Programme Specification BSc Environmental Engineering (NUIST-UoR Academy) NUISTbased (full-time) For students entering Part 1 in September 2021

AFENVENGJJ UFENVENGJX

This document sets out key information about your Programme and forms part of your Terms and Conditions with the University of Reading.

Awarding Institution	University of Reading
Teaching Institution	University of Reading
Length of Programme	4 years
	BSc Environmental Engineering (NUIST-UoR Academy) UoR- based (full-time) - 4 years (internal transfer only)
Accreditation	N/A

Programme information and content

The foundation year (Part 0) is designed for foundation year students at NUIST who intend to progress on to a three-year undergraduate programme within the NUIST-University of Reading Academy. Successful completion of the NUIST Foundation Programme gives the student admission to one of the University of Reading undergraduate programmes. It also contributes, through credit transfer, to the first year of an award of NUIST.

On completion of Part 0, students will have the general academic language and study skills required to begin their Year 1 degree studies.

This programme aims to provide students with a sound scientific foundation in the mathematics, physics and chemistry that are essential for understanding the processes that operate in the natural environment, and that are required for modern environmental engineering and management. It also aims to provide students with the scientific and transferable skills that are relevant to environmental engineering in a global context. Students graduating from this programme will have the necessary theoretical and practical skills to become independent, critical environmental engineers.

This programme is available to students studying at NUIST-Reading Academy, who may transfer to UoR for part 3 for part of their degree.

	The aims of this of the programme are to develop students' language knowledge* and language skills to meet the needs of their future academic studies, by improving their ability to:
Foundation	
year:	• use academic sources effectively and appropriately (in accordance with academic conventions) to complete academic assignments
	• present information, ideas and opinions through writing, in a clear, organised, and effective way, using appropriate academic language

	 understand long spoken texts (e.g. mini-lectures, lecture extracts, spontaneous monologues) and take notes independently listen to and understand spontaneous speech in both group and one-to-one settings, and to contribute orally in both contexts in a relevant and constructive way deliver extended formal presentations, and respond effectively to questions study independently e.g. planning their work, managing their time, finding additional language learning resources and additional sources relevant to their academic assignments work effectively in groups.
	*Language knowledge: in all parts of the programme, there will be an emphasis on expanding the students' range and control of English vocabulary, grammar, language functions and academic style.
	Content will include:
	Reading skills and strategies, including survey reading, close reading, selecting information, summarising, monitoring comprehension, summarising, synthesising.
	Listening skills and strategies, including identifying main and supporting points, note-taking, decoding connected speech, monitoring comprehension; listening and responding appropriately in interactive situations.
	Speaking skills, including oral presentations, group discussions, oral fluency, communicative strategies, negotiating meaning by checking understanding and asking for clarification, pronunciation.
	Writing skills, including paragraphing, text organisation, introductions and conclusions, analysing essay questions, paraphrasing, avoiding plagiarism, referencing; the process of writing i.e. planning, drafting, receiving feedback, redrafting.
	Language knowledge: (a) vocabulary – General Service List, Oxford 3000, Academic Word List (b) grammatical structures and functional language relevant to general academic English.
	Studied at NUIST
Part 1:	Introduces you to a range of different aspects of Environmental Science, as well as related disciplines such as Chemistry, Physics and Mathematics.
	Studied at NUIST
Part 2:	Provides you with opportunities to develop your knowledge, with particular emphasis on understanding key environmental processes, interactions and applications.
	Studied at NUIST

Gives you the opportunity to focus your study through a range of specialist subject modules from which a choice is made, and conduct an original, independent research project.
Studied at NUIST or UoR

Module information

Each part comprises 120 credits, allocated across a range of compulsory and optional modules as shown below. Compulsory modules are listed.

Foundation modules:

Module	Name	Credits	Level
IF0NU1	English for Academic Purposes 1	60	0
IF0NU2	English for Academic Purposes 2	40	0
IFONUP	English for Academic Purposes Project	20	0

Part 1 Modules:

Name	Credits	Level	
Chemistry of the Earth & Environment	20	4	
Introduction to Environmental Science	10	4	
Our Dynamic Earth	10	4	
Environmental Soil	10	4	
Environmental Engineering Microbiology	20	4	
Environmental Monitoring	20	4	
Techniques in Geography & Environmental Science	10	4	
English for Environmental Engineers	20	4	
	Chemistry of the Earth & Environment Introduction to Environmental Science Our Dynamic Earth Environmental Soil Environmental Engineering Microbiology Environmental Monitoring Techniques in Geography & Environmental Science	Chemistry of the Earth & Environment20Introduction to Environmental Science10Our Dynamic Earth10Environmental Soil10Environmental Engineering Microbiology20Environmental Monitoring20Techniques in Geography & Environmental Science10	

Part 2 Modules:

Module	Name	Credits	Level
GV2ADNU	Analysing Data	10	5
GV2ECHNU	Environmental Chemistry	10	5
GV2ECNU	Ecological Engineering of the Environment	10	5
GV2EGNU	Environmental Engineering	10	5
GV2F4NU	Soil Ecology & Functions	10	5
GV2FCANU	Geography & Environmental Science Field Class	20	5
GV2GISNU	Environmental Information Systems	10	5
GV2IANU	Environmental Impact Assessment	10	5
GV2PMNU	Environmental Planning & Management	10	5
GV2WPNU	Water Pollution Control Engineering	20	5

If you take a year-long placement or study abroad, Part 3 as described below may be subject to variation.

Part 3 Modules:			
Module	Name	Credits	Level
GV317NU	Carbon and Global Change	20	6
GV3CCNU	Climate Change	10	6
GV3GEDNU	Dissertation	40	6
GV3PECNU	Air Pollution: Effects and Control	20	6
GV3POLNU	Environmental Pollution	20	6
GV3PSNU	Research Skills and Project Management	10	6

Students studying Part 3 at UoR must take the following:

Module Code	Name	Credits	Level
GV3PS	Research Skills and Project Management	10	6
GV3GED	Dissertation	40	6
GV3CC10	Climate Change	10	6
GV3AP	Air Pollution: Effects and Control	20	6
GV317	Carbon and Global Change	20	6
GV3POL	Environmental Pollution	20	6

Optional modules:

The optional modules available can vary from year to year. An indicative list of the range of optional modules for your Programme is set out in the Further Programme Information. Details of optional modules for each part, including any Additional Costs associated with the optional modules, will be made available to you prior to the beginning of the Part in which they are to be taken and you will be given an opportunity to express interest in the optional modules that you would like to take. Entry to optional modules will be at the discretion of the University and subject to availability and may be subject to pre-requisites, such as completion of another module. Although the University tries to ensure you are able to take the optional modules in which you have expressed interest this cannot be guaranteed.

Additional costs of the programme

During your programme of study you will incur some additional costs.

At NUIST: There will be some additional costs if you require printing facilities at NUIST, there may also be additional costs if your programme involves a field trip whilst at NUIST. Details of costs can be found at the NUIST help desk.

At UoR: Printing and photocopying facilities are available on campus at a cost per A4 page of $\pounds 0.05$ (black and white) and $\pounds 0.30$ (colour). Essential costs in this area will be low as most coursework will be submitted electronically.

You will be required to make a minor contribution to costs for your food and board at a compulsory Part 2 field class. Bursaries and other forms of financial support are available for students in financial difficulty. You will be expected to be equipped with suitable outdoor clothing and footwear for field classes. There are no compulsory textbooks and the library has an extensive collection to support your curriculum, including textbooks and electronic resources. Reading lists and module specific costs are listed on the individual module descriptions. Discounted second hand copies may be available.

Costs are indicative and may vary according to optional modules chosen and are subject to inflation and other price fluctuations.

Prices as estimated in 2020.

Placement opportunities

N/A

Teaching and learning delivery:

In Part 0 you will be taught through classes, using a communicative approach to language learning, with an emphasis on meaning, task completion, interaction and feedback. You will also have a number of tutorials, and carry out supervised project work. Total study hours for Part 0 will be a minimum of 1200 hours.

Modules in Part 0 are taught by Academy staff in Nanjing.

For Part 1, 2 and 3 you will be taught through a combination of lectures, seminars, practical classes, fieldtrips and laboratory based sessions.

Modules in Nanjing are taught by a combination of Academy staff and visiting staff from the University of Reading.

Total study hours for each Part of your programme will be a minimum of 1200 hours. The contact hours for your programme will depend upon your module combination; an average for a typical set of modules on this programme in Part 3 is 156 hours (for students studying at UoR). Further information about module contact hours can be located in the relevant module description.

For students studying at NUIST contact hours will vary, in general a 10 credit module will have 3 contact hours per week over 16 weeks.

In addition to your scheduled contact hours, you will be expected to undertake guided independent study. Information about module contact hours and the amount of independent study which a student is normally expected to undertake for a module is indicated in the relevant module description.

Accreditation details

N/A

Assessment

For Part 0 you will be assessed through a combination of written exams and coursework. Some modules may be assessed by 100% coursework whereas others contain a mixture of both coursework and exam at varying ratios.

Part 1, 2 and 3 will be assessed through a combination of written examinations, coursework, presentations and practical exercises.

Progression

Part 0 Foundation year

In order to complete Part 0 successfully, students are required to:

(i) obtain a mark of at least 40% in IF0NU1 and IF0NUP.

(ii) obtain a mark of at least 5.5 in IF0NU2 with no element (Speaking, Listening, Reading and Writing) below 5.0. The summative assessment for this module through the TEEP.

Students who obtain 6.0 in IFONU2, with no element (Speaking, Listening, Reading and Writing) below 5.5 will be deemed to have met the English language progression requirement to Part 2 and will be exempted from the mandatory Year 1 non-credit EAP module.

Successful completion of these modules will lead to progression to Year 1 of the student's chosen degree programme.

The University-wide rules relating to 'threshold performance' are as follows:

Part 1

To gain a threshold performance at Part 1, a student shall normally be required to:

(i) obtain an overall average of 40% in 120 credits

(ii) obtain a mark of at least 30% in individual modules amounting to at least 100 credits taken in Part 1

(iii) obtain 6.0 in TEEP on IF1NU3A (where taken), with no element (Speaking, Listening, Reading and Writing) below 5.5.

In order to progress from Part 1 to Part 2, a student must achieve a threshold performance; and

(iii) obtain an overall weighted average of at least 40% in the compulsory modules at Part 1.

In order to progress from Part 2 to Part 3 in the 3 year programme, a student must achieve a threshold performance.

Part 2

To gain a threshold performance at Part 2, a student shall normally be required to:

(i) obtain a weighted average of 40% over 120 credits taken at Part 2; and
(ii) obtain marks of at least 40% in individual modules amounting to at least 80 credits; and
(iii) obtain marks of at least 30% in individual modules amounting to at least 120 credits, except that a mark below 30% may be condoned in no more than 20 credits of modules owned by the Department of Mathematics and Statistics.

In order to progress from Part 2 to Part 3 in the 3 year programme, a student must achieve a threshold performance.

The University's Honours classification is as follows:

Classification

Bachelors' degrees.

The University's honours classification scheme is based on the following:

Mark / Interpretation

70-100% / First Class 60-69% / Upper Second Class 50-59% / Lower Second Class 40-49% / Third Class 35% - 39% / Below Honours Standard 0 - 34% / Fail

The weighting of the Parts/Years in the calculation of the degree classification is:

Part 2: one-third Part 3: two-thirds

Dual Awards

Successful completion of the Programme will lead to the award of degrees by both the University of Reading and Nanjing University of Information Science and Technology. Modules completed at Part 2 and Part 3 regardless of place of study, will contribute to the classification of degrees.

For further information about your Programme please refer to the Programme Handbook and the relevant module descriptions, which are available at <u>http://www.reading.ac.uk/module/</u>. The Programme Handbook and the relevant module descriptions do not form part of your Terms and Conditions with the University of Reading.

BSc Environmental Engineering (NUIST-UoR Academy) NUIST-based (full-time) for students entering Part 1 in session 2021/22 25 May 2021

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