

ID	Details	Context	Evidence	Notes
A	Use engineering knowledge and understanding to apply technical and practical skills.			
A1	Review and select appropriate techniques, procedures and methods to undertake tasks	Looking at techniques for measuring light and circadian effects	Logbook - learning about spectroscopy, lux, lumens, illuminance, irradiance, etc.	Due to the pandemic, there have been many changes of direction which have each required a clear and correct selection of procedures and techniques to get the task done
A2	Use appropriate scientific, technical or engineering principles.	Developing circuit designs and Printed Circuit Boards (PCBs) in KiCAD, employing techniques learnt in industry to ensure robust design	Gerber Files as well as all .KiCad_PCB and .sch files, Physical PCBs	Using KiCAD software to develop a schematic and produce a PCB design.
B	Contribute to the design, development, manufacture, construction, commissioning, operation or maintenance of products, equipment, processes, systems or services.			
B1	Identify problems and apply appropriate methods to identify causes and achieve satisfactory solutions.	The hyperspectral camera was no longer usable, the reason for this needed to be identified and an alternative strategy implemented	Emails to Darren Reynolds	Completing this project in a pandemic year has meant that many problems have arisen, and in many times, it is hard to identify the causes without access to professional equipment.
B2	Identify, organise and use resources effectively to complete tasks, with consideration for cost, quality, safety, security and environmental impact.	When making decisions about what components to use, we first identify the minimum requirements of the component. This could include tolerances and electrical characteristics and package size. We then find a selection of matching components and select the cheapest that fits all the requirements. We also ensure to track all costs and invoices that are incurred as this is an R&D project, it is important to keep a record.	Invoices in logbook	In the hardware design, we have been careful to choose only RoHS compliant components. As the budget has been extremely limited, and the product is designed to be affordable, the cost of components has been carefully watched.
C	Accept and exercise personal responsibility.			
C1	Work reliably and effectively without close supervision, to the appropriate codes of practice.	This project has been an individual one, and while I have been working with Vojtech for much of the project, we have both taken separate roles and self-led our practices	Meeting minutes and logbook entries	
C2	Accept responsibility for work of self or others.	The work done by both Vojtech and me reflects our mutual responsibility in the project	Meeting minutes	See supervisor and Vojtech meeting minutes
C3	Accept, allocate and supervise technical and other tasks.	Many times in meetings, I have delegated work to Vojtech to ensure that we complete all the required tasks	Meeting minutes	See supervisor and Vojtech meeting minutes
D	Use effective communication and interpersonal skills.			
D1	Use oral, written and electronic methods for the communication in English1 of technical and other information.	Reflected in the interim proposal and progress report in which a written document and oral presentation were completed respectively. The technical aspects of the report needed to be communicated fully and effectively	Interim Proposal and Oral Presentation	Meeting minutes, emails (eg. sourcing the hyperspectral camera) Written reports such as the interim proposal
D2	Work effectively with colleagues, clients, suppliers or the public, and be aware of the needs and concerns of others, especially where related to diversity and equality	Many points have occurred in the project in which I have had to contact professionals in the field to give feedback or suggestions on directions. Interviews were conducted at the beginning of the project to assess the usefulness of the initial project idea. Frequent supervisor meetings as well as meetings with Vojtech have occurred throughout the project	See Emails throughout the project. Minutes and interview notes in logbook	Working with Vojtech, considering needs of working from home and helping him with the language in the reports etc as English isn't his first language
E	Make a personal commitment to an appropriate code of professional conduct, recognising obligations to society, the profession and the environment.			
E1	Comply with the Code of Conduct of your institution.	IET "Members shall actively promote public awareness and understanding of the impact and benefits of engineering and technology achievements". Much of the project is bringing awareness to the issue of light at night.	See literature review	Complying with ethics of UWE and its policies (eg. soldering) as well as providing a risk assessment for work completed
E2	Manage and apply safe systems of work	Despite it making the project more difficult, I have ensured that safe working practices have been included, such as not soldering at home and avoiding social isolation in the pandemic	logbook notes	Risk assessment completed for the project
E3	Undertake engineering work in a way that contributes to sustainable development. This could include an ability to: • Operate and act responsibly, taking account of the need to progress environmental, social and economic outcomes simultaneously.	Sustainability of the device has been a focus point, making sure only RoHS compliant components are used, not over or underordering components. The project itself is also trying to fix a problem with social sustainability such as health and wellbeing	logbook, component orders, literature review	The project is angled from a health perspective, so all of the work has been focussed on social and economic outcomes. Of course the environment is also being considered and that has been reflected in the requirements document.
E4	Carry out and record CPD necessary to maintain and enhance competence in own area of practice including: • Undertake reviews of own development needs • Plan how to meet personal and organisational objectives • Carry out planned (and unplanned) CPD activities • Maintain evidence of competence development • Evaluate CPD outcomes against any plans made • Assist others with their own CPD			
E5	Exercise responsibilities in an ethical manner	Communications with interviewees	Consent forms, anonymisation process, etc.	Every stage of the project has required there to be ethical considerations on how to proceed, from choosing components to interpreting the results.