Programme Specification		
Awarding body:	University of Surrey	
Teaching institution (if different):	University Centre Farnborough, Farnborough College of Technology	
Final award:	BSc (Hons)	
Programme/pathway title:	Environmental Sciences and Sustainability	
Subsidiary award(s) and title(s):	Award	Title
	Cert HE	Environmental Sciences and Sustainability
	Dip HE	Environmental Sciences and Sustainability
	BA (Ord)	Environmental Sciences and Sustainability
FHEQ Level:	Level 6	
Credits:	*360*	
ECTS credits:	*180* *1 ECTS credit = 2 UK credits*	
Name of Professional, Statutory or Regulatory Body (PSRB):	Committee of Heads of Environmental Sciences (CHES). It plays a leading role in the Higher Education Environmental Science Community and advocates for environmental science within education. Accreditation will be sought for the proposed programme of study.	
Mode of study and route code:	Mode of study	Please tick applicable
	Full-time	☒
	Full-time with PTY	☐
	Part-time	☐
	Distance learning	☐
	Short course	☐
HESCOs Code:		
Start date (date/month/year):	01/09/2022	
End date (date/month/year):	30/07/2024	
Length of programme in months:	24	
QAA Subject benchmark statement (if applicable):	Earth Sciences, Environmental Sciences and Environmental Studies (2021)	
Other internal and / or external reference points:	*Complete this section if you have any other internal reference points which are used to inform programme learning outcomes, e.g. PSRB literature, award characteristic document etc.*	
Faculty and Department/School:	*For joint honours programmes list who will have administrative responsibility for the programme*	
Programme Leader:	Dr. Manju Chhillar	

Date of production/revision of the specification:	01/12/2021

Educational aims of the programme: *List the educational aims of the programme*

This degree programme aims to:

- Develop an understanding of the theories and principles of environmental science and sustainability.
- Provide a foundational knowledge in current environmental challenges and the role of humans in the future of our environment.
- Give practical experience in field and research techniques associated with environmental scientific procedures and research.
- Provide practical experience in the use of the latest software in the field of research and environmental management (e.g., ARCGIS, SPSS) to enhance employability.
- Assist students in developing their decision making and planning skills as future environmentalists and researchers.
- Foster opportunities for students to work with different organisations in the field of environment assessment and planning.
- Develop complex decision-making skills, sometimes within unpredictable contexts.
- Enable students to develop dynamic forms of leadership, collaboration and networking across diverse groups.
- Produce graduates who are prepared for the opportunities available in research, environmental monitoring, assessment, management and planning.

Programme learning outcomes:

The programme provides opportunities for students to develop and demonstrate knowledge and understanding, skills, qualities and other attributes in the following areas:

Within this section please list the programme learning outcomes for the principal and subsidiary awards.

You will need to map each learning outcome to IP (C-Cognitive/Intellectual; K-Subject Knowledge; T-Transferable Skills; P- Professional/ Practical skills)

and also to the programmes principal and subsidiary awards. Please delete / add in any principal / subsidiary awards attached to the programme not included in the table headings below.

The optional reference column is provided for any other mapping references related to learning outcomes, eg PSRB references or QAA Subject Benchmark Statement references.

Learning Outcome	K	C	T	P	Optional Ref	Cert HE / PG Cert Level 4	Dip HE / PG Dip Level 5	BSc (Ord) 60 Credits Level 6	BA / BSc (Hons) / MBA / MA / MSc Etc.
Knowledge and understanding of:									
K1. The importance of environmental sustainability	X					☒	☒	☒	☒
K2. The role of anthropogenic factors in shaping the environment to achieve sustainability	X					☒	☒	☒	☒
K3. The processes and conditions responsible for making the earth habitable.	X					☒	☐	☐	☒

K4. The processes and functioning of different ecosystems and the role of energy flow and biogeochemical cycles in maintaining environmental equilibrium.	X					☒	☐	☐	☒
K5. The historical underpinnings of environmental change	X					☒	☐	☐	☒
K6. The extent, causes and possible solutions for local, national and international environmental issues	X					☒	☒	☒	☒
K7. Climate, climate change, human impacts on climate, and climate policies	X					☒	☒	☒	☒
K8. The methodological and ethical issues associated with environmental research	X					☒	☐	☐	☒
K9. The role and need for fieldwork in environmental sciences.	X					☐	☒	☒	☒
K10. The evolution and application of different national and international laws and policies and their relevance to environmental management.	X					☐	☐	☒	☒
K11. The different types of pollution and their critical linkage to public health	X					☒	☒	☒	☒
K12. The role of geospatial techniques in environmental management.	X					☐	☒	☒	☒
K13. The use of various quantitative and qualitative research techniques in the environmental sciences.	X					☒	☒	☒	☒
K14. The role and development of green technologies in moving towards sustainable development.	X					☐	☐	☒	☒
K15. The impact of change in politics on the environment at local, national and international levels.	X					☐	☐	☒	☒
Intellectual / Cognitive skills						☐	☐	☐	☒
C1. Assess the main research methodologies in environmental sciences.		X				☐	☒	☒	☒
C2. Identify and review key literature relating to environmental sciences and sustainability		X				☒	☒	☒	☒
C3. Examine the role of anthropogenic factors on environmental change.		X				☒	☒	☒	☒
C4. Evaluate the influence of environmental laws and policies in tacking environmental issues at global, national and regional levels.		X				☐	☐	☒	☒

C5. Quantify climate change as one of the most serious threats towards the environment.		X				☐	☒	☒	☒
C6. Evaluate the role of interior and surface processes in shaping the earth		X				☒	☐	☐	☒
C7. Apply the use of geospatial and statistical techniques in the study of the environment.		X				☒	☒	☒	☒
C8. Evaluate the role of planning and policies in changing urban landscapes at the global level.		X				☐	☒	☒	☒
C9. Predict the future of green technologies in developed and developing countries		X				☐	☐	☒	☒
C10. Apply the skills acquired from the environmental industry to environmental issues.		X				☐	☒	☒	☒
C11. Use theories and concepts to judge the present environmental situation and propose possible solutions.		X				☒	☒	☒	☒
C12. Analyse and apply quantitative data relating to environmental issues and sustainability.		X				☐	☒	☒	☒
C13. Synthesise primary and secondary information to evaluate key environmental issues.		X				☐	☒	☒	☒
Professional / Practical skills						☐	☐	☐	☐
P1. Employ ecological sampling techniques for measuring biological populations in ecosystems.			X			☒	☐	☐	☒
P2. Apply a range of research methods and designs in environmental sciences.			X			☒	☒	☒	☒
P3. Analyse reports, papers and articles to understand concepts, processes and issues in the environment.			X			☐	☒	☒	☒
P4. Apply appropriate methodologies to identify fieldwork objectives.			X			☐	☒	☒	☒
P5. Collect, tabulate and present data using the appropriate research techniques for different research projects.			X			☐	☒	☒	☒
P6. Analyse, present, and interpret research data using a statistical computer package (e.g., SPSS).			X			☐	☒	☒	☒
P7. Operate geographical information software systems to view and manipulate spatial data for environmental management.			X			☐	☒	☒	☒
P8. Operate kits and instruments to collect primary data during fieldwork.			X			☐	☒	☒	☒

P9. Present the outcomes of fieldwork in written and verbal format.			X			☐	☒	☒	☒
Key / Transferable skills						☐	☐	☐	☐
T1. Demonstrate the ability to work in co-operation with others.				X		☒	☒	☒	☒
T2. Apply IT in different forms to demonstrate environmental management and sustainability skills.				X		☒	☒	☒	☒
T3. Exercise independent study skills in terms of time-management, planning, behaviour, motivation and initiative.				X		☒	☒	☒	☒
T4. Demonstrate the ability to self-assess their academic and professional strengths; for any weaknesses identified that may affect their professional practice, develop and utilise appropriate support system.				X		☒	☒	☒	☒
T5. Benefit from the critical judgements of others and recognise their personal strengths and needs.				X		☒	☒	☒	☒
T6. Utilise effective problem solving and decision-making skills using appropriate quantitative and qualitative methods.				X		☒	☒	☒	☒
T7. Acquire new knowledge, skills and an attitude to learn continuously.				X		☒	☒	☒	☒
T8. Reflect on their own performance and that of others and respond positively to constructive feedback.				X		☐	☒	☒	☒
T9. Communicate effectively to varied audiences in writing and verbally, e.g. assignments, group discussions, presentation.				X		☒	☒	☒	☒
T10. Interact effectively with others and work in a team with effective interpersonal skills.				X		☒	☒	☒	☒
T11. Critically evaluate information presented and analyse possible outcomes.				X		☐	☐	☒	☒
T12. Make decisions based on complete and sometimes incomplete information.				X		☒	☒	☒	☒
T13. Demonstrate professional levels of competence across the environmental sector.				X		☐	☒	☐	☒
T14. Demonstrate creativity in problem solving across the discipline area.				X		☒	☒	☒	☒
T15. Evaluate transferable skills gained during the work placement.				X		☐	☒	☒	☒
Programme structure:									

Provide a brief summary of the programmes structure.

All programmes operate on a 15-credit modular structure (or multiples of 15 credits) over two semesters. Modules are normally semester based and can be worth either 15, 30, 45 or 60 credits. A 15-credit module is indicative of 150 hours of learning, comprised of student contact, private study and assessment.

This programme is studied full-time over two academic years. In order to achieve the principal award of BSc (Hons) Environmental Sciences and Sustainability, a student must complete 360 credits, 120 credits at FHEQ Levels 4, 5 and 6 respectively. Students are also eligible to exit the programme with the following subsidiary awards:

- BSc Ordinary – 300 credits with a minimum of 60 credits at FHEQ Level 6
- Diploma of Higher Education (Dip HE) – 240 credits with a minimum of 120 credits at FHEQ Level 5
- Certificate of Higher Education (Cert HE) – 120 credits at FHEQ at Level 4

In order for students to progress they must achieve a minimum average of 40% and have completed all 120 credits at FHEQ Levels 4, 5 and 6.

Programme adjustments (if applicable):

List any specific programme variances that differ from standard University practice, e.g. PSRB requirements.

FHEQ Level 4: potential awards – Cert HE

Module code	Module title	Core / compulsory / optional	Credits	Period (Semester 1, Semester 2, Year Long or Across Academic Years)	Qualifying Conditions
COM4001	Academic Skills	Core	15	Year Long, Sem 1 and 2	
COM4002	Contemporary Issues	Core	15	Year Long Sem 1 and 2	
ESS4001	Environment and Sustainability	Core	15	Year Long Sem 1 and 2	
ESS4002	Environmental History	Core	15	Year Long Sem 1 and 2	
ESS4003	Planet Earth	Core	15	Year Long Sem 1 and 2	
ESS4004	Ecology and Ecosystem	Core	15	Year Long Sem 1 and 2	
ESS4005	Research Methods	Core	15	Year Long Sem 1 and 2	
ESS4006	Global Environmental Issues	Core	15	Year Long Sem 1 and 2	
How many core/optional modules must a student choose in order to achieve the necessary amount of credits to achieve this level?		*120*			

FHEQ Level 5: Potential awards – Dip HE

Module code	Module title	Core / compulsory / optional	Credits	Period (Semester 1, Semester 2, Year Long or Across Academic Years)	Qualifying Conditions
ESS5001	Atmosphere and Global Climate Change	Core	15	Year Long Sem 3 and 4	
ESS5002	Urban Ecosystem	Core	15	Year Long Sem 3 and 4	
ESS5003	Global Water Resources	Core	15	Year Long Sem 3 and 4	
ESS5004	Environmental Pollution and Public Health	Core	15	Year Long Sem 3 and 4	
ESS5005	Geographic Information Systems and Environmental Management	Core	15	Year Long Sem 3 and 4	
ESS5006	Research and Data Analysis	Core	15	Year Long Sem 3 and 4	
ESS5007	Fieldwork in Environmental Sciences	Core	15	Year Long Sem 3 and 4	
ESS5008	Work Placement	Core	15	Year Long Sem 3 and 4	
How many core/optional modules must a student choose in order to achieve the necessary amount of credits to achieve this level?		*240*			
FHEQ Level 6: Potential awards – BA (Hons) / BA (Ord) / BSc (Hons) / BSc (Ord) / BMus (Hons) / BMus (Ord) / BEng (Hons) / BEng (Ord)					
Module code	Module title	Core / compulsory / optional	Credits	Period (Semester 1, Semester 2, Year Long or Across Academic Years)	Qualifying Conditions
ESS6001	Environmental Dissertation	Core	45	Year Long Sem 5 and 6	
ESS6002	Remote Sensing in Environmental Management	Core	15	Year Long Sem 5 and 6	
ESS6003	Environmental Politics and Policy	Core	15	Year Long Sem 5 and 6	
ESS6004	Biodiversity: Conservation and Management	Core	15	Year Long Sem 5 and 6	
ESS6005	Global Environmental Movement: Past and Present	Core	15	Year Long Sem 5 and 6	
ESS6006	Green Future: Towards Sustainability	Core	15	Year Long Sem 5 and 6	
How many core/optional modules must a student choose in order to achieve the necessary amount of credits to achieve this level?		*360*			
Opportunities for placements / work-related learning / collaborative activity – please indicate if any of the following apply to your programme					

Associate Tutor(s)/Guest Speakers/Visiting Academics:	☒
Professional Training Year (PTY):	☐
Placement(s) (study or work that are not part of the PTY or Erasmus Scheme):	☒
Clinical Placement(s) (that are not part of the PTY Scheme):	☐
ERASMUS Study (that is not taken during Level P):	☐
Study exchange(s) (that are not part of the ERASMUS Scheme):	☐
Dual degree:	☐
Programme set up questions - list NA if not applicable	
Source of funding for the programme (eg NHS where not student/employer funded):	Student Funded
Collaborating organisation (eg NHS providing significant input into a programme):	NA
Location of study (eg if distance learning / overseas centre):	University Centre, Farnborough College of Technology
Registered body (where the award is to be mandatory regulated by HCPC, RCVS or NMC etc – not optionally regulated eg accreditation/registration is an option):	
Closed programme (is the programme specifically to be offered privately to a group of students, eg only employees of companies or organisations that are meeting the costs of the students studies):	NA
Other Information:	
Quality assurance:	
The *Regulations* and *Codes of Practice* for taught programmes can be found at: https://www.surrey.ac.uk/quality-enhancement-standards	