your online account. Use it to see your timetable, keep your personal details up-to-date, see how you are doing on your course, let us know if you will miss a lecture or class, contact the Student Services Hub and much more. https://www.essex.ac.uk/myessex/

You can personalise myEssex further by adding and hiding links, adding personal contacts and by changing the look of the pages.
Section 2: About the School of Computer Science and Electronic Engineering

2.1 ACADEMIC STAFF

Information on academic staff within the School can be found by accessing the links below:

- List of academic staff including office locations and contact details: [http://www.essex.ac.uk/csee/staff/Staff.aspx?type=academic](http://www.essex.ac.uk/csee/staff/Staff.aspx?type=academic)
- Details of staff research areas: [http://www.essex.ac.uk/csee/research/interests.aspx](http://www.essex.ac.uk/csee/research/interests.aspx)
- School administrative responsibilities and committees: [http://www.essex.ac.uk/csee/documents/academic-responsibilities.pdf](http://www.essex.ac.uk/csee/documents/academic-responsibilities.pdf)

Some of the key staff you may come into contact with during your undergraduate studies include:

- **Head of School:** Professor Anthony Vickers
- **Director of Education:** Dr John Woods
- **Director of Examinations:** Dr Nigel Newton
- **Undergraduate Director:** Dr David Bebbington
- **Degree Apprenticeships Co-ordinator:** Dr Adrian Clark
- **Year 1 Supervisor:** Professor Kun Yang
- **Year 2 Supervisor:** Professor Manoj Thakur
- **Year 3/Year 4 Supervisor:** Dr Sam Steel
- **Study Abroad Officer:** Dr Nick Zakhleniuk
- **Senior Tutor:** Dr Nick Zakhleniuk
- **Disability Liaison Officer & Inclusivity Lead:** Dr Francisco Sepulveda

2.2 SCHOOL ADMINISTRATIVE STAFF

If you have any queries relating to your department or course of study, please contact the School Office (Tel: 01206 872770 Email: csee-schooloffice@essex.ac.uk) or the relevant year administrator detailed below:

- **School Manager:** Miss Marie Scott 3488
- **(Acting) Examinations and Finance Manager:** Mrs Dianne Blundell 2438
- **Deputy School Manager:** Mrs Irene Smith (mat cover) 2418
- **Undergraduate Administrator (Year 1 & 2):** Dr Woroud Melhem 2679
- **Undergraduate Administrator (Year 3 & 4):** Mrs Valerie Hartgrove 2770
- **Student Administrator:** Mrs Nicole Smither 4122
- **Postgraduate Taught Administrator:** Mrs Debbie Neve 2256
- **Postgraduate Research Administrator:** Mrs Claire Harvey 4379
- **Degree Apprenticeships Administrator:** Miss Megan Capon 4879

Please use the link below to access full information on School administrative staff: [http://www.essex.ac.uk/csee/staff/Staff.aspx?type=admin](http://www.essex.ac.uk/csee/staff/Staff.aspx?type=admin)

If you need help during your studies, please contact your personal tutor in the first instance (see Section 2.5).
2.3 LABORATORIES AND EQUIPMENT INFORMATION

The School provides twelve laboratories and teaching facilities for the exclusive use of Computer Science and Electronic Engineering students – including five computer laboratories, an electronics hardware laboratory, an embedded systems laboratory, and a robot arena. Laboratory sizes, between ten and seventy workstations, are designed to allow one-to-one interaction between staff and students during scheduled class times. The laboratories are managed by an experienced and dedicated team of technical support staff who can assist students with most practical aspects of the curriculum.

Additional information on the technical facilities and services available in the School is contained in the Technical Support section of the School website.

School Laboratories

Students have free access to the laboratories except when there is a scheduled practical class in progress. If a class is in progress general access is granted at the discretion of the class supervisor.

Support from Graduate Laboratory Assistants (GLAs) in practicals

In your practical lab sessions you and the Lecturer will sometimes be supported by Graduate Laboratory Assistants (GLAs). These may be technicians, postgraduate students or research staff from the School. The postgraduate students are trained and briefed before each practical. They are not there to carry out the work or you or to provide you with the answers, but they are there to help, to answer technical and scientific questions, and to check and aid your understanding. They will also check that you have tidied up your bench space before you leave the laboratory.

GLAs may mark some of your practical work. They receive training in marking and are given model answers and marks schemes to ensure consistency. The Lecturer retains overall control of the marking process and moderates the final marks. If you have concerns about the GLAs, either relating to their marking and feedback in your work or in the practicals, you should contact the Module Supervisor in the first instance.

2.3.1 Laboratory Opening Times

Laboratory opening times are given in the table ‘Teaching Laboratory Opening Times’, which appears on the following pages. Laboratories are classified as general computing (type C) or specialised laboratories (type S). Most software development modules are taught in Computer Laboratory One, Two or Three. These laboratories are open 24 hour, 7 days a week including the Christmas and New Year holiday closure period. Access to all other laboratories is restricted to the times specified.

For Health and Safety reasons, principally lone working, access to specialised laboratories requires that a technician or supervisor is present while the laboratory is open. The specialised laboratories are closed at weekends and out-of-term time. Access to specialised laboratories outside the stated hours is by prior arrangement and subject to the approval of the Systems Manager. All requests for out-of-hours access will be carefully considered, but scope for access, particularly as weekends, is limited.

During vacations, laboratories may be closed for refurbishment or due to reduced staffing levels. The School reserves the right to vary opening times for any or all of its laboratories as necessary. Students will be given advance warning of such decisions.

Please note when using laboratories with 24 hour access, that at approximately 0400 hours every day, each system may automatically restart to perform system maintenance. This includes rebooting systems which are running Linux back into Windows. The software present in the teaching laboratories is very complex and problems do sometimes occur, so as a general rule, please remember to save work on a regular basis to prevent any data loss that may result in such exceptional cases.
In addition to the School's computer laboratories, students are entitled to use any of the Computing Service's general access laboratories.

For network security reasons connection of private laptops in the School's teaching laboratories to the wired network is not allowed. Please use the University wireless network for laptop network connection.

Instructions detailing how to connect to the University Wireless Network are available from the Computing Service web site: - https://www1.essex.ac.uk/it/ The recommended wireless network service is Eduroam.

Please note it is a student conduct offence to remove network cables from laboratory machines, as spare network connections in the laboratories are primarily for the use of students with disabilities.

Any problems relating to day to day systems administration (installation, maintenance and repair) should be reported to by email to ces-faults@essex.ac.uk. Please use this email address rather than individual staff email addresses, so that if a member of staff is absent another member of the team can help with your request.
### 2.3.2 List of Teaching Laboratory Opening Times

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<th>Type</th>
<th>Capacity</th>
<th>Information</th>
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<td>Software Laboratory (Lab 1)</td>
<td>5.512</td>
<td>C</td>
<td>77</td>
<td>Used for general computing. Technician: Jayne Bates</td>
</tr>
<tr>
<td>[24 hours, 7 days]</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Software Laboratory 2 (Lab 2)</td>
<td>5.518</td>
<td>C</td>
<td>33</td>
<td>Used for general computing. Technician: Beverley Colley</td>
</tr>
<tr>
<td>[24 hours, 7 days]</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CCFEA - Laboratory (Lab 3)</td>
<td>5.517</td>
<td>C</td>
<td>25</td>
<td>Used for by CCFEA for general computing. Computer Officer: Kevan Wilding</td>
</tr>
<tr>
<td>[24 hours, 7 days]</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Laboratory 1</td>
<td>5.511</td>
<td>C</td>
<td>11</td>
<td>Undergraduate final year and MSc projects Technician: Beverley Colley</td>
</tr>
<tr>
<td>[24 hours, 7 days]</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Laboratory 2</td>
<td>5.515</td>
<td>C</td>
<td>8</td>
<td>Undergraduate final year and MSc projects Technician: Beverley Colley</td>
</tr>
<tr>
<td>[24 hours, 7 days]</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td>Project Laboratory 3</td>
<td>5.503</td>
<td>C</td>
<td>6</td>
<td>Undergraduate final year and MSc projects Technician: Beverley Colley</td>
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<tr>
<td>[24 hours, 7 days]</td>
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<td></td>
<td>2 project PCs</td>
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<td>Networks Laboratory (Lab 4)</td>
<td>4B.53</td>
<td>C</td>
<td>52</td>
<td>CISCO networking courses and general computing.</td>
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<td>[9am – 7pm, weekdays]</td>
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<td></td>
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<td>Technician: Simon Moore</td>
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<td>Games Laboratory (Lab 5)</td>
<td>4.513</td>
<td>C</td>
<td>25</td>
<td>Apple iMac laboratory for games development.</td>
</tr>
<tr>
<td>[24 hours, 7 days]</td>
<td></td>
<td></td>
<td></td>
<td>Technician: Simon Moore</td>
</tr>
<tr>
<td>Networks Laboratory (Lab 6)</td>
<td>4B.53</td>
<td>C</td>
<td>25</td>
<td>CISCO networking courses and general computing.</td>
</tr>
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<td>[9am – 7pm, weekdays]</td>
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<td></td>
<td></td>
<td>Technician: Simon Moore</td>
</tr>
<tr>
<td>Intelligent Games Research Laboratory</td>
<td>3.511</td>
<td>S</td>
<td>NA</td>
<td>Robotics and Games research laboratory. Access is limited to scheduled</td>
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<td>teaching sessions and by prior arrangement.</td>
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<td>Embedded Systems Laboratory (Lab 7)</td>
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<td>Signal analysis and test equipment, soldering stations. ARM7 development</td>
</tr>
<tr>
<td>[9am – 5pm, weekdays]</td>
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<td>boards. Technician: Malcolm Lear</td>
</tr>
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<td>Hardware Laboratory (Lab 8)</td>
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<td>S</td>
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<td>Electronic equipment, and access to project workbenches and machines.</td>
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<td>[9am – 5pm, weekdays]</td>
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<td>Telecommunications Laboratory (Lab 9)</td>
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<td>N/A</td>
<td>Electronic and telecommunications equipment.</td>
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<tr>
<td>Clean Room</td>
<td>5S.3.1</td>
<td>S</td>
<td>N/A</td>
<td>Users receive training before access is allowed. Access is by prior</td>
</tr>
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<td>[by appointment, weekdays]</td>
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<td></td>
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<td>arrangement and technician supervised. Technician: Adrian Boland-Thomas</td>
</tr>
<tr>
<td>Robot Arena</td>
<td>1N1.2</td>
<td>S</td>
<td>12</td>
<td>Robots plus workstations with a software build for robotics usage.</td>
</tr>
<tr>
<td>[9am – 5pm, weekdays]</td>
<td>.1</td>
<td></td>
<td></td>
<td>Technician: Robin Dowling</td>
</tr>
</tbody>
</table>
2.3.3 Technical Support and Resources

The Systems Manager, Dr Bob Self, has overall responsibility for technical services and facilities and is responsible for the day to day operation of the computer laboratories and associated facilities.

Members of the School's Computer Support Team are responsible for the general maintenance of the computer laboratories and computing infrastructure, including loading printers with paper and dealing with both hardware and software problems. Each member of the team has specific responsibilities (see below) in addition to their laboratory responsibilities and should be contacted with any related queries in the first instance.

<table>
<thead>
<tr>
<th>Name</th>
<th>Responsibility</th>
<th>Phone Extension</th>
<th>E-mail address</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bob Self</td>
<td>Systems Manager with overall responsibility for teaching laboratories</td>
<td>2908</td>
<td><a href="mailto:rpself@essex.ac.uk">rpself@essex.ac.uk</a></td>
</tr>
<tr>
<td>Beverley Colley</td>
<td>Software Build and Projects</td>
<td>2927</td>
<td><a href="mailto:bev@essex.ac.uk">bev@essex.ac.uk</a></td>
</tr>
<tr>
<td>Simon Moore</td>
<td>Linux and Systems Programming Network Laboratory</td>
<td>2920</td>
<td><a href="mailto:moors@essex.ac.uk">moors@essex.ac.uk</a></td>
</tr>
<tr>
<td>Jayne Bates</td>
<td>CAD and Multimedia</td>
<td>2909</td>
<td><a href="mailto:jayne@essex.ac.uk">jayne@essex.ac.uk</a></td>
</tr>
<tr>
<td>Kevan Wilding</td>
<td>Programming Support and Databases CCFEA</td>
<td>3583</td>
<td><a href="mailto:kwilding@essex.ac.uk">kwilding@essex.ac.uk</a></td>
</tr>
</tbody>
</table>

Registration as Authorised User

Following registration at the beginning of the Academic Year, all students automatically become authorised users of the University Computing Facilities. Authorisation to use University Computing Facilities implies that you agree to read and to abide by the Guidelines for the Proper Use of University Computing Facilities - a copy of which will have been given to you at registration.

The University Regulations include as breaches of discipline:
- unauthorised access to, and use of, any University computing facility
- unauthorised access to computer material
- unauthorised modification of computer material.

Students should refer to the guidelines for the use of IT facilities at: https://www1.essex.ac.uk/it/about/acceptable-use-policy/default.aspx

Care of your Laboratories

In past years, excellent co-operation from students has enabled us to keep long opening hours for the programming laboratories. The continuation of this policy is very much in your control and therefore all authorised users of the laboratories carry the Head of School's authority to look after the laboratory. You are asked to be watchful for any actual or potential misuse of the facilities. In the very rare event of any physical “incident”, please use the telephone to summon a security officer immediately.

Please note that all teaching laboratories are monitored by a video surveillance system.

Please use the laboratories in a socially responsible way:
• Do not take food or drinks into the laboratories,
• Do not create excessive noise which will disturb others.
• Do not leave computer printouts on the desks, please use the paper recycle bins provided.

IMPORTANT NOTE

The School's computers should only be used for course related activities. Any student reported for misusing the School computer facilities runs the risk of losing access to these facilities.

Security
You are not allowed to remove any equipment, hardware or components from the laboratories. Only under very exceptional circumstances will permission be given to remove equipment, and then only by approval from the laboratory supervisor and the Systems Manager. To seek permission, a written application must be presented to both the above-mentioned persons.

Passwords
Unfortunately there are malicious and misguided people about and it is a sad fact that given the ability to read, write and delete your files, somebody may wish to do so. No system is completely secure, but you can maximise your own security by choosing an unlikely password and by protecting access to your files appropriately.

Please refer to the Computing Service Password FAQ for detailed information regarding password changing and security:- https://www.essex.ac.uk/password/faq.aspx

Feedback and Special Requests
We welcome feedback on the operation of our laboratories, either by email to the laboratory supervisor or ces-faults@essex.ac.uk.

Reservations/Bookings
During term time the laboratories are usually reserved for classes in the daytime and a timetable of scheduled teaching will be posted outside each laboratory. You may use spare machines during scheduled classes, but only with the expressed permission of the laboratory supervisor. Outside of scheduled teaching times, you may use the laboratories when you wish.

Project Facilities
There is strict control on the installation and removal of software in the general computing laboratories, but there is often a requirement for administrator-level privileges when students are working on projects.

Machines are set aside for project use by the Computer Support team in the Project areas adjoining Laboratory 1. These machines are considered “insecure”, and are networked behind a firewall, to isolate project machines from the rest of the University network.

Systems and removable disks are allocated to students for the duration of projects. Linux or Windows can be used as required. Students who require a project disk in support of their project should contact Beverley Colley in room 5.509, adjacent to Computer Laboratory One.

Hardware Projects
Students who need to purchase electronic components for their project should place their order through the relevant laboratory technician, Robin Dowling (Robotics), or Malcolm Lear (Embedded Systems).

Please select the required components using the online catalogue provided by one of the University approved suppliers; Onecall (Farnell) or RS Components. If the component required is not available seek the advice of the technicians, who can often find a suitable supplier or recommend an alternative item. The
lead time for in-stock components is typically two weeks, but some specialised components can take longer to source so remember to order well in advance.

Please note that University purchasing regulations do not allow the School to order from EBay. Only in the most exceptional circumstances should students order or supply components themselves. Such cases must be approved in advance by the Systems Manager. Students are not entitled to reclaim costs for unapproved purchases.

**Disk Space**

Users’ home directories (M drive) are maintained on disk drives managed by the University’s Computing Service and are backed up nightly. Critical files, such as reports or your thesis, should be stored on your M drive. Less important files, typically those which you can easily recreate or download, may be backed up and stored on a USB memory stick or a writable CD or DVD.

If you lose files from your M drive you should contact the Computing Service Help Desk (telephone extension: 2345), who can help restore lost files from the most recent backup.

There is a M drive quota of 500Mb disk storage for all students, so please make sure that you delete unwanted files regularly. The disk management utility ‘WinDirStat’, which is installed on all lab machines, is ideal for managing M drive space and identifying the best candidate files for removal.

Note that image and sound files occupy much more space than text and that certain applications (such as Internet Explorer) maintain caches of recently accessed pages automatically, which may become quite large if not cleared periodically.

See ‘Managing You M Drive’ for more information relating to home directory space management:-
http://www.essex.ac.uk/csee/documents/ManagingMDrive.pdf

**Printers**

There are laser printers in each laboratory, and in addition laser printer output is available from the Computing Service Help Desk, including colour output. Payment for printing is by voucher or online credit card payment, as detailed at https://www1.essex.ac.uk/it/

It is a University regulation that the cost of production of project reports, dissertations and theses is the candidate’s responsibility (Regulations 3.31, 4.14). If you wish to submit laser printed final copy (single-sided), you must pay for that yourself.

**Electronic Mail (e-mail)**

All students may use electronic mail. Your world-wide electronic mail address is: username@essex.ac.uk. All users of electronic mail are reminded that it is not confidential; messages must be kept short and must not cause offence; it is not a right but a privilege which may be withdrawn selectively or globally without notice if misuse is suspected.

**MSDNAA**

The School is a member of the Microsoft MSDN Academic Alliance (MSDNAA) service for students and staff which allows free download of most Microsoft operating systems and development tools (excluding Microsoft Office) for personal use and student projects.

You will need to register in order to use this facility. A copy of the registration form together with full details about MSDNAA can be found at the School’s student intranet website at:
http://www.essex.ac.uk/csee/current/default.aspx
2.3.4 Hardware Laboratory Procedures (Room 1NW2.10)

Log Books
During the laboratory sessions you must keep a log book of your work.

We expect you to develop high quality writing skills and this requires proper structuring of reports, use of English and correct use of SI notation in presenting units.

The mark returned for your work will depend upon the quality of both technical content and presentation.

Hardware Laboratory Log Book Guidelines
Log books of the prescribed type and quality are available during lab sessions and from Computer Technicians in room 5.510. You are expected to use a new book for each year of the course and to record preparatory work and observations/results from all hardware and CAD experiments, group projects and eventually your final year project.

The log book is the principal record of your time in the laboratory and it is important that you use it in “real time” as experiments are performed. Examples of what should be in the log book include:

- Experiment title and dates undertaken.
- Name of partner(s) if not working individually.
- Record of preparatory reference material.
- List of experimental equipment including identity numbers of experiment boards for future reference.
- Observations and comments of your own that go beyond the bare minimum required by an experiment script - including such observations in a later written report will be rewarded in the assessment process, since they suggest that you really have put some intellectual effort into the work.
- Notes of everything you do, however trivial. Do not rely on memory, or loose pieces of paper!
- Raw data for material that will appear in a formal report such as graphs and circuit diagrams; these should be sufficiently clear that they can be read by someone else and by you at a later date.
- Records of measurements at the time they are made.
- Graphs plotted as you proceed using a pencil to facilitate changes; this practice makes it easy to detect erroneous readings.
- Calculations of component values in a design exercise.
- Sketches of oscilloscope traces that will later appear in a formal report. Digital screen dumps can also be obtained for inclusion in reports or log book; it might be useful also to print a hardcopy at the time to paste into the logbook.
- Observations of unusual findings.
- Tabulations of recorded data.
- Notes of all component values together with their tolerances; in particular highlight values used in any calculations.
- Where appropriate, details of measurement equipment and potential or actual sources of error.
- All results, calculations and brief conclusions when experiment is completed.

The log book should be written during the time spent in the laboratory (except possibly the brief conclusions) and contain sufficient information so that a formal report can be prepared at a later date, when you may have forgotten some of the experimental details. You should not spend time writing up your log book after performing an experiment. However, while performing preparatory work before a laboratory session (e.g. calculating component values) this information should be entered into your log book so that it is available immediately and is comprehensible for use in the laboratory.

As implied above, neatness is not a priority (although there is a lowest acceptable limit); it is the information content and ability to record relevant detail in an intelligible way while you are doing the experimental work that is more important. The judgement is more of the quality of the information and whether it is in a form which other engineers could, if necessary, retrieve.
Your log book will be assessed regularly for acceptability. There is a process where indicators from both attendance and log book assessment may be used to weight marks obtained on a formal report; thus log book performance that falls below a minimum will result in deduction of marks being made.

**Background: The Need for a Log Book**

Even this early in your engineering career, it is very good practice to get used to keeping a log book. It will often become a formal requirement in industry, where properly maintained laboratory notebooks have significant scientific, legal and administrative value. In engineering, there are three main reasons why a logbook should be kept:

- The log book is a *personal journal* which records not only your experience during the work, but also your own knowledge. It is furthermore a way of facilitating your thinking as you work on the laboratory or project.

- It is also a *commentary*, which can be consulted by colleagues whenever they need to understand your work or reconstruct it. Often, in a commercial environment, employees leave or are transferred to another part of the company. In such circumstances, a logbook is invaluable for those who must continue the work.

- In an industrial setting, it acts as a *legal document* which can provide evidence. For example, claims must often be made about the date on which an invention or development was made, and these would be supported by a logbook which, in that case, would be signed by witnesses. Also, the rules about what goes into such a logbook would be more formal than is required for your undergraduate logbooks. In industry, protection of intellectual property such as know-how and patents has always been important, and logbooks are an important means of achieving this.

**Electronic Tools and Components**

Students are expected to purchase their own cutters and pliers for use in the laboratory although a limited number are available by request on a per-session basis.

Resistors, capacitors and connecting wire are available in the laboratory. Diodes, transistors, integrated circuits and copper clad board will be provided as necessary. Any kit and any other personal equipment may be stored in the lockers in the laboratory (a padlocks and key will be needed).

**Construction Techniques and Layout**

When constructing circuitry please use the experiment board or copper-strip prototype board as supplied. In our experience, S-DEC or similar solder-less prototyping systems, while useful and fast, can suffer from poor reliability because of contact wear or oxidation. Please bear this in mind if a circuit fails to work as expected.

At the low signal frequencies you will meet in the laboratory, layout should not be too critical. However, there are certain practices that must be followed whatever the frequency.

**Grounding**

To ensure external interference such as 50 Hz mains and local radio frequency sources does not affect oscilloscope measurements, the earth leads on both scope probes must be attached to the power supply ground line (0V) close to the circuit itself. Although the scope is connected to mains ground, do not rely on this.

**Decoupling**

The first components to be wired into place in a circuit should always be at least one large capacitor from each power rail to ground. ‘Large’ in this context usually means electrolytic, in the range 10 - 100 microfarads. The reason for this is that although the power supply contains a regulator and its own
decoupling capacitors, the leads between the supply and the circuit card have both resistance, and more important, inductance. If your circuit uses logic devices, then very fast (nanosecond) voltage and current transients will be present. These can develop surprisingly high voltages across the lead inductance, which may be large enough to cause spurious signals to appear on other circuit outputs. You may have noticed on complex logic systems using many ICs that each device will have its own decoupling capacitor, typically a small ceramic type of value 1-10 nF. Incoming power rails will be decoupled by large electrolytics where they enter the circuit card.

A problem that can happen with even the simplest analogue amplifier circuit due to lack of decoupling is oscillation. Active components (transistors and op amps) typically do not behave according to the simple models at high frequencies, with the result that oscillation criteria can be met, with feedback via the power rails, in which case very large unwanted signals will appear at frequencies of tens of MHz.

2.4 SCHOOL OFFICE

The CSEE School Office is situated in room 4.514 (turn left as you enter the School from Square 2):
Opening hours: Monday – Friday 10.00am to 1.00pm and 2.00pm to 4.00pm.

Contact Information
Colchester Campus
Department of Computer Science and Electronic Engineering
University of Essex
Wivenhoe Park
Colchester CO4 3SQ

Direct Tel: 01206 872770
Email: csee-schooloffice@essex.ac.uk
Website: /www.essex.ac.uk/csee

2.5 PERSONAL TUTORS

If you need help during your studies, please contact your personal tutor in the first instance for advice and guidance.

All undergraduate and taught postgraduate students have a Personal Tutor who you will meet soon after you have arrived, and who will meet with you regularly throughout your course. If you are a postgraduate research student your research supervisor will take on this role. Your Personal Tutor is there to help you feel connected to your department, school or centre, and is someone you can talk to if you have questions about your course or encounter any difficulties which affect your studies. Your Personal Tutor may also recommend other support services on campus that might be able to help. If you are unsure who your Personal Tutor is, please ask a member of the administrative staff in your department.

At the beginning of the Autumn Term all First Year Students will be invited to attend a meeting with an allocated Personal Tutor. The purpose of this meeting will be to introduce you to your Personal Tutor and to the Personal Tutoring scheme at the School, including online platform “My Tutor”, and to find out a bit more about you, your expectations and to provide you with the opportunity to ask any questions you may have about your studies or the University/ School.
Your Tutor will remain a point of contact for you throughout your time with us so please feel free to contact them at any time to arrange another meeting or ask any question you may have. In your final year, you will be expected to meet with your Personal Tutor on a regular basis to discuss your project.

2.6 SUPPORT WITHIN THE SCHOOL

2.6.1 PEER MENTORING

Any questions? Ask a peer mentor!
Most new undergraduate students have questions about starting at university - and this is where our peer mentoring initiative can really help. We understand that you might have lots of questions that you would prefer to ask a more experienced student rather than a staff member. That’s what a peer mentor can provide.

Mentoring is a relationship usually between a new student (the mentee) and a more experienced student (the mentor) to help the new student settle in, and to make them aware of ways that they can get involved and make the most of their university experience.

At Essex, most departments run their own peer mentoring scheme and so how they operate varies slightly between departments. For example, some departmental schemes operate in pairs or groups. Most peer mentoring schemes are for undergraduate students.

What is a peer mentor?
A peer mentor is another student (normally from your department) with experience of the University who can offer practical advice and information, and point you in the right direction to services that may be available to you. You might be feeling confused about where to find things on campus, how to use the library, who’s who in your department, or how to get to know other students. Or, you might just feel like having a chat with someone who’s had experience of adjusting to university life and who can give you tips about how to settle in. This is where your peer mentor can help you!

How do I get a Peer Mentor?
In the School of Computer Science and Electronic Engineering, you can sign up for a peer mentor though the department. All new first year students

How do I meet my Mentor?
If you request a Peer Mentor, your mentor will contact you to arrange your first meeting. It is expected that you will meet with your mentor several times throughout the academic year.

What is the difference between a peer mentor and a buddy?
The Students' Union co-ordinates a buddy scheme for specific groups of students including mature students and LGBT students.

Peer mentoring scheme:
- Department-based scheme
- First port of call for referral
- Professional mentor - mentee relationship
- Peer mentors are trained
- Peer mentors are automatically v Team members (opt-out)
- Peer mentors can log hours via v Team and for Big Essex Award

Buddying scheme
- Students’ Union club or society-based scheme
- Informal, social
• Friendship-based
• Buddies are not trained
• Buddies are not automatically v Team members
• Buddies cannot log hours

Confidentiality, record keeping and data protection
It is important you understand that the mentoring relationship will remain confidential. A peer mentor is in a position of trust and is expected to treat student concerns and private matters with utmost sensitivity. However, they are not expected to keep secrets. To handle information confidentially means that information isn’t shared beyond the scheme, and it will normally only be shared with your scheme co-ordinator or Student Support. Details of the confidentiality to be offered within your scheme are available from your peer mentor co-ordinator.

For further information about the peer mentoring scheme, please contact the first year administrator, Woroud Melhem (wmelhem@essex.ac.uk) (01206 872679) or visit the CSEE School Office (room 4.514.)

2.6.2 WHO TO CONTACT IN THE SCHOOL

In addition to your Academic Tutor (see section 2.5), the School has a Senior Tutor and a Disability Liaison Officer, who may be contacted by any student at any time during School hours for help or advice (see contact details below).

<table>
<thead>
<tr>
<th>Name</th>
<th>Room</th>
<th>Telephone</th>
<th>E-mail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senior Tutor</td>
<td>1NW.4.14</td>
<td>01206 874248</td>
<td><a href="mailto:naz@essex.ac.uk">naz@essex.ac.uk</a></td>
</tr>
<tr>
<td>Dr Nick Zakhleniuk</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disability Liaison Officer</td>
<td>4.516</td>
<td>01206 874151</td>
<td><a href="mailto:fsepulv@essex.ac.uk">fsepulv@essex.ac.uk</a></td>
</tr>
<tr>
<td>Dr Francisco Sepulveda</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Students seeking advice on any kind of problem, whether personal or academic, may also contact the relevant Year Administrator, the School Manager or the relevant Year Supervisor. We are here to help so please contact us.

2.7 COMMUNICATION METHODS

Important information is communicated to students by means of regular mail, electronic mail and on University notice boards. The University makes increasing use of electronic mail to advise students of deadlines and to communicate information on various aspects of student life. In the School of Computer Science and Electronic Engineering, e-mail is the main method of communication, and students are required to access and check their University e-mail account at least three times per week in term time, and preferably daily. Important information is also posted on the University notice boards and on school notice boards. (See also Section 8.3)

2.8 DEPARTMENTAL PRIZES

The following prizes are awarded annually by the First Year Examinations Committee (for first year students) or the Board of Examiners (for second/final year students). No student will be eligible for the award of more than one prize in any one year, with the exception of the Institute of Engineering and Technology prize-winner.
2.8.1 First year prizes

K. F. Bowden Memorial Prize
Four prizes, in memory of a former Professor, are awarded to the first year undergraduate students. These prizes are awarded on the recommendation of the First Year Examinations Committee to the four first year students with the best overall year mark. Each prize is worth £250.

The O’Reilly Academic Prize
Awarded to the first year student who achieves the best overall average mark on one of the single honours degree courses in either Computer Science or Computer Systems Engineering theme. The prize-winner will receive an O’Reilly book voucher worth £100.

2.8.2 Second Year Prizes

The Frank Thilo Prize
Awarded to the second year single honours BSc student who achieves the best overall year mark. The prize-winner will receive a cheque for £125 and BCS student annual membership vouchers.

K. F. Bowden Memorial Prize
Four prizes, in memory of a former Professor, are awarded to second year undergraduate students. These prizes are awarded on the recommendation of the Board of Examiners to the four second year students with the best overall year mark. Each prize is worth £250.

2.8.3 Second Year /Final Year Prize

The Devdas Korappath Gopel Prize
In memory of a former student, is awarded for outstanding performance on the BSc Computer Science degree. It is open to both second and final year students. The prize of £100 will be awarded to the second or final year BSc Computer Science student with the best overall year mark.

2.8.4 Final Year Prizes

The Computer Science and Electronic Engineering Prize is awarded to the final year student who achieves the highest degree mark and is worth £250.

The Institute of Engineering and Technology Prize
Awarded to the final year BEng student who achieves the highest degree mark. The prize-winner will receive two years’ free membership.

The Wind River Systems Prize
Awarded to the final year student who achieves the highest mark in the module of either CE323 (Embedded Systems Design) or CE315 (Mobile Robotics) and is worth £250.

The two10degrees Prize (formerly the Active Web Solutions Prize)
Awarded to the student who achieves the highest mark for the final year BSc project, and is worth £250.

The TeamCast Prize
Donated by TeamCast is awarded by the Board of Examiners to the Final Year student achieving the highest degree mark on the BEng Telecommunication Engineering degree. The value of the prize is £150.

BT Project Prize
Awarded for outstanding individual performance on a BEng project and is worth £125. To determine the winner of this prize, the BEng student with the highest mark for the Individual Project Report will be awarded this prize.
**BT Project Presentation Prize**
Awarded for the best presentation mark on a final year BEng project and is worth £125.

**The Project Presentation Prize**
Awarded for the best presentation on a final year project at the Project Presentation Day and is worth £125.
Section 3: Learning and Teaching

3.1 LEARNING, TEACHING AND INDEPENDENT STUDY

The School's educational aims include to:

- Deliver an education in the chosen subject of high academic standard set in a framework of procedures to monitor and improve quality;
- Offer coherent, flexible, modular undergraduate degree courses, shaped by the research strengths of the School, allowing specialisation in relevant disciplines and accessible at different levels by students with varied backgrounds and qualifications;
- Provide a choice of undergraduate degree courses with curricula designed: (a) to promote the progressive development of subject knowledge and understanding and of practical and key skills; (b) to encourage the development of independence in learning;
- Deploy a range of teaching, learning and assessment modes structured to meet the requirements of the curriculum in a well-resourced environment;
- Stimulate interest in and enthusiasm for the chosen subject and encourage students to realise their academic potential;
- Help students by providing a friendly, supportive environment and clear, comprehensive information relating to degree organisation, year structure, module content and assessment methods;
- Produce graduates who can proceed either to postgraduate study particularly in appropriate subject areas, or to a range of careers, using the key skills acquired during their study.

Successful teaching and learning involves a partnership between student and staff. Whatever level of study you're following at Essex, you're here for an excellent education. We're committed to research-led teaching and your personal development, and during your time here, we'll support you in demonstrating your academic potential, and in developing the knowledge and skills you'll need as you embrace your future graduate career.

3.2 TEACHING AND LEARNING EXPECTATIONS

You can expect that we will:

- Work to achieve our aims;
- Provide clear and comprehensive documentation for all modules;
- Provide teaching sessions which (a) are well prepared and delivered, (b) are supported by sufficient materials and equipment and (c) for practical work, are safe;
- Notify you as far in advance as is possible of any changes to the teaching timetable;
- Return assessed work within 4 term-time weeks;
- Deal with queries you may have relating to modules within a reasonable timescale.
We expect that you will:
• Make the best use of the educational opportunities and resources available and work to achieve the stated objectives and to realise your academic potential;
• Familiarise yourself with the contents of this handbook and the documentation which accompanies each module and follow the guidance, procedures and rules described;
• Attend prescribed instruction of all types and where absence is unavoidable notify the relevant person;
• Regularly consult notice boards and your email and keep your address updated so that you do not miss important information;
• Prepare adequately for and participate actively in teaching sessions;
• Support your formal tuition with an appropriate level and intensity of student managed learning;
• Submit assessed work in the appropriate form and by the published deadlines;
• Use feedback on written work constructively, both to build on your strengths and to identify and remedy your weaknesses;
• Regularly review your academic progress (marks) and take appropriate action where and when necessary;
• Contribute to the development and improvement of the student learning experience by providing accurate and considered feedback on modules when required, and by participating in the staff-student liaison process.
• Abide by the various rules and regulations in the School and University that have evolved in order to provide safe, fair and effective teaching and learning support for all students.

Teaching and Assessment Methods
The School uses a range of teaching methods depending upon the level of the module and the type of material that is being dealt with:
• Lectures and classes play a key role in all years, conveying knowledge and facilitating understanding.
• Lab sessions are used to develop key skills, and to augment knowledge and understanding of the lecture material. They can be supported by Technicians and by trained Graduate Lab Assistants.
• Project work develops skills in planning, problem solving and research methodology.
• Students develop oral presentation skills as part of the presentation of the 3rd year project.
• Outside formal contact hours, you will undertake student managed learning (e.g. studying lecture material, preparing coursework assignments, revising for exams)
• Team work skills are developed in Group Project modules in Year 2.
• Students on the BSc Digital and Technology Solutions will undertake part of their studies in the workplace, accessing learning materials via distance learning. Distance learning materials will be provided through our Moodle server and through the use of Webinars.

You are expected to work 35-40 hours per week. The formal timetable comprises a relatively small fraction of this. You are responsible for organising your time in an effective way. Independent learning is developed by systematically increasing the proportion of time available for student-managed learning over the three years.

An important part of our teaching and your learning is the feedback that we give you on all assessed coursework; this may be comments written directly on your work, or on marks’ criteria grids and cover sheets, or it may be more general feedback when the work is returned. You should review carefully and learn from all these sources of feedback. Whilst staff may give general feedback on the progress tests, you do not receive feedback on any of the end of year exams in any year.
Academic Conduct:

Personal Recording of Teaching Events/supervisory meetings/ formal meetings
A student may not make a personal recording of a teaching event, supervisory meeting, oral examination or other formal meeting or committee which considers the student’s academic progress or performance without the permission of all other individuals present. If this permission is granted, the recording may be made for the personal use of the student only, in support of their studies and learning. The recording must not be made publicly available or shared for other purposes without the consent of those present. Disabled students who have difficulty with note-taking are encouraged to contact Student Support for further information on when recording is permissible and other access strategies.

3.3 MOODLE AND FASER

We use Moodle as our online learning environment, to enhance face-to-face teaching and to store important module materials such as reading lists and past exam papers. It lets you get to course materials, and has built-in features to enhance learning such as discussion forums, chat facilities, quizzes, surveys, glossaries and wikis.

FASER is our online coursework submission and feedback system. Use it to check coursework deadlines, upload coursework and receive electronic feedback all in one place.

faser.essex.ac.uk
www.essex.ac.uk/it/services/learning-technology/

3.4 COURSE STRUCTURES, LEARNING OUTCOMES, AND PROFESSIONAL BODIES

3.4.1 CSEE Courses and Course Structures
The School of Computer Science and Electronic Engineering offers the following undergraduate courses:

Computer Science
- BSc Computer Science
- BSc Computer Games
- BEng Computer Networks
- BSc Information and Communication Technology
- MSci Computer Science (integrated Masters)

Big Data, Data Science and Analytics
- BSc Data Science and Analytics

Robotics
- BEng Robotic Engineering

Computer Systems Engineering
- BEng Computer Systems Engineering
- BEng Computers with Electronics

Electronics and Telecommunications Engineering
- BEng Electronic Engineering
- BEng Communications Engineering
- MEng Electronic Engineering (integrated Masters)
- MEng Communications Engineering (integrated Masters)
Degree Apprenticeships

- BSc Digital and Technology Solutions
- BEng Electronic Engineering (Degree Apprenticeship Route)

The School of CSEE offers a Year Abroad and Industrial Placement Year in all our Undergraduate Degree Programmes¹. Further information can be found in this Handbook; please contact the School Office for further information.

Information on course structures, including a mapping of which modules are core/compulsory and which are optional for your course can be found on the CSEE website http://www.essex.ac.uk/csee/current/default.aspx. The information is kept as up-to-date as possible, but the School reserves the right to make changes to the provision of modules before the academic year starts.

The University credit-rating system for undergraduate study is based on a nationally recognised framework. The undergraduate academic year normally consists of 120 credits and each undergraduate module is assigned a number of 'workload credits', which indicate the proportion of the academic year’s work that is devoted to the module. In our School, individual modules are assigned either 15, 30 or 45 credits.

For most of the courses in Year 1 all modules are core or compulsory. In Years 2 and 3 students are required to select optional modules. The number of modules for your degree course is detailed on the course structure grids on the CSEE website. In choosing optional modules, students are advised to keep a balance across both terms, but may choose modules to a maximum of 75 credits in either the autumn or spring terms. Please note that a full year 15 credit module is worth 7.5 credits in each term; a full year 30 credit module is worth 15 credits in each term.

3.4.2 Programme specifications and Modules

Programme Specifications provide key information, such as the structure and aims of your course, as well as the knowledge and skills you will develop. The learning outcomes are categorised into knowledge, intellectual, practical and key skills, and are linked to the aims, learning outcomes and assessment on the modules you take. The relevant Programme Specification for your course and stage of study will be available to you online through the MyEssex webpage or via this link: www.essex.ac.uk/programmespecs/

Full module outlines are located on the module directory: https://www.essex.ac.uk/modules/, including details on the module supervisor and teaching staff, module content, learning and teaching methods and assessment methods.

Please note that each year, courses will go through an annual update process, where changes to your course structure may be made. The revised structure grids will be published on the Departmental website over the Summer.

¹ n.b. This does not apply for degree apprenticeship programmes
3.4.3 Professional Bodies and Societies

THE INSTITUTION OF ENGINEERING AND TECHNOLOGY (IET)

The IET is the UK body which accredits degrees in engineering and technology. You can have complete confidence that the degrees we offer meet the highest standards required for education and training by the Engineering profession. The School encourages students to become a Student Member of the IET.

IET literature is available at: www.theiet.org/

You can choose to join the IET at any time during your course but obviously the sooner you join the sooner you benefit from membership. In order to become a Student member you can complete an online registration form at: www.theiet.org/membership/join/

Locally the IET Anglian Coastal Network organises a number of meetings at the University. The topics selected for these evening meetings are of broad interest to all students on our courses. The meetings are also held in the Ipswich area and the IET Essex Branch organises meetings in Chelmsford. Whether or not you choose to become a Student member of the IET, you are welcome to attend any of these events which will be publicised in the School by posters and also via email. Details of local IET meetings and details of student bursaries can also be found on the IET notice board.

If you join as a Student member you will be automatically transferred to the class of Member of the IET (MIET) when you graduate. After some further study (for example an MSc) and a number of years in a responsible position, you can apply to become a Chartered Engineer.

Further information is available from Professor Dariush Mirshekar (Rm 1NW.3.18) and Professor Anthony Vickers (vicka@essex.ac.uk) (Rm 1N1.3.2).
THE BRITISH COMPUTER SOCIETY (BCS)

Membership
The School encourages students to become a student member of the British Computer Society, the Chartered Institute for IT. Student members are members of the ‘BCS Young Professionals Group’.

Students in their third year also have the opportunity to apply for accelerated full membership (MBCS) via the ‘Membership on Graduation Scheme’. This special scheme process allows students who are about to graduate to apply early for full membership which is awarded on the successful completion of their degrees. This is a significant saving in time as normally applicants would have to work for three years in a suitable job before being eligible to apply for full membership.

The BCS has found that many potential employers are increasingly looking for graduates who not only have a good degree in a relevant subject but they are also giving preferential treatment to those who already have a professional membership, for example an MBCS. Having this membership illustrates a commitment to being a professional and may well make the difference of being invited for interview or rejected on a first application.

Further information and application forms for student membership are available from the CSEE School Office (4.514), or from Dr Adrian Clark (alien@essex.ac.uk) (Rm 1NW.3.24) for the accelerated full membership scheme.

General information on the British Computer Society, particularly the advantages of student membership, is available at: www.bcs.org

Information about the local (Essex) branch of the BCS is available at: www.essex.bcs.org
The Branch holds many events throughout the year, some of which are based at the University Campus. Details are publicised on the University Intranet and on the Branch website.
PROFESSIONAL ACCREDITATION

Some of the School’s degrees have received formal accreditation from the IET and/or the BCS on behalf of the UK Engineering Council. This means that graduates from these degree programmes will be well on the way to applying for Chartered status. In its accreditation visit in March 2016, approval was granted for the following degrees:

<table>
<thead>
<tr>
<th>BCS</th>
<th>IET</th>
<th>BEng Computers with Electronics</th>
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</thead>
<tbody>
<tr>
<td>BCS</td>
<td>IET</td>
<td>BEng Computer Networks</td>
</tr>
<tr>
<td>BCS</td>
<td>IET</td>
<td>BEng Computer Systems Engineering</td>
</tr>
<tr>
<td>IET</td>
<td></td>
<td>BEng Electronic Engineering</td>
</tr>
<tr>
<td>IET</td>
<td></td>
<td>BEng Telecommunication Engineering</td>
</tr>
<tr>
<td>BCS</td>
<td>IET</td>
<td>BSc Computer Games</td>
</tr>
<tr>
<td>BCS</td>
<td>IET</td>
<td>BSc Computer Science</td>
</tr>
<tr>
<td>IET</td>
<td></td>
<td>MEng Electronic Engineering</td>
</tr>
<tr>
<td>IET</td>
<td></td>
<td>MEng Telecommunication Engineering</td>
</tr>
<tr>
<td>BCS</td>
<td></td>
<td>MSci Computer Science</td>
</tr>
<tr>
<td>BCS</td>
<td>IET</td>
<td>MSc Advanced Computer Science</td>
</tr>
<tr>
<td>IET</td>
<td></td>
<td>MSc Advanced Communication Systems</td>
</tr>
<tr>
<td>BCS</td>
<td>IET</td>
<td>MSc Artificial Intelligence</td>
</tr>
<tr>
<td>BCS</td>
<td>IET</td>
<td>MSc Advanced Web Engineering</td>
</tr>
<tr>
<td>BCS</td>
<td>IET</td>
<td>MSc Big Data and Text Analytics</td>
</tr>
<tr>
<td>BCS</td>
<td>IET</td>
<td>MSc Cloud Computing</td>
</tr>
<tr>
<td>IET</td>
<td></td>
<td>MSc Computer Engineering</td>
</tr>
<tr>
<td>BCS</td>
<td>IET</td>
<td>MSc Computer Games</td>
</tr>
<tr>
<td>IET</td>
<td></td>
<td>MSc Computer Networks and Security</td>
</tr>
<tr>
<td>IET</td>
<td></td>
<td>MSc Electronic Engineering</td>
</tr>
<tr>
<td>BCS</td>
<td>IET</td>
<td>MSc Embedded Systems</td>
</tr>
<tr>
<td>BCS</td>
<td>IET</td>
<td>MSc Embedded Systems and Robotics</td>
</tr>
</tbody>
</table>
3.5 CHANGING YOUR DEGREE AND MAXIMUM PERIOD OF STUDY

Changing your course
If you want to change your course, you should talk to someone in your department first. Check the deadlines for course changes with the Student Services Hub. www.essex.ac.uk/students/course-admin/changing-course.aspx

You should discuss your thoughts about changing course with someone in your school. If your new course is in a different department, you should also speak to someone in that department.

Investigate your potential new course by looking at course information on the department’s web pages, talking to students on the course and speaking to tutors. You should also look at our Rules of Assessment for the new course to check whether there are any course-specific requirements.

If you are considering changing course due to academic worries with your current course, you might find it useful to seek academic support before changing course by contacting the Talent Development Centre www.essex.ac.uk/students/study-resources/tdc

If you want to make a formal request for a course change, you should do so via the online Course Change form available here: www.essex.ac.uk/esf/

Maximum period of study
Undergraduate students have a maximum period in which to complete their studies. This is set at the point at which you register, and is normally the length of your programme plus two additional years. This is to allow some flexibility in cases where you find you must intermit, or you fail a stage of study and must repeat it, or you want to transfer to a new course and must retake a stage of study.

3.6 MODULES

3.6.1 Module Enrolment and Selection/Changing Modules

You need to enrol for your modules every year, even if there are no optional modules on your course. New students are invited to enrol during the summer vacation before they register. At registration they receive a confirmation of module enrolment for checking. All continuing students will receive information on module enrolment during the Easter vacation. Instructions on choosing your optional modules and confirming your compulsory modules will be provided nearer the time. Module enrolments are made online on eNROL: www.essex.ac.uk/enrol/home/home_phase1.asp

If you need advice about your choice of modules, you should discuss this with your Personal Tutor or Year Supervisor in the first instance. For advice on specific modules you should speak to the Module Supervisor. Your choice of optional modules may be subject to timetabling constraints.

You can change your optional modules using eNROL up to end of the second week of teaching in each term, and all changes to optional modules must be processed by these dates:

- Autumn Term Modules (end of Week 3)
- Spring Term Modules (end of Week 17)

Please note that if you are requesting changes to your optional modules during the Spring Term (week 17), you are not permitted to drop an Autumn module and replace it with a Spring term module at this stage.
3.6.2 Core, Compulsory and Optional Modules

Programme Specifications provide key information on which modules are core, compulsory and optional within your course. Your course specification is available to you online through the MyEssex webpage or via this link: www.essex.ac.uk/programmespecs/

Full module outlines are located on the module directory: https://www.essex.ac.uk/modules/, including details on the module supervisor and teaching staff, module content, learning and teaching methods and assessment methods.

3.6.3 Module Reading Lists

Please refer to https://essex.rl.talis.com/index.html for details on reading lists.

3.7 LISTEN AGAIN

Did you miss something? Our Listen Again digital recording service lets you listen again to lectures so you grasp every detail. It’s available in teaching rooms or lecture theatres where you see the sign. listenagain.essex.ac.uk

3.8 SUPERVISION OF FINAL YEAR PROJECT MODULE

CE301 Final Year Project - (Triple module = 45 credits)

Project Co-ordinator: Dr. Anthony Vickers
Telephone extension: 2876
E-mail: vicka@essex.ac.uk

Introduction
This module represents the first and only time within your degree that you will manage a project entirely on your own. Starting from a simple project description, provided either by yourself or your Personal Tutor, you will create a product specification. From this specification you will choose a design methodology and arrive at a design solution. From this design solution you will work over the remaining project period to produce the product which you will demonstrate publically at the Project Open Day and then privately at your demonstration/oral examination. Alternatively you will use an Agile methodology, following a series of planned sprints, generating working products from the outset.

Learning Outcomes
On completion of the module, students will be able to:

- L1 Apply an appropriate design methodology to achieve a product defined by a specification.
- L2 Use Gantt charts and time management techniques to plan and manage a project over a period of six months or more.
- L3 Locate and read references and produce summaries and critical analysis of them. Be aware of peer review as a means of the quality assurance of written work.
- L4 Record plans, ideas, results, and reflections in a log book as defined in the project guidebook.
- L5 Work as an individual to specify, design, construct and test a system to meet a project requirement.
- L6 Demonstrate oral and written communication skills through the writing of the initial, interim, and final report, through the preparation and presentation of a poster at the Project Open Day, and by providing a working demonstration of the project product.
- L7 Present and discuss ideas informally with academic supervisors.
- L8 Plan an employability strategy in light of current knowledge regarding graduate employment.
- L9 Define and discuss the role of an engineer in society particularly related to professional ethics.
- L10 Plan and report on the aspects of risk within their specific project.
- L11 Explain the meaning of Intellectual Property and ways in which IP can be protected.

**Project Organisation**

Students work under the supervision of a member of academic staff, who is responsible for setting the initial terms of reference for the project. Projects are allocated at the end of the Year 2. Projects in general require a balance of theory, practical work, experiment, and appraisal of the relevant background literature undertaken during the summer vacation. Students undertake projects individually.

The details of the project are agreed with the supervisor before the end of the Summer term of Year 2 so that preliminary research and background reading can be undertaken during the Summer Vacation between Year 2 and Year 3. Practical work commences at the beginning of the Autumn term and continues until the end of the Spring term.

You are expected to dedicate approximately 15 hours a week to your project throughout the Autumn and Spring terms, maintaining a record of your work (planning, action, reflections) in your logbook through the project period. You are also expected to attend the weekly CE301 lectures. The module supervisor and your own project supervisor will monitor your work rate. Many students will be able to work on their project in most of the University or School computer laboratories. Some students are provided with bench space or a designated computer and access to necessary equipment to carry out their project work. You should see your project supervisor regularly. At least once a week is recommended.

**Professional Development Studies (PDS)**

There is a series of lectures/workshops that are given by the module supervisor and external speakers. These events are provided to help you with your project and with your future employment. The detailed timetable of these events will be given at the first introductory lecture in week 2.

**Method of Assessment (100% coursework)**

Assessment of the module consists of the following components:

- An Initial Report (5%)
- An Interim Oral Examination (10%)
- An Open Day Abstract and Poster (5%)
- A Final Report (55%)
- A Logbook (5%)
- Project Presentation, Demonstration and Oral Examination (20%)

Do remember that each report can only use previous reports as references. You must not copy from one report to another.

Please read the CE301 Project Guidelines, and the Grading Guidelines on the CE301 Moodle server

**PLEASE NOTE:**

All submissions are to be submitted electronically, via FASER, apart from logbooks, which are submitted to the CSEE School Office as a hard copy.

Please see Coursework Deadlines for the exact dates / times of submissions, available on FASER.

**IT IS IMPORTANT TO SUBMIT WORK ON TIME.**

**THE UNIVERSITY’S POLICY ON LATE SUBMISSION OF WORK WILL APPLY TO THIS 45 CREDIT MODULE.**
3.9 ESSEX ABROAD
There are opportunities for eligible students to undertake a full year of study abroad in countries such as the United States (including Hawaii), Australia, New Zealand, Canada, Europe, Hong Kong, Japan, Latin America, and the Middle East. Students within the School of Computer Science and Electronic Engineering undertake their year abroad between the second year and final year of study. The University has exchange agreements with a wide variety of universities and can help students to select the most appropriate destination. Study abroad can enhance your C.V. and it gives you valuable experience of another culture and way of life. Spending an extended period of time in another country provides an unparalleled opportunity to see a side of life which tourists never encounter. International experience is also highly valued by employers in today’s global economy.

The marks from the year of study abroad are only used to improve a student’s degree classification. (There is however, a requirement of achieving a minimum average year mark during your study abroad) Calculation of degree classification at the Final Year Examination Board is therefore undertaken both with and without the year abroad. There are currently no tuition charges for study abroad year. Also, in many cases, the cost of living elsewhere is lower than in Colchester, so you should not assume that study abroad is an expensive proposition.

Any student interested in applying should contact Dr Nick Zakhleniuk, Departmental Study Abroad Officer, in the first instance at naz@essex.ac.uk, for approval in principle. Degree Apprenticeship students are not eligible to undertake this option as part of their course. Further information on study abroad, particularly in relation to insurance, accommodation, language and finance can also be found online: https://www.essex.ac.uk/undergraduate/study-abroad or through the Essex Abroad Office (email: saoadmin@essex.ac.uk).

3.10 STUDENT PLACEMENTS AND EMPLOYABILITY
Placements are an excellent way to gain practical experience relevant to your degree and improve your chances of getting a good job on graduation. Working as an employee on an approved placement enables you to:
• apply knowledge gained through your course to practical problems;
• learn about current work-based practices;
• make an informed choice for your final-year project topic.

We encourage all eligible* second-year students to consider actively seeking opportunities to experience industry, whether this is for the summer vacation period, typically ten to twelve weeks, or for a whole year i.e. between the second year and final year as part of a placement year degree (see separate placement handbook). Students will usually receive a salary and most significantly many go on to be permanently employed by their placement company when they graduate.

Some placement opportunities can be found by the School. Students will be sent details of these by e-mail or via Facebook. Students should also expect to be proactive in seeking suitable opportunities themselves. The School cannot guarantee to find placements for all students. Because of their popularity, you need to be aware of the timeline that covers applications for placements. Some of the larger companies (e.g. IBM, Google, BAE Systems) typically close applications in November i.e. a full 8 months prior to the commencement of the placement. Smaller companies are normally more flexible, with many seeking students up to and after the third term examinations.

The task of finding employers, and of advising students about possible employers, is undertaken by students, staff and the Employability and Careers Centre. The suitability of any proposal is examined by the School’s Placements Officer but cannot be guaranteed. They will be pleased to hear about your interest in this scheme and discuss options with you.

If you wish to seek advice on placement opportunities and requirements please contact one of the following in the first instance:

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr Michael Fairbank</td>
<td>Placements Co-ordinator</td>
<td><a href="mailto:m.fairbank@essex.ac.uk">m.fairbank@essex.ac.uk</a></td>
</tr>
<tr>
<td>Dr Vishwanathan Mohan</td>
<td>Placements Officer</td>
<td><a href="mailto:Vishwanathan.mohan@essex.ac.uk">Vishwanathan.mohan@essex.ac.uk</a></td>
</tr>
<tr>
<td>Dr Giovanni Stracquadanio</td>
<td>Placements Officer</td>
<td><a href="mailto:g.stracquadanio@essex.ac.uk">g.stracquadanio@essex.ac.uk</a></td>
</tr>
<tr>
<td>Dr Manoj Thakur</td>
<td>Placements Officer</td>
<td><a href="mailto:mpthak@essex.ac.uk">mpthak@essex.ac.uk</a></td>
</tr>
<tr>
<td>Mrs Valerie Hartgrove</td>
<td>Student Administrator (Year 3 and Placement)</td>
<td><a href="mailto:vhartg@essex.ac.uk">vhartg@essex.ac.uk</a></td>
</tr>
<tr>
<td>David Everiss</td>
<td>Faculty Placements Manager</td>
<td><a href="mailto:deveriss@essex.ac.uk">deveriss@essex.ac.uk</a></td>
</tr>
<tr>
<td>Nigel Collins</td>
<td>Faculty Placements Officer</td>
<td><a href="mailto:ncollins@essex.ac.uk">ncollins@essex.ac.uk</a></td>
</tr>
</tbody>
</table>

* Permission will normally be given only if a student’s progress is satisfactory and the work experience is seen to be complementary to, or supportive of, his or her course. Degree Apprenticeship students are not eligible to undertake this option as part of their course. Eligibility also requires that the student holds a tier-4 visa and is already registered on the placement year degree scheme. Changing onto the placement year degree part was through a degree is normally possible, but any tier-4 visa student will likely need to return to their home country and re-apply for their visa.

For further support regarding placements please use this link: http://www.essex.ac.uk/csee/ug/placements.aspx

3.10.1 Employability Modules

The School has an excellent employability record, more than 90% of graduates go into graduate level work or further study following their undergraduate course. It embeds employability related material through all three years of the undergraduate courses. Employability modules that students will study on in CSEE are:
<table>
<thead>
<tr>
<th>Module Code</th>
<th>Module Name</th>
<th>2017-2018 Supervisor</th>
</tr>
</thead>
<tbody>
<tr>
<td>CE101-4-FY</td>
<td>Professional Development</td>
<td>Professor Klaus McDonald-Maier</td>
</tr>
<tr>
<td>CE201-5-SP/CE501-5-SP</td>
<td>Comp Sci Project and Industrial Practice</td>
<td>Dr Michael Fairbank</td>
</tr>
<tr>
<td>CE301-6-FY / CE601-6-FY</td>
<td>Individual Project</td>
<td>Professor Anthony Vickers</td>
</tr>
</tbody>
</table>
3.10.2 Careers Staff in The School

The Employability Development Director within the School is Prof Dariush Mirshekar (dariush@essex.ac.uk).

However the following staff within the Faculty also have particular responsibility for careers. You can also contact them with careers-related queries at any time:

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nick Goodman</td>
<td>Senior Faculty Employability Manager</td>
</tr>
<tr>
<td>Khrieu Healy</td>
<td>Faculty Employability Officer</td>
</tr>
<tr>
<td>Dee Hardcastle</td>
<td>Faculty Careers Advisor</td>
</tr>
</tbody>
</table>

Keep your eye out for careers-related emails and also check our Facebook page for information on careers activities.

3.10.3 The Employability and Careers Centre

The Employability & Careers Centre assists students in a friendly and informal manner during their time at the University and after graduation. The Centre offers one-to-one advice on all aspects of planning your career including job hunting techniques such as making applications and interview skills. There are programmes of talks and workshops run by experienced and knowledgeable staff and employers each term. Details are available at www.essex.ac.uk/careers/.

The Employability & Careers Centre can also help students find part-time and temporary work during term time or in vacations, as well as internships and placements to develop relevant experience. It aims to help students find suitable employment opportunities either on campus or in the local area, whilst providing a quick and convenient service for employers to promote opportunities. You can find all the details on their webpages at: www.essex.ac.uk/careers

Students should look out for special events including the Jobs Market (October) and the annual Careers Fair (November).

Employability

As the proportion of the population with degrees increases, so the process of securing a graduate level job becomes more competitive. Just having a degree is no longer a guarantee of getting the job you want, so during your time at Essex, you should take every opportunity to improve your employability. The kinds of things that will help are:

- Gaining additional qualifications such as Cisco Certification.
- Gaining relevant work experience through a placement year or vacation work. If you are taking a year abroad degree it is possible to undertake a placement as part of your year abroad.
- Holding positions of responsibility in student societies, being a mentor, or being a representative on the Staff Student Liaison Committee.
- Making use of the facilities offered by the Employability and Careers Centre, for example, advice on writing your C.V. and careers workshops.

3.10.4 Job References: Requesting References from Members of Staff

If you require a personal reference, always ask permission from a member of staff before giving their name as a referee. You should consider from whom it is most appropriate to request a reference and who will be best equipped to evidence your character and performance in the subject.

For example, final year project supervisors, year organisers, or core course supervisors are likely to be more suitable than lecturers that have taught you on a first year option course. Every reasonable
effort will be made to meet a request for a reference for graduates up to three years after they leave the University. Requests received outside of this timescale may, of course, be met if a member of staff is equipped with the necessary information on the student and is willing to provide a reference. In the case of research students, it would be normal to expect to provide a reference for a more extended period of up to ten years.

It is helpful if you can provide the member of staff with details of the course or job you have applied for and, if relevant, a CV or other summary of your qualifications and experience. Please try to ask for references in good time – It is not always possible for a member of staff to write a reference immediately.

Copies of references
A copy of any reference provided will be retained within our School for no longer than three years for taught students and ten years for research students. If a reference is retained beyond this timeframe, our School will seek explicit consent from the student concerned. Read the outline of University policy on the writing and retention of references: https://www1.essex.ac.uk/studentdocs/

3.11 AN INCLUSIVE AND DIVERSE LEARNING EXPERIENCE

3.11.1 Disability and Emotional Wellbeing

We would encourage all new students with a disability, long term medical condition, specific learning difficulty or mental health difficulty to disclose and register with the Student Services Hub so that we can plan how best to support you in your studies.

You can find out about the support we offer here:

www.essex.ac.uk/students/contact/help.aspx

UK students may be eligible for a Disabled Students’ Allowance grant. See our webpages for more information, including application forms and key changes:

www.essex.ac.uk/students/disability/funding.aspx

3.11.2 Information for International Students

We are proud to be a global community and we recognise that living and studying in the UK may be very different from your own country.

Essex has a wide range of support covering academic and health and wellbeing issues. Our friendly and professional staff will be able to guide, give advice and assist you during your time at Essex.

You can find helpful information here -

www.essex.ac.uk/students/new/international/default.aspx

If you are studying on a Tier 4 visa, don’t forget to read section 8.4 Tier 4 Information of this handbook which has further information and links.
3.11.3 Mature and Part-Time Students

As a mature student you’ll be in very good company – around 37% of our students are mature students.

We appreciate that studying as a mature student can present challenges. This is particularly true if this is your first experience of higher education and you have other commitments and responsibilities to meet such as work and family. We want you to be aware of the support available so that you can make the most of your time at Essex.

You can find more information here: [www.essex.ac.uk/students/groups/mature-students.aspx](http://www.essex.ac.uk/students/groups/mature-students.aspx)

3.11.4 Degree Apprenticeships

As a student undertaking your study as degree apprentices you are an employee of your sponsoring company. In some degree apprenticeship schemes you will take some modules on campus and some while working in your company through distance learning. All learning material will be provided through Moodle for these modules. You will have access to the lectures through the Listen Again service. You will also receive Webinars, tailored to your educational needs. If you have any questions regarding your distance learning modules please contact the degree apprenticeship co-ordinator.

Your apprenticeship degree consists of an academic part and a work part. The two are independent but the academic part will help you with your work part and vice versa. It is important to keep in mind that the time you spend at your company is not time spent ‘outside’ your degree, but that what you learn at your company will enhance what you learn at the University and the two are therefore closely connected.

Contact

<table>
<thead>
<tr>
<th>Head of School</th>
<th>Professor Anthony Vickers</th>
<th><a href="mailto:vicka@essex.ac.uk">vicka@essex.ac.uk</a></th>
</tr>
</thead>
<tbody>
<tr>
<td>Degree Apprenticeship Coordinator</td>
<td>Dr Adrian Clark</td>
<td><a href="mailto:alien@essex.ac.uk">alien@essex.ac.uk</a></td>
</tr>
<tr>
<td>Student Administrator (Degree Apprenticeships)</td>
<td>Miss Megan Capon</td>
<td><a href="mailto:Megan.capon@essex.ac.uk">Megan.capon@essex.ac.uk</a></td>
</tr>
<tr>
<td>Personal tutor</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The Apprenticeship Agreement

Before you start your Degree Apprenticeship, you should have an Apprenticeship Agreement with your employer which states the course you are studying along with the duration of the course. This may be embedded within your employment contract. You should have also signed a Commitment Statement with the University and your employer which sets out your responsibilities in your apprenticeship as well as those of your employer.

Training experience
You have a right, as set out in the Commitment Statement, to an apprenticeship which enables you to achieve the specified learning outcomes. In particular, this means that you have the right to be given real tasks and responsibilities which enable you to learn new skills and to reflect on them. You have the right to an apprenticeship company mentor, who must be available to you, within reason, to respond to any queries or issues, and to give you feedback on your work.

In the UK, besides these rights, you have the same rights at work as every individual working in the UK. You can get information on basic employment rights on the Citizens Advice Bureau website (http://www.adviceguide.org.uk/england/work_e/work_rights_at_work_e.htm).

**Academic matters**

Your time spent at your company is an integral component of your degree apprenticeship course. As this takes place outside of the University context, it is paramount that you take responsibility for your own learning, supported by your company mentor and academic tutor. Reflect regularly on how your work relates to the learning outcomes of your modules, and think about how you will achieve all of them.

Should you have any questions about the academic requirements of your apprenticeship, you should talk to your academic tutor.

**Relationship to your company mentor**

The mentor should assist you in combining your academic studies with your company work and give you feedback and advice on your work.

In return, you are obliged to conduct yourself professionally towards your mentor, in order to achieve a successful working relationship. Be respectful and reliable towards your mentor, and perform your tasks to the best of your ability. If you have any problems, discuss them with your mentor early on.

Should you have any major problems with your mentor, you should contact your School academic tutor.

**Disability and specific learning needs**

If you have a disability or specific learning need, or if you are pregnant or a carer, it is your responsibility to inform the Degree Apprenticeship Student Administrator, who can provide information and refer you to the right point of contact within the university.
3.12 STUDENT REPRESENTATION

Student feedback is a vital part of the University’s approach to quality assurance and enhancement. It is therefore important that you are given the opportunity to feedback and that you take time to feedback to the University. You can do this in a number of ways:

You can contact (or volunteer to be) a student representative who represent the voice of fellow students in departmental Student Staff Liaison Committees (SSLCs) and other University level committees.

[Links]
http://www.essexstudent.com/representation/coursereps/
http://www.essex.ac.uk/quality/student_representation/student_rep.asp
http://www.essex.ac.uk/quality/student_representation/sslc.asp

Every year, we will ask you to complete the Student Assessment of Module and Teaching (SAMT). This survey will be summarised and discussed by SSLCs and will inform reports written by us for central University committees as part of our quality assurance processes.

- **Student satisfaction surveys** enable the University to gauge overall satisfaction amongst students. When the results have been reviewed and analysed, the University can then enhance your experience of learning at Essex. The National Student Survey (NSS) for final year students feeds into university league tables. NSS also lets us know how we’re doing and where we can make improvements. The survey is run online and you will receive a link to the survey via email. Students not eligible for NSS will be invited to complete the UK Engagement Survey (UKES) which asks about how you spend your time on your course, what kind of learning you’ve taken part in and your views on your teaching and learning experience.

3.13 LIBRARY SERVICES

At our Colchester Campus, the Albert Sloman Library on Square 5 has a variety of study spaces over six floors, including 24/7 facilities and group work areas. The Library offers a wide range of learning resources, online and in print, with a dedicated Helpdesk, overnight chat service and the opportunity to book appointments with your Subject Librarian to help you through your studies and beyond.

[Links]
libwww.essex.ac.uk

The library has a team of Subject Librarians who can help you to find appropriate resources for your assignments and show you how to search effectively. They can also provide advice on referencing and how to avoid plagiarism, using reference management software, and evaluating sources. Your Subject Greg Cadge - contact him at greg.cadge@essex.ac.uk, or use the Book a librarian form on the Library website to get in touch.

For guidance in relation to third-party proofreading of student work: www.essex.ac.uk/proofreading
3.14 ATTENDANCE MONITORING (Count-me-in) AND ABSENCE FROM SESSIONS

Your attendance at lectures and classes has a significant impact on how successful you are in your studies. At Essex, we monitor attendance so we can identify students who may need guidance and support.

You’ll need to record your attendance at teaching events using the electronic reader in the teaching room. Just ‘tap in’ for every timetabled teaching event you attend.

You should not tap in for someone who is not attending the class; and also you should not tap in if you then immediately leave the teaching event. This may result in disciplinary action being taken against you.

If you lose your card or it is faulty, go to the Student Services Hub to get a new card (a fee may be applicable). If you attend a teaching event but are unable to record your attendance as you don’t have your registration card, you should speak to a member of administrative staff in your department. In the case of a lost card, your department will normally record you as present for up to seven days.

For more information on attendance, and for links to forms and guidelines visit: www.essex.ac.uk/students/course-admin/attendance.aspx

If you need to report an absence from a teaching event, test or exam due to medical or other circumstances you should do so by completing the relevant form in myEssex for a notified absence. We will consider the reasons and may record it as an authorised absence. Be aware that you may need to provide evidence, including medical evidence if relevant.

Please contact your Personal Tutor, department staff or the Student Services Hub for advice and support, particularly if you are going to be absent for several weeks.
Section 4: Assessment

4.1 RULES OF ASSESSMENT

The Rules of Assessment are used to calculate your results. 
www.essex.ac.uk/students/exams-and-coursework/ppg/general/assess-rules.aspx

The following is only a summary of the key points. You should read the rules and make sure you understand them. If you need advice, ask your Personal Tutor, Departmental Administrator, or SU Advice.

Decisions about your results are made at the end of the Summer Term.

The rules cover:

- whether you have passed the modules you have studied and can be awarded credit
- whether you have met the requirements to move on to the next stage of your course
- whether you have met the requirements to pass your course, and what classification you will receive
- if you have not passed, what reassessment you could be offered
- if you have not passed, whether you must withdraw from your course, with or without an exit award

Marks and degree classification

<table>
<thead>
<tr>
<th>Marks</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>40</td>
<td>Pass/third class (3)</td>
</tr>
<tr>
<td>50</td>
<td>Lower second class (2.2)</td>
</tr>
<tr>
<td>60</td>
<td>Upper second class (2.1)</td>
</tr>
<tr>
<td>70</td>
<td>First class (1)</td>
</tr>
</tbody>
</table>

Your final degree classification is based upon your marks in stage 2 and stage 3 (for a three year course). You must meet the requirements for stage 1 (first year) to continue on the course.

Core, compulsory and optional modules

To understand the requirements to pass your course, you need to know the status of the modules that you are taking. You can find details of the status of your modules in Section C of your programme specification via My Essex.
Core | You must take this module | Must pass this module. No failure can be permitted.
---|---|---
Compulsory | You must take this module | There might be limited opportunities to continue on the course/be eligible for the degree if you fail it.
Core with Options | You can select one of a restricted list of modules | Must pass this module. No failure can be permitted
Optional | You can choose which module to study | There might be limited opportunities to continue on the course/be eligible for the degree if you fail it.

### What do I need to do to pass my course?

To understand what you need to do to pass your course you should read the Rules of Assessment webpages; look up the status of the modules you are taking; and see whether there are any additional course requirements by checking any variations for your department (Appendix A under the rules of assessment). Please note that courses within the School of Computer Science and Electronic Engineering which carry professional body accreditation by the BSC and/or IET are subject to specific Rules of Assessment. This includes a requirement to pass all modules at each stage of study, as this is a requirement by our accrediting bodies. You should make sure you familiarise yourself with these rules as set out under Appendix A in the Rules of Assessment.

If you are thinking of undertaking a work placement or year abroad, you should check the requirements for these programmes.

### Exit Awards

If you decide to withdraw from your course before you finish, or you fail too many credits to be awarded a Bachelor’s degree, you may be awarded a qualification at a lower level, if appropriate.

Within the School of Computer Science and Electronic Engineering, eligible students failing to meet the specific requirements of our accredited degrees in Years 2 and 3 may be offered the opportunity to transfer to a non-accredited degree route. If this is the case, details of this option will be outlined to you following the meeting of the examination board.

#### 4.2 Extenuating Circumstances, Withdrawing and Intermittent

Extenuating circumstances are circumstances beyond your control which cause you to perform less well in your coursework or examinations than you might have expected. In general, extenuating circumstances will be of a medical or personal nature that affect you for any significant period of time and/or during the examination period. You need to submit your form by the deadline given here-

[www.essex.ac.uk/students/exams-and-coursework/ppg/general/assess-rules.aspx](http://www.essex.ac.uk/students/exams-and-coursework/ppg/general/assess-rules.aspx)
You will **not** get extra marks if you hand in an extenuating circumstances form. Boards of Examiners use other methods to take into account extenuating circumstances, such as permitting further reassessment opportunities for uncapped marks.

You should read the guidance on extenuating circumstances very carefully before submitting your form and evidence. Seek advice from the Students’ Union Advice Centre, [www.essexstudent.com/services/advice_centre/](http://www.essexstudent.com/services/advice_centre/) or the Student Services Hub, [www.essex.ac.uk/students/contact/default.aspx](http://www.essex.ac.uk/students/contact/default.aspx)

**Thinking of leaving or taking a break from your studies?**

You may experience doubts at some point during your studies, if you’re thinking about leaving Essex, we’re here to support you and give you the advice you need to help you make an informed choice.

**Intemission** is a temporary withdrawal or leave of absence from the University and provides you with the opportunity to take a break from your studies. Normally, this is for reasons beyond your control (e.g. health or personal problems) although other reasons are permitted. Intemission must be approved by the University first, so if you are thinking about intermitting, we strongly advise you to contact your department and your Student Services Hub to talk to one of our advisers.

You should also read our guidance on intermitting very carefully at [www.essex.ac.uk/see/intermit](http://www.essex.ac.uk/see/intermit). If your intermission is agreed to, we will also give you the advice and support you need to help you carry on with your studies.

**Withdrawing** is the formal process for permanently leaving your programme of study and the University. If you are thinking of withdrawing, you should seek advice from your Department or the Student Services Hub at the earliest opportunity. It is very important that you discuss your circumstances with the University and follow the formal procedure for withdrawing. If the University is not formally notified, then you may risk continuing to incur further tuition or accommodation fees. More advice and information is available at [www.essex.ac.uk/see/withdraw](http://www.essex.ac.uk/see/withdraw).

### 4.3 RE-MARKING OF COURSEWORK

You have the right to request a re-mark of your coursework under certain circumstances, which your department will advise you on. The University Marking Policy can be found here: [www.essex.ac.uk/quality/university_policies/examination_and_assessment/marketing_policy](http://www.essex.ac.uk/quality/university_policies/examination_and_assessment/marketing_policy). You will need to complete a form and be aware that marks can go down as well as up.

### 4.4 MODERATION, SECOND MARKING POLICIES AND EXTERNAL EXAMINERS

The University policy on **moderation** is part of the Marking Policy. When work is moderated, it means that a second member of academic staff takes a random sample of the work for a particular assessment and reviews the marks given. A moderator would not change individual marks for the work, but would liaise with the first marker to agree whether marks should be reviewed across the particular piece of assessment or module, which may lead to marks being adjusted.

**Second marking** is where a second marker marks the work but has access to the first marker’s marks and/or comments.

**External Examiners** are usually academics from other universities but may be from industry, business or the profession depending on the requirements of the course. They give an impartial view of the course and independent advice to ensure that courses at the University meet the academic standards expected across UK higher education. External Examiners write reports on the courses and modules they are responsible
for which are made available to you via your department. You can find the name and institution of the External Examiner for your course and modules by looking on the Programme Specifications Catalogue and the Module Directory. You can find out more about how the University uses External Examiners here: www.essex.ac.uk/quality/external_examiners/default.asp

Please note: you may not contact External Examiners directly under any circumstances. If you have any concerns about the quality and standards of your course, please contact your student rep, your Head of Department or the Students’ Union.
4.5 APPEALS, COMPLAINTS AND FITNESS TO PRACTICE

Appeals on academic grounds can be made following the meeting of the Board of Examiners and the publication of your results. Be aware that there are strict deadlines for the submission of the appeal form and your evidence.

We strongly advise all students thinking about making an appeal to contact the Students’ Union Advice Centre.

You may not appeal against academic judgement. This means that you can’t appeal against the marks you have been given by a Board of Examiners without evidence of extenuating circumstances or procedural irregularity.

More information about appeals, including the deadlines and forms to complete, can be found online at: www.essex.ac.uk/see/appeals

Making a Complaint: The University is a large community engaged in many activities of both an academic and non-academic nature. From time to time, you may feel dissatisfied with some aspect of your dealings with the University and, when that happens, it is important that the issue is dealt with constructively and as quickly as possible without risk of disadvantage or recrimination.

A complaint is defined as the expression of a specific concern about matters that affect the quality of a student’s learning opportunities (this is in line with the QAA Quality Code for Higher Education, Chapter B9: Academic Appeals and Student Complaints). The University aims to resolve complaints quickly and informally.

You can find the complaints procedure and the forms here: www.essex.ac.uk/see/complaints

Fitness to practise is only applicable to students on certain professional courses (such as nursing or social work). If this applies to you, you will have been told by your department. You can find the full Fitness to Practise procedure online at: www.essex.ac.uk/students/exams-and-coursework/ppg

4.6 ACADEMIC INTEGRITY AND ACADEMIC OFFENCES

The University expects students to act with honesty and integrity in relation to coursework, examinations and other assessed work, and to follow our conventions for academic writing (including appropriate referencing of sources) and ethical considerations. If you don’t meet these expectations, then you may be charged with having committed an academic offence, a matter the University takes very seriously.

It is your responsibility to make yourself aware of the regulations governing examinations and how to correctly prepare your coursework. An academic offence can take place even if you didn’t mean to commit one, and examples include plagiarism, falsifying data or evidence, and communicating with another candidate in an examination.

If you aren’t sure what the conventions are, particularly in relation to referencing, you should ask your department, contact the Talent Development Centre, and also refer to 7: Referencing and good academic practice in this handbook.

More information about academic offences and getting support can be found at:
4.7 ETHICS

All research involving human participants, whether undertaken by the University’s staff or students, must undergo an ethics review by an appropriate body and ethical approval must be obtained before it commences. You can find our Guidelines for Ethical Approval of Research Involving Human Participants here - www.essex.ac.uk/reo/governance/human.aspx - along with the Ethical Approval application form.

‘Human participants’ are defined as including living human beings, human beings who have recently died (cadavers, human remains and body parts), embryos and foetuses, human tissue and bodily fluids, and personal data and records (such as, but not restricted to medical, genetic, financial, personnel, criminal or administrative records and test results including scholastic achievements). Research involving the NHS may require and research involving human tissue or adults lacking capacity to consent will require Health Research Authority approval.’
Section 5: Coursework

Most modules contain assessable assignment work, which is marked and returned to the student. Please note that illegible coursework work will be awarded zero.

5.1 COURSEWORK SUBMISSION (including FASER) AND DEADLINES

Most assignments will be submitted on-line via the coursework submission system (FASER) at: http://faser.essex.ac.uk/

Alternatively, an assignment may be marked in a laboratory session.

Coursework deadlines for all assignments are published on FASER. You should use this information to assist with planning your coursework throughout the year to ensure you are able to meet all your deadlines.

As a result of exceptional circumstance, it is occasionally necessary to change deadlines. In the event of any variation to the schedule, FASER will be updated and information will be published by e-mail and on the notice boards. It is your responsibility to check for changes to deadlines. Students should note that module supervisors are not permitted to change coursework deadlines once published.

5.2 SAMPLES OF COURSEWORK

The External Examiners are provided with electronic samples and if the coursework is a hardcopy submission then paper copy samples are taken and in exceptional circumstances the department would reserve the right to hold back samples as required.

5.3 RETURN OF COURSEWORK POLICY

The School is committed to providing timely feedback that is designed to help you understand your strengths and weaknesses and give you the opportunity to enhance those strengths and overcome the weaknesses. Marked coursework/assignments, including feedback, will be returned to students within four working weeks of the submission deadline. A due date for feedback and grades will be provided for each piece of coursework. In exceptional circumstances there may be a delay in the return of grades and feedback. If the submission deadline is during the last three weeks of term, the marked coursework will be returned to the student at the start of the following term.

All assignment marks are recorded in a University database. With the exception of the project modules, students will receive their coursework marks by email as soon as the marks have been entered. The marks for modules which are assessed by coursework only will be provisional and subject to possible change until they have been confirmed by the meeting of the Board of Examiners. The final mark for project modules will not be released until after the meeting of the Board of Examiners. You should check your coursework marks carefully against your records, and report any discrepancy immediately to the CSEE School Office.

Module supervisors reserve the right to ask students to come to a meeting to discuss any piece of work submitted.
5.4 LATE COURSEWORK POLICY

The University operates a uniform policy on late submission of coursework. Work which is not submitted by the deadline will receive a mark of zero; no individual extensions will be granted. The policy states that the mark of zero shall stand unless you submit satisfactory evidence of extenuating circumstances that indicate that you were unable to submit the work by the deadline. The University expects you to plan and organise your work carefully and sensibly, and to schedule your time so that coursework is completed safely in advance of its deadline.

There will, very occasionally, be circumstances in which work is completed very close to the deadline and unforeseen circumstances prevent it from being submitted by the published deadline. In such a case you should take all possible steps to inform the School (via the CSEE School Office) as soon as possible, and submit a ‘Late Submission of Coursework Form’ to the CSEE School Office.

The ‘Late Submission of Coursework Form’ must be submitted within seven days (including weekends and/or bank holidays) of the deadline date. It will be considered by the School’s ‘Late Submission Committee’ which meets three times during the academic year (see ‘Diary for the Academic Year 2017-18’). This Committee has the power to reinstate your marks in certain circumstances. Other academic departments have similar arrangements.

The Committee will not, however, accept circumstances such as oversleeping, or confusion over the deadline, but will take into account any positive steps you have taken to ensure submission. Further guidance concerning late submission of coursework, including guidance on what circumstances are not accepted as grounds for mark reinstatement, can be found on the University website at:

http://www2.essex.ac.uk/academic/students/ug/crswk_pol.htm

When a piece of work constitutes 100% of assessment for the course (for example, a project or a dissertation), and you feel that you have extenuating circumstances, submissions beyond seven days of the published deadline will be accepted for consideration by the relevant ‘Late Submission Committee’. You will need to submit a ‘Late Submission of Coursework Form’ and any supporting documentation along with the piece of work.

In general, work submitted beyond seven days of the deadline will be marked for formative feedback only (provided model answers have not been released).

If your application is rejected by the Late Submissions Committee, you may still submit an Extenuating Circumstances form. If the Board of Examiners accepts that the circumstances have affected your ability to submit your work, it has the power to instate your formative mark if it concludes that this is the best way to deal with your claim. More information about submission of Extenuating Circumstances forms is available via the Registry web pages at the following URL

https://www.essex.ac.uk/students/exams-and-coursework/ext-circ.aspx

5.5 ANONYMOUS MARKING POLICY

Effective feedback helps students to understand the mark given for a particular piece of work, and helps students to reflect on their own learning and to achieve better marks in future pieces of work. A variety of methods of providing feedback are used across the University, and departments chose the most appropriate for their courses and modules. The University does not have an institution-wide approach to anonymous marking in coursework. Departments decide whether to use anonymous marking in coursework or not.
This department does not operate a system of anonymous marking. We believe that marking provides an important point of contact with the student, through which individualised and personal forms of encouragement and involvement can be fostered. We believe that the quality of formative feedback is enhanced when the marker knows the student, and current work can be seen in the context of earlier assignments and classroom interactions. The comments we provide in coursework seek to encourage students in areas where they have done have done well and to highlight what they could do better. We take great care to mark fairly and effectively and we feel strongly that our ability to do this is improved through knowing our students.

If you take optional modules outside your home department, you should make sure you are aware of the policy on whether coursework is marked anonymously or not, and how to submit coursework.

5.6 REASSESSMENT IN COURSEWORK

A student who believes an assignment has been marked incorrectly may request a formal re-marking of an assignment provided:

1. The assignment has been single marked and has not been through a moderation process.
2. The student has already discussed the reason for the mark awarded with the module supervisor.

Such requests for remarking must be submitted within 7 days of the marks being released. A form is available from the CSEE School Office.

In response to a request, the work will be second marked by another member of academic staff and the marks will be reconciled. Students should be aware that the new mark may be higher or lower than the original mark.

5.7 REFERENCING IN COURSEWORK

The School of Computer Science and Electronic Engineering using the IEEE referencing Style. To find out about your departmental referencing style, IEEE and for help with referencing, visit the library website: http://libwww.essex.ac.uk/referencing.htm

Also see Section 7.
Section 6: Exams

6.1 EXAMINATION REGULATIONS

The General Regulations which govern examinations can be found via the website here www.essex.ac.uk/about/governance/regulations/affairs.aspx#exams.

Attendance at examinations is compulsory. For exams that are more than an hour long, you will not be allowed to enter the examination room if you arrive later than 55 minutes after the start of the exam. If your exam is only an hour long, you will only be admitted up to ten minutes after the start of the exam.

6.2 ACCESS TO EXAM SCRIPTS

If you want to see your exam script, you should normally make the request within four weeks after the exam to the department which is responsible for that module. The department should either: let you see the script in the presence of one of the staff responsible for teaching the module or give you a copy or summary of the examiners’ comments on your performance.

6.3 DEPARTMENTAL POLICY ON THE USE OF DICTIONARIES/CALCULATORS

Dictionaries
Dictionaries (paper or electronic) are not permitted in any Computer Science and Electronic Engineering examinations. If you take a dictionary to an examination where it is not permitted, you will be reported on suspicion of committing an Academic Offence.

Calculators
If you are allowed to use a calculator in your examinations, the only models you are permitted to use are the Casio FX-83GT PLUS or the Casio FX-85GT PLUS.

The only exception is for certain Finance exams that require a financial calculator, in which case you may use the Hewlett Packard 12c (all variants) or the Texas Instruments BAII Plus (including the BAII Plus Professional).

A limited number of Casio calculators will be available to borrow on the day of your exam from the Exams Office on a first-come, first-served basis, on production of your registration card. Please note financial calculators will not be available.

6.4 GENERAL INFORMATION ABOUT SUMMER EXAMS AND EXAMINATION RESULTS

You can find your personalised exam timetable online at: www.essex.ac.uk/examtimes/

You must bring your registration card and exam entry form with you to the exam. You will not be allowed entry without them. Remember to check your exam entry form carefully and contact the Examinations Office if there are any errors.
You can download a guide to examinations, and watch a short video at: www.essex.ac.uk/students/exams-and-coursework/default.aspx and watch a short video at: www.essex.ac.uk/students/exams-and-coursework/

You will receive an email to your Essex email account as soon as your results are published. You can find the publication schedule at: www.essex.ac.uk/students/exams-and-coursework/schedule.aspx

6.5 ANONYMOUS MARKING POLICY IN EXAMINATIONS

All formal examinations at the University of Essex are marked anonymously.

Your Exam Entry form also has your candidate number in large print in the centre of the page. This is the number you should write on the examination scripts.

6.6 REASSESSMENT IN EXAMINATIONS

You can find information relating to resitting exams at: www.essex.ac.uk/students/exams-and-coursework/resits.aspx.

Remember that reassessment in examinations (and coursework) carries a fee.

6.7 HELP WITH EXAMINATION PREPARATION

Examinations create stress for most people and, in order to help students prepare, the department offers a programme of postgraduate revision lectures in week 30 in the summer term. In addition, the Student Support Office offers a series of Examination Workshops which are run by specialist staff. Sessions cover revision, planning and exam techniques, the examinations, using the exam paper and the examination room, as well as sessions on relaxation and how to cope with stress. Staff in the Counselling Service can also provide sessions on stress management.

6.8 SCALING OF EXAMINATION RESULTS

Very occasionally, when there is a problem with the assessment for a module, the Exam Board may scale (decrease or increase) the marks of all students on a module in order to achieve a fair result. Scaling requires approval by the External Examiners. It will only be proposed after consideration of both statistical evidence and candidates' work. An unusual mark distribution on its own is insufficient reason for scaling. It therefore follows that no mark can be considered final until a Board of Examiners has met.

6.9 DEPARTMENTAL TESTS AND EXAMINATIONS

The School runs internal tests in addition to the examinations run by the University. These take a number of forms including multiple choice progress tests, time-constrained assignments or online assessments. Any student entitled to special examination arrangements should inform the School (Julie Poole: jpoole@essex.ac.uk) as soon as this has been agreed with student support in order that appropriate arrangements can be made.

Departmental Tests are usually shown on your teaching timetable. You should enquire with your Module Supervisor the form in which your test will take.

6.10 REFERENCING IN EXAMINATIONS

(See Section 7 of this handbook)
Section 7: Referencing and Good Academic Practice

7.1 REFERENCING AND GOOD ACADEMIC PRACTICE

Respecting authorship through good academic practice is one of the key values of higher education in the UK.

The University takes academic offences very seriously. You should read the sections of this handbook which refer to referencing, coursework and examinations very carefully.

Referencing is a key academic/scientific skill. It is how you will acknowledge all sources used within a piece of work. You must reference all works used directly (quotes) and indirectly (paraphrasing and summarising).

Referencing allows you to give credit to authors'/researchers' concepts and ideas/ideas and results, demonstrate your breadth of reading and knowledge on a subject, direct readers to your sources, and avoid plagiarism.

You should always use the best available sources of evidence, such as peer reviewed journals and recognised books.

7.2 WHERE TO SEEK GUIDANCE

The Talent Development Centre provides online courses and guides to help you fully understand what is required from you. You can find out about the full range of workshops and resources that are available to you by visiting https://www1.essex.ac.uk/students/study-resources/tdc/default.aspx

You can also complete the online Academic Integrity course at moodle.essex.ac.uk/course.

7.3 THE UNIVERSITY ACADEMIC OFFENCES POLICY

Please see section 4.6, 5.9 and 6.6, and remember that the Academic Offence Procedure applies to all students www.essex.ac.uk/about/governance/policies/academic-offences.aspx.
8.1   REGISTRATION, ENROLLING AND TRANSCRIPTS

All new and returning students are required to register at the start of each academic year. The process for new students includes activating an IT account, completing Pre-Arrival Online, and attending the University’s main registration event in the Sports Hall.

New students: www.essex.ac.uk/students/new/registration.aspx

Returning students are required to complete Online Registration. In addition to this, returning students who hold Tier 4 visas are required to complete a document check in person at the University’s main registration event in the Sports Hall. Returning students: www.essex.ac.uk/students/course-admin/registration.aspx

8.1.2 Module Enrolment
Students registered on programmes of study leading to a degree may have options to select as part of their course structure. The eNROL system is an online tool to review and select available modules specific to a particular course and year of study. All new and returning students should use the online system prior to the start of each academic year. Returning students will access the system from the April preceding the next academic year. New students will access the system from the end of August. Departments will approve student selections within a few weeks of eNROL use and timetables will take module enrolment into account when planning for the next academic year. Early module enrolment will ensure students know which modules to attend and where the lectures and classes are held.

8.1.3 Award Documents
As your studies draw to a close, and once your exam board has met, it takes up to five working days for your results to be confirmed. You will be sent an email to inform you when the results are live on a password protected web page. Graduating students will receive a degree certificate and graduating undergraduate students also be able to access their electronic HEAR which gives details of all marks obtained during their studies.

Further information can be found at:
www.essex.ac.uk/students/graduation/award-documents/default.aspx

8.2   FIND YOUR WAY AND ROOM NUMBERING SYSTEM
Find Your Way is our interactive campus map app. Download it to help you find any location on campus and get directions quickly and easily. There's also a handy web version http://findyourway.essex.ac.uk

If you're looking for a specific room, follow these rules.

If the room number has three parts and the first is alphabetical eg TC.1.20 then the room is in one of the outer buildings. The format is building.floor.room. The first part indicates the building - "TC" is the Teaching Centre and "LH" is the Ivor Crewe Lecture Hall. The second part tells you the floor and the third the room number. For example, LH.1.12 is Ivor Crewe Lecture Hall, floor 1, room 12.

If the number has three parts and the first contains numbers and letters eg 5N.7.16, then the room is in square 4 or 5. The format is entrance.floor.room. The first part tells you the square and corner (eg 4S is the south corner of square 4), which matches the labels on the entrances (eg door 4NW is next to The Store). The second part is the floor and the third part the room. For example, 5NW.6.12 is in the north-west (NW) corner of Square 5 (entrance "5NW"), floor 6, room 12.

If the number has two elements and the second element has three digits eg 4.722, the room is in the Maths/Social Studies/Rab Butler/Square 1 building area. The first number shows the floor and the last three digits show the room number.

Also... if the last three digits are 700-799 the room is off Square 1, and if the last three digits are 500-599 the room is in the Square 2 area (Computer Science). For example, 5.512 is room 512, floor 5.

8.3 IT SUPPORT, WIFI, EMAIL ACCOUNT, FREE MS OFFICE, COMPUTER LABS, M:DRIVE

Visit our website to set up your IT account and password, register an external email address and passphrase and request a reminder for a forgotten passphrase: www.essex.ac.uk/it/getaccount.

You must change your password within four weeks of your account being created, and then once every four months after that. The easiest way to change your password is online at: www.essex.ac.uk/password.

Once you're set up, you can access email, log on to lab computers, connect to eduroam wi-fi and much more.

As part of your Office 365 email account you get 1TB cloud storage space for all your documents with OneDrive. OneDrive lets you create, edit, and share documents online. You also get at least 300 MB of local storage, known as your M: drive. You can access this by going to 'My Documents' on any lab computer.

Visit the IT Services website for helpful information, including how-to guides, answers to frequently asked questions, and links to video screencasts. www.essex.ac.uk/it
If you can't find what you're looking for, or if you need to talk to someone, then you can get help from the IT Helpdesk in the Silberrad Student Centre. Open Monday to Thursday 8.30am to 6.00pm, and Friday 8.30am to 5.45pm.

Information on computers and software is available here: www.essex.ac.uk/it/services/computers-and-software/default.aspx?tab=3

If you need to use a computer on campus our computer labs are the perfect place to study or work. Many labs stay open until late and some are open 24/7. For computer lab locations, opening hours and real-time availability visit: www.essex.ac.uk/it/services/computers-and-software/default.aspx

8.4 TIER 4 STUDENTS

If you are a citizen of a country that is not part of the European Economic Area or Switzerland it is likely that you will require a visa to enter or remain in the UK to study. The type of visa you need to apply for will depend on your circumstances including what passport or travel document you hold, the length of your proposed study and where you are applying from. Find out more on the University's website at: www.essex.ac.uk/immigration/

8.5 ON-CAMPUS FACILITIES

There is a broad range of facilities to support your living and learning experience at our Colchester Campus – including study-based services like the IT helpdesk and group study pods, but also various food and drink venues, two banks, a general store run by the Students’ Union, a printing and copy centre, market stalls each Thursday, a Post Office, launderettes, and much, much more. Full details on all on-campus facilities feature on our student webpages and in the campus guide you received with your welcome information when you joined us as a student member. www.essex.ac.uk/students www.essex.ac.uk/welcome

8.6 GRADUATION
The culmination of all your hard work, **Graduation** ceremonies take place at our Colchester Campus each July in the Ivor Crewe Lecture Hall. All eligible students studying at our Colchester, Loughton and Southend Campuses will be invited to attend. For more information visit our graduation pages: [www.essex.ac.uk/students/graduation/default.aspx](http://www.essex.ac.uk/students/graduation/default.aspx)
Section 9: Skills, Employability and Experience

9.1 EMPLOYABILITY AND CAREERS CENTRE

Get valuable, one-to-one advice from careers specialists throughout your time at Essex and beyond. Come and see us or log in to CareerHub+ whether you have one hundred questions or just don’t know where to start! We offer one-to-one advice and guidance, job-hunting workshops, CV and job application reviews, and online services for creating CVs, interview preparation and job vacancies.

www.essex.ac.uk/careers

9.2 LEARNING LANGUAGES AT ESSEX

Learn a language at Essex to increase your global and cultural awareness. Language learning can give you the confidence to work and travel internationally, expand your options for studying abroad, and get a competitive edge when you’re looking for a job. There are a number of ways to do it, so look online to discover the best option for you.

www.essex.ac.uk/study/why/languages

9.3 TALENT DEVELOPMENT CENTRE

Our specialist academic skills advisors are on hand to give you guidance on all aspects of study skills such as assignment planning; essay writing; English language and academic style; maths, numeracy and stats support. Visit us to find out how to book in for one-to-one sessions and small-group workshops.

www.essex.ac.uk/students/study-resources/tdc/

9.4 CAREER HUB+

Find hundreds of part-time jobs, internships and graduate vacancies, book on to careers events and workshops, take career assessments, practice your interview skills, build your CV, and connect with employers on CareerHub+, the online Essex careers and jobs portal. Login with your Essex IT ID and password.

careerhub.essex.ac.uk/students/login

9.5 FRONTRUNNERS

Challenge yourself. Frontrunners is Essex’s unique on-campus work placement scheme for students. You’ll get the chance to work on real projects in real workplaces and develop real skills for you to brag about on your CV. You’ll get fully trained in your role and you’ll get paid for it.

www.essex.ac.uk/frontrunners
9.6 STUDENT AMBASSADORS

Be a Student Ambassador and make a difference to others and make a difference on your CV! Student Ambassadors help to promote the University and higher education. You'll be a valued part of the Student Recruitment and Outreach teams. Keep an eye out for Student Ambassador vacancies on CareerHub+ at the start of the Autumn Term.

www.essex.ac.uk/careers/job_hunting/on_campus

9.7 VOLUNTEERING

Join the vTeam and be the difference. There are plenty of opportunities to volunteer during your time at Essex. The vTeam, run by the Students Union, is a fantastic opportunity to meet new people, make friends, give something to the local community, and gain valuable skills. www.essex.su/vteam

9.8 BIG ESSEX AWARD

The University’s employability award is a guaranteed way to help you stand out from the crowd and get University recognition for all your extra-curricular experience on your Higher Education Achievement Record (HEAR). Sign up and start your journey! www.essex.ac.uk/careers/bige

9.9 ESSEX INTERNS

Essex interns create paid internships exclusively for you as an Essex student. They're flexible too; part time during term time or full time in vacations. You can even take part up to three years after you graduate, as part of our Essex graduates support package. Sign up for Essex Interns to kick-start your career.

www.essex.ac.uk/careers/internships
Section 10: You Matter: Health, Welfare, Support and Safety

10.1 STUDENT SERVICES HUB, INCLUDING CONTACTS FOR DISABILITY/SpLD SUPPORT

(See Section 3.11.1)

10.2 WELLBEING, COUNSELLING AND CONFIDENTIAL ISSUES

If you need practical advice, a confidential conversation, or general information and guidance on University life, no matter what the issue is, the Student Services Hub is the place to go. Want to know how and when to apply for accommodation? Having problems with your funding? Struggling with exam stress? Your questions matter and you'll get answers from our team of experts.

Colchester email: askthehub@essex.ac.uk
Southend email: askthehub-sc@essex.ac.uk
Loughton email: askthehub-lc@essex.ac.uk
www.essex.ac.uk/students/health-and-wellbeing/default.aspx

If you get into financial difficulty get help and talk to someone as soon as possible. The sooner your problem is identified, the sooner it can be solved. Advisers in our Student Services Hub and our independent SU Advice Centre can listen and talk you through the issues.

www.essex.ac.uk/fees-and-funding/money/

10.3 HARASSMENT ADVISORY NETWORK, DIGNITY AND RESPECT

We are Essex. We encourage a culture of dignity and respect. We're committed to upholding an environment that's free from any form of harassment or bullying. Though rare, these incidents can occur and if they do our network of trained harassment advisors are on hand to help.

www.essex.ac.uk/equality
www.essex.ac.uk/equality/harassment
www.essex.ac.uk/students/new
10.4 FAITH GROUPS

We’re proud of our vibrant and diverse multicultural community and we recognise and support the many different religions and beliefs on campus. The calm, friendly and supportive atmosphere in our Multi-Faith Chaplaincy is a welcoming place for staff, students and the wider community to meet, interact and engage with each other.

www.essex.ac.uk/students/experience/mfc/default.aspx

10.5 NIGHTLINE

Established at Essex in 1970, Nightline is a friendly help and support service run by students, for students. We work under strict confidentiality ensuring complete anonymity, and we’re always willing to listen. From tea and toast to campbeds, whether you’re waiting for a taxi, need a revision break, or just want to chat, pop in or call us.

www.essex.ac.uk/students/health-and-wellbeing/nightline.aspx

10.6 HEALTH AND SAFETY ON CAMPUS

Our campuses are generally very safe environments. We want to ensure that things stay this way. In order to achieve this we work closely with local agencies including the police and borough councils. Take a look at our website for general advice and information:

www.essex.ac.uk/students/experience/safety.aspx

Please read the emergency evacuation notice in your accommodation, work or study location for fire safety procedures. If you have a permanent or temporary disability that may mean you have difficulty in evacuating one or more areas, you can arrange for a Personal Emergency Evacuation Plan (PEEP).

www.essex.ac.uk/students/experience/safety.aspx
Safety Bus*
www.essex.ac.uk/students/campus/emergency.aspx
Personal Emergency Evacuation Plan (PEEP)

10.7 RESIDENCE LIFE

Our Residence Life team is here to help you settle in and support you during your time living on campus. Each residents’ assistant (RA) is assigned an area and will aim to get to know you and organise a range of social activities. Plus they can help if you’ve got any concerns or complaints. Residence Life operates outside of office hours when other University support services are closed.

www.essex.ac.uk/accommodation/support/reslife
10.8 HEALTH CENTRE

If you’re studying on a course for more than six months, you’re required to register with a local doctor. Our Colchester Campus has its own health centre or you can use the NHS Choices postcode finder to find your nearest doctor.

www.rowhedgesurgery.co.uk
www.nhs.uk

10.9 STUDENTS UNION ADVICE CENTRE

Our SU advice centre offers free, confidential, independent and impartial advice on any issue that might be affecting you. Our friendly, trained staff are on hand to support you throughout your time at Essex.

www.essex.su/advice
suadvice@essex.ac.uk
01206 874034

10.10 UNIVERSITY PRIVACY STATEMENT

Under the Data Protection Act 1998, any individuals about whom the University may be holding personal data have the right to access the data that is being held about them. Full details about how this works, and how to request such information are available on the Records Management web pages, see: ‘How to access your personal data’.

https://www.essex.ac.uk/website-privacy-and-cookies-policy
www.essex.ac.uk/records_management/request
Section 11: The Essex Experience

11.1 THE ESSEX STUDENT CHARTER

Our Student Charter is developed by the University of Essex and our Students' Union as a part of our ongoing commitment to create an outstanding environment that offers the highest standards of teaching, research and support in an international and multi-cultural community.

www.essex.ac.uk/students/experience/charter

11.2 FREEDOM OF SPEECH POLICY AND THE CODE OF CONDUCT

For regulations relating to the Code of Student Conduct, see the University's website:

www.essex.ac.uk/students/study-resources/handbooks/default.aspx
www.essex.ac.uk/governance/regulations

11.3 ESSEX SPIRIT, SOCIAL MEDIA AND WHAT'S ON?

Keep up-to-date with important news, events and offers from across the University with our Essex Spirit blog. Go to our email lists to subscribe to the fortnightly e-bulletin.

blogs.essex.ac.uk/essexspirit/
www.essex.ac.uk/news

We have more than 60 Facebook pages, including one for each department. We’re also on Twitter.

www.facebook.com/uniofessex/
https://twitter.com/Uni_of_Essex

Our ‘What’s on?’ calendar brings together all the events happening across our three campuses, so you can make the most of your time at Essex.

www.essex.ac.uk/events
11.4 STUDENTS UNION

We’re famous for our Students’ Union at Essex, and for good reason. Here you’re not just a member of a normal Students’ Union, you’re part of a family. We’re here to cheer you on as you walk into exams and to help you absolutely destroy the competition in interviews and land your dream job. We’ve given students the tools to set up over 100 societies for anything they want. And if you’re into sport – we run more than 40 sports teams and unlike other Universities ours are free to join. You choose what drinks we serve in our bar and what products we stock in our shops, just write it on the wall and we’ll do our absolute best to get it in stock for you ASAP.

Say hello at essex.su

11.5 ALUMNI

Your time will fly by. But Essex is forever, not just for a few years, and you’ll be part of this place for life. When you graduate, you’ll get an alumni card, which gets you access to all alumni events, like our popular Sports Weekend, and allows you to keep using the gym and the library, so stay in touch.

alumni.essex.ac.uk/home

11.6 WHAT COMES NEXT?

Choosing to be a postgraduate student at Essex is one of the few decisions in life that's black and white. Our research degrees include PhD, MPhil, MSc, MA and MD, and our culture of world-class research provides an outstanding and supportive environment in which to undertake your research study. If you decide to stay on for further study with us, you’ll have a great opportunity to study a challenging course within a research-intensive and supportive environment. You’ll develop knowledge in your chosen area and learn from some of the top academics in the field, while becoming a valued member of our postgraduate community. Explore our courses on our coursefinder, and find out more about the value of being a postgrad.

www.essex.ac.uk/masters
www.essex.ac.uk/phd
www.essex.ac.uk/coursefinder
<table>
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<tr>
<th>CODE</th>
<th>MODULE TITLE (all 15 credits each)</th>
<th>Computer Science</th>
<th>Comp Systems Engineering</th>
<th>Electronics and Telecommunications Engineering</th>
<th>NON-ACCREDITED DEGREE ROUTES</th>
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<tr>
<td>CE151-4-AU</td>
<td>Introduction to Programming</td>
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<td>CE163-4-AU</td>
<td>Foundations of Electronics I</td>
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<td>MA114-4-AU</td>
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<td>MA181-4-AU</td>
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<td>CE152-4-SP/CE452-4-SP*</td>
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<td>Network Fundamentals</td>
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<td>MA108-4-SP</td>
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<td>CE101-4-FY/CE401-4-FY*</td>
<td>Professional Development</td>
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<td>CE142-4-FY</td>
<td>Mathematics for Electronics and Telecommunications</td>
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### UNDERGRADUATE STRUCTURE 2017-2018 - SECOND YEAR

#### Key
- **D**: Core module for course (must be passed to progress or gain award)
- **DO**: Core option for course (selected option must be passed to progress or gain award)
- **C**: Compulsory module for course (BSc Data Science & Analytics only)
- **O**: Optional module (BSc Data Science & Analytics only) - the number of options you must select is listed below the Course name

#### Registry Code and Module Title

<table>
<thead>
<tr>
<th>Code</th>
<th>Module Title</th>
<th>Computer Science</th>
<th>Comp Sys Eng</th>
<th>DS&amp;A</th>
<th>Electronics and Telecommunications Engineering</th>
<th>NON-ACCREDITED DEGREE ROUTES</th>
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<td>Software Engineering</td>
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<td>Databases and Information Retrieval</td>
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<td>Human Computer Interfaces and Visualisation</td>
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<td>Artificial Intelligence</td>
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<td>C++ Programming</td>
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<td>C Programming &amp; Embedded Systems</td>
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<td>Engineering Mathematics</td>
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<td>ICT Systems Integration and Management</td>
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<td>Optimisation (Linear Programming)</td>
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<td>CE231-5-FY</td>
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<td>CE201-5-FY</td>
<td>Group Project &amp; Industrial Practice</td>
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#### Notes
- **Pre-Requisite**
- **Core module for course (must be passed to progress or gain award)**
- **Core option for course (selected option must be passed to progress or gain award)**
- **Compulsory module for course (BSc Data Science & Analytics only)**
- **Optional module (BSc Data Science & Analytics only)** - the number of options you must select is listed below the Course name.
<table>
<thead>
<tr>
<th>CODE</th>
<th>MODULE TITLE</th>
<th>OPTIONS</th>
<th>Number of Optional Choices (all 15 credits unless stated otherwise)</th>
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<tr>
<td>CE305-6-AU</td>
<td>Advanced Programming</td>
<td>DO DO D* DO</td>
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<tr>
<td>CE316-6-AU</td>
<td>Natural Language Engineering (also PG - CE887)</td>
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<td>CE318-6-AU</td>
<td>Computer Vision (also PG - CE886)</td>
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<td>Network Engineering</td>
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<td>Languages and Compilers</td>
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<td>Information Retrieval</td>
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<td>MA306-6-SP</td>
<td>Computational Optimisation</td>
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<td>CE301-6-FY</td>
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