University of Glasgow

Glasgow College UESTC

SCHOOL OF ENGINEERING
Final Year Project (Individual)
Ethical Consideration - Declaration (ECD) Form

Project Title:	Smart Charging Scheduling for Cost and Peak Reduction
Student Name:	Letian Xie
Student UoG & UESTC IDs:	2959471 / 2023300901028
Supervisor (1st) Name:	Dr Amer Ghias

Ethical Gateway Questions (Please answer the following questions.)

Does the study involve vulnerable participants or those unable to give informed consent? *(e.g. children, people with learning disabilities, your own students)*	Yes [ ] No [X]
Does the study require permission of a gatekeeper for access to participants? *(e.g. schools, self-help groups, residential homes, hospitals)*	Yes [ ] No [X]
Is it necessary for participants to be involved without consent? *(e.g. covert observation in non-public places)*	Yes [ ] No [X]
Does the study involve sensitive topics? *(e.g. obtaining information about sexual activity, substance abuse)*	Yes [ ] No [X]
Is blood, tissue samples or any other substances be taken from participants? *(e.g. blood, urine, stools, skin)*	Yes [ ] No [X]
Does the study involve intrusive interventions? *(e.g. The administration of drugs, hypnosis, physical exercise)*	Yes [ ] No [X]
Are financial or other inducements be offered to participants? *(With the exception reasonable expenses or small tokens of appreciation)*	Yes [ ] No [X]
Does the study investigate any aspect of illegal activity? *(e.g. drugs, crime, underage alcohol consumption or sexual activity)*	Yes [ ] No [X]

Will work reveal personally attributable confidential information (written, audio or video), or cause undue distress, degrade personal dignity, or infringe human rights? *(eg. Show characteristics of someone's personality, cause distressful emotions, participant will need to be stressed beyond what is considered normal for them, contacting people under threatening circumstances)*	Yes [ ] No [X]
Does the work involve, environmental issues? *(e.g. Relates to real life environmental judgements, such as climate change, species and habitat loss, and pollution.)*	Yes [ ] No [X]
Will the work present ethical problems for tutors, or the university, or participating companies or organisations? *(eg Will the work infringe intellectual property rights.)*	Yes [ ] No [X]
Are (non-human) animals involved with the work? *(e.g. Might the work inflict physical or psychological cruelty, pain, disfigurement or unnecessary restraint)*	Yes [ ] No [X]

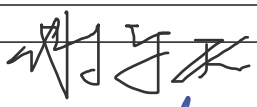
If the answer to any of the ethical gateway questions above is "Yes", or if there are any other significant ethical issues, then further ethical consideration is required.

In any proposal involving human participants clear explanation of how informed consent will be obtained, how confidentiality will be observed, how the nature of research and the means of dissemination of the outcomes will be communicated to the participants must be provided.

Summarise below the ethical issues involved in the proposal and how these will be addressed.

Summary of Ethical Issues

No significant ethical issues arise. The work is software simulation only, using public aggregate data and labelled synthetic sessions: it makes no real-life environmental judgement and involves no pollution, habitat or species impact. Schedules are reported as cost and peak demand figures, not as emissions or environmental advice. No participants, human tests, animals or charger experiments are involved, and no raw user IDs are disclosed or redistributed. Cite sources, verify licences and reassess with the supervisor before any change in scope.

Signed (student): 	Date: 10.27
Signed (1st Supervisor): 	Date: 10.27