University of Bedfordshire

Course Information Form

This Course Information Form provides the definitive record of the designated course

Section A: General Course Information

Course Title	BEng (Hons) Electronic Engineering
Final Award	BEng (Hons)
Route Code	BEELEAAF/BEEEFAAF
Intermediate Qualification(s)	
FHEQ Level	6
Location of Delivery	University Square Campus, Luton
Mode(s) and length of study	Full-time over 3 years Part-time pathway typically over 6 years
Standard intake points (months)	October, February
External Reference Points as applicable including Subject Benchmark	QAA Level 6 Descriptors: https://www.qaa.ac.uk/docs/qaa/quality-code/qualifications-frameworks.pdf Subject Benchmark Statements for Engineering (2019) FHEQ (2014)
Professional, Statutory or Regulatory Body (PSRB) accreditation or endorsement	This course is accredited by The IET (The Institution of Engineering and Technology).

HECoS code(s)	100163
UCAS Course Code	H610

Course Aims	• To develop personal skills so that you have confidence and ability to apply your knowledge both individually and as part of a team • To promote a responsible attitude towards the use of computer techniques in solving engineering problems • To facilitate your understanding of the fundamentals of electronic engineering and computer technologies • To facilitate your ability to apply the techniques to understand, analyse and resolve real-world engineering problems • To promote your awareness of the cultural, social, political, economic and ethical implications in electronic engineering. The curriculum structure consists of units that allow you to gain fundamental knowledge and to further explore advanced electronic engineering and computer techniques; to develop skills of applying these knowledge and techniques in order to innovatively resolve real-world engineering problems; to develop communication and team-working skills.

Course Learning Outcomes

Upon successful completion of your course you should meet the appropriate learning outcomes for your award shown in the table below

	Outcome	Award
1	Demonstrate a systematic understanding of electronic engineering while adopting a logical and pragmatic approach to complex concepts in real world problems	BEng(Hons) Electronic Engineering(all routes)
2	Develop creative and innovative skills to achieve sustainable solutions to problems using accurately established techniques of analysis and enquiry within electronic engineering.	BEng(Hons) Electronic Engineering(all routes)
3	Provide solutions to complex problems based on your conceptual understanding and application of numerical, computational, analytical and technical skills using industry level emerging tools.	BEng(Hons) Electronic Engineering(all routes)
4	Solve real-world problems with an understanding of uncertainty, ambiguity and limits of knowledge within electronic engineering.	BEng(Hons) Electronic Engineering(all routes)
5	Critically evaluate arguments; assumptions, abstract concepts from	

Teaching, learning and assessment strategies	Our teaching is centred upon you, aiming to build your confidence by providing timely and informative feedback under the guidance of their teacher. The approach to teaching and learning begins with student centred methods and progresses towards independent learning. The students will gain foundation knowledge in electronic engineering in their first year of study on this course. They will focus on the application of computer techniques to the engineering domain in detail, broadening their knowledge at Levels 5 and 6 of this course. In addition, during their final year projects, students should be able to demonstrate various in-depth skills including project management and the production of an artefact. Project supervision involves regular tutorial meetings between groups/individuals and their staff supervisor. The project is a required part of the degree that guarantees the Honours element, and is seen both in the University and outside as an indication of the overall abilities and performance of the student. The assessments provide you with opportunities to diagnose your skills, abilities, academic/occupational background and to give you an early indication of what specific learning practices may help you improve in specific areas of study, starting from student induction period in conjunction with Fundamentals of Computing unit and throughout the entire in-course period of study. There will be frequent opportunities to get feedback both from tutors, peers and via self-assessment, and some assessments will allow for draft submissions to be considered by a tutor or peers to identify aspects in need of development prior to final hand-in. The assessments are to be inclusive such that a variety of methods will be used in assessing students to ensure that no particular group of students are advantaged or disadvantaged. The methods include portfolios, laboratory practical work, group and individual production projects, individual and group written reports and formal written exams. Mini-projects and case studies provide you with real-world problems. You are expected to find solutions to the problems following the process of analysis, technique evaluation, design and syntheses, and solution evaluation. These mini-projects and case studies are designed in both group work and individual work fashions to allow you to practice your communication skills and team working skills, and to develop the capability of working individually. They are also design in the way in which you need to connect together different elements taught within a unit and also across different units with helps from the course team who explain to you how individual units make-up of the course. Written exams focus on theoretical knowledge and the application of the knowledge to engineering problems.

Learning support	The University's comprehensive student support service includes: Student Information Desk, a one-stop shop for any initial enquiries; Student Support team advising and supporting those with physical or learning needs or more general student well being; Study Hub team providing academic skills guidance; Personal Academic Tutoring system; a student managed Peer-Assisted Learning scheme; support from your lecturers
Admissions Criteria	https://www.beds.ac.uk/entryrequirements **Approved Variations and Additions to Standard Admission** 80 UCAS points are expected from one or more following subjects at A/As level: Maths, Advanced Maths, Physics, Computing and Electronic Engineering
Assessment Regulations	https://www.beds.ac.uk/about-us/our-university/academic-information **Note: Be aware that our regulations change every year** **Approved Variations and Additions to Standard Assessment Regulations** This course is accredited by the IET and will require you to pass all units in level 5 and level 6 IET restrict the level of compensation allowed on this course to a maximum of 30 credits of failure in total, at all levels, where the unit grade achieved is between 30-39%. Foundation Year compensation is additionally permitted up to a further 30 credits, without impacting that maximum. Full details on UoB compensation and this variation to them are available from the UoB Academic Regulations webpage via the UoB website.

Section B: Course Structure

Unit	Unit Name	Level	Credits	Core or Option	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CIS018-1	Fundamentals of Computer Studies	4	30	Core	T1				T2		T2	T2							
CIS020-1	Introduction to Software Development	4	30	Core		T1	T2					T2							
CIS034-1	Engineering Mathematics	4	30	Core		T2		T1	T2										
CIS038-1	Foundations of Electronic Systems and Computer Networks	4	30	Core	T1		A1		T2D1	T2									
CIS047-2	Circuit Analysis & Signal Processing	5	30	Core		T1D1			T2D2										
CIS048-2	DSP and Embedded Systems Development	5	30	Core	D1		D1			T2 D2									
CIS071-2	Analogue and Digital Electronics	5	30	Core		T1D1		D2		T2 D2									
CIS072-2	Digital Communications and Software Engineering	5	30	Core			D1		D2										
CIS013-3	Research Methodologies and Emerging Technologies	6	30	Core	D1 A1				A2	A2		D2 A2							
CIS015-3	Social and Professional Project Management	6	30	Core					A1	A2	A1	D1 A1							
CIS017-3	Undergraduate Project	6	30	Core	A1					A1	A2	A2							
CIS020-3	Control,WSN and Energy	6	30	Core	A1		A2					A2							

Section C: Assessment Plan

The course is assessed as follows :

BEELEAAF- BEng (Hons) Electronic Engineering

Unit Code	Level	Period	Core/Option	Ass 1 Type code	Ass 1 Submit wk	Ass 2 Type code	Ass 2 Submit wk	Ass 3 Type code	Ass 3 Submit wk	Ass 4 Type code	Ass 4 Submit wk
CIS018-1	4	SEM1	Core	CW-ESS	11	EX-CB	13				
CIS020-1	4	SEM1	Core	CW-EPO	6	WR-GR	13				
CIS034-1	4	SEM2	Core	WR-GR	9	EX	13				
CIS038-1	4	SEM2	Core	CW-CS	11	EX	13				
CIS047-2	5	SEM1	Core	CW-PO	11	EX	13				
CIS072-2	5	SEM1	Core	WR-I	7	EX	13				
CIS048-2	5	SEM2	Core	CW-PO	11	EX	13				
CIS071-2	5	SEM2	Core	WR-I	10	EX	13				
CIS013-3	6	SEM1	Core	CW-RW	4		13				
CIS020-3	6	SEM1	Core	WR-GR	10	EX	13				
CIS015-3	6	SEM2	Core	PR-OR	10	WR-I	11				
CIS017-3	6	SEM2	Core	WR-I	8	PR-VIV	13				

EX-CB	Computer-based Invigilated Examination
PR-OR	Practical - Oral Presentation
PR-VIV	Practical - Viva
WR-GR	Coursework - Group Report
WR-I	Coursework - Individual Report

Administrative Information

School	School of Computer Science and Technology
Head of School/Department	Dayou Li
Course Coordinator	Tahmina Ajmal