## Programme Specification

### Awarding Institution
Newcastle University, Université de Nice – Sophia Antipolis, Brandenburg Technische Universität Cottbus, Universitat Politecnica de Cataluna, Warsaw University of Technology

### Teaching Institution
Newcastle University, Université de Nice – Sophia Antipolis, Brandenburg Technische Universität Cottbus, Universitat Politecnica de Cataluna, Warsaw University of Technology

### Final Award
MSc

### Programme Title
MSc in Hydroinformatics and Water Management (EuroAquae)

### Programme Code
5140F

### Programme Accreditation
JBM

### QAA Subject Benchmark(s)
Engineering

### FHEQ Level
7

### Last updated
September 2018

### Programme Aims

The programme provides opportunities for students to develop and demonstrate knowledge and understanding, qualities, skills and other attributes in the following areas. The programme outcomes have references to the benchmark statements for Engineering:

1) To provide opportunities for candidates with first degrees in a range of scientific and engineering disciplines to enhance their knowledge of the water environment through a programme involving theoretical, practical and computational (informatics) components;

2) To prepare and train future scientists and executive engineers in charge of modelling and managing projects in hydro-technologies and environment. These professionals have a vocation to assist local, regional, national and international collectives, public services and to be involved in private companies;

3) To offer experience in the planning and execution of an extended research project;

4) To provide experience of dissertation writing and other presentational skills;

5) To be part of the Erasmus Mundus programme, the European Union co-operation and mobility programme in the field of higher education;

6) To provide a programme which meets the Frameworks for Higher Education Qualifications (FHEQ) in UK, the French Ministry of Education standards and accreditation procedures (Ministry expertise every 4 years and Conseil National d’Evaluation CNE for the whole institution) in France, the Quality agencies of Spain, (any other regulation in the participating countries) at Masters level;

7) To provide a programme that meets the accreditation requirements of the Joint Board of Moderators (JBM [www.jbm.org.uk](http://www.jbm.org.uk)) for Further Learning for a Chartered Engineer (CEng) for candidates who have already acquired an Accredited CEng (Partial) BEng(Hons) or an Accredited IEng (Full) BEng/BSc (Hons) undergraduate first degree;

8) To provide an entry route into an appropriate professional institution such as the Chartered Institution of Water and Environmental Management (CIWEM [www.ciwem.org.uk](http://www.ciwem.org.uk)) and the Royal Institution of Chartered Surveyors (RICS [www.rics.org/uk](http://www.rics.org/uk)).
9) To provide a programme that meets the accreditation requirements of the Joint Board of Moderators (JBM, www.jbm.org.uk) for Further Learning for a Chartered Engineer (CEng) for candidates who have already acquired an Accredited CEng (Partial) BEng (Hons) or an Accredited IEng (Full) BEng/Bsc (Hons) undergraduate first degree.

10) To provide a programme designed to meet the standards set by the Engineering Council’s Accreditation of Higher Education Programmes (AHEP3, May 2014).


11) To provide a programme that develops the skills, attributes and values defined in the University's Graduate Skills Framework.

http://www.ncl.ac.uk/quilt/modules/gsf.htm

### 11 Learning Outcomes

The programme provides opportunities for students to develop and demonstrate knowledge and understanding, qualities, skills and other attributes in the following areas. The programme outcomes have references to the benchmark statements for Engineering (E).

<table>
<thead>
<tr>
<th>Knowledge and Understanding</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>On completing the programme students should have:</strong></td>
</tr>
<tr>
<td>A1</td>
</tr>
<tr>
<td>A2</td>
</tr>
<tr>
<td>A3</td>
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<tr>
<td>A4</td>
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<tr>
<td>A5</td>
</tr>
</tbody>
</table>

### Teaching and Learning Methods

Outcomes are reached through a series of 4 stages (semesters), carried out at different institutions. A.1 is addressed primarily during the “Basic acquisitions” phase in Semester 1. A2 and A3 are achieved during the Hydroinformatics phase of Semester 2. A.4 and A.5 are achieved in Semester 3 (Thematic specialism phase). All (A.1 to A.4) are reinforced and practiced during Semester 4 in “Professional practice and Research”. Teaching is by a mixture of intensive one-week residential courses and conventional taught modules, both of these comprising lectures and tutorials. Acquisition of A.2 and A.4 is partly by the above techniques and partly by field visits, applied research projects carried out in universities and with industrial partners, and project work in professional practice.

### Assessment Strategy

Assessment occurs through tutorial examples and coursework. The primary means of assessing factual knowledge is the closed book examination. This is supported by assessed written coursework. In-depth individual learning is essential for the completion of the dissertation.
Intellectual Skills

On completing the programme students will have:

B1 Ability to select and apply appropriate mathematical methods for modelling and analysing relevant problems;

B2 Use of scientific principles in the development of engineering and environmental solutions to practical problems in the water environment and water infrastructure operation;

B3 Use of scientific principles in the modelling and analysis of the water environment and of water infrastructure operation;

B4 Decision making in complex and unpredictable situations, leading to the ability to select and apply appropriate computer-based methods for modelling and analyzing problems in the water environment and in water infrastructure operation;

B5 Originality in the creation of new products or methodologies or research outputs through synthesis of ideas from a wide range of sources;

B6 Ability to produce solutions to problems through the application of engineering and water environment knowledge and understanding.

B7 Ability to build and manage team work in virtual environment

Teaching and Learning Methods

Fundamental aspects of B1 and B7 are developed in Semester 1 (Basic courses in maths/physics/hydraulics etc and Collaborative Engineering.) Subsequently, B1–B6 are primarily acquired in Semesters 2 and 3 during the intensive modules addressing specialist themes and hydroinformatic methods: these include hands-on computer laboratories and design-based activities. B5 and B7 are further developed in design-based and problem-solving assignments in Semesters 2 and 3, and are also reinforced and practiced in Semester 4 during either a research project or professional practice.

Assessment Strategy

Closed-book examinations are used to assess intellectual abilities while assessed coursework provides further opportunities to demonstrate intellect and ability. The dissertation provides final evidence of the levels attained.

Practical Skills

On completing the programme students should have:

C1 The ability to use ICT tools and hydroinformatics technologies;

C2 The ability to design components of the water infrastructure and schemes for management of the water environment;

C3 Practical testing of design ideas through computer simulation with technical analysis and critical evaluation of results;

C4 The ability to evaluate critically the application of engineering and environmental techniques dealing with complex issues such as industrial, legislative and commercial constraints;

C5 The ability to plan, execute and present a research project;

C6 The ability to search for information and develop ideas further.

C7 The ability to manage project work in teams in decentralized environment using ICT.

Teaching and Learning Methods

C1 is taught principally through lectures and tutorials in Semester 1 and 2. C2-C4 are taught in Semesters 2 and 3 during more intensive modules addressing specialist themes and hydroinformatic
methods; these include hands-on computer laboratories and design-based activities. C7 is covered in one module in semester 1 and another in semester 3. C5 and C6 are primarily developed and practiced in Semester 4 during the research project or projects in professional practice.

### Assessment Strategy

C1 and C2 are explicitly assessed in Semester 1, 2 and 3 modules. Other outcomes C3-C7 are assessed through coursework and project requirements.

### Transferable/Key Skills

On completing the programme students should be able to:

D1  Management, transformation and presentation of data in a variety of ways;
D2  Use of methods based on scientific evidence in the solution of problems;
D3  Use of initiative, creativity and innovation in problem solving;
D4  Effective communication in English, or other languages as appropriate, (including written, oral and poster media);
D5  Use of generic ICT, GIS and programming skills;
D6  Independent learning and wider time and resource management;
D7  Collaborative approach to team working and project management.

### Teaching and Learning Methods

Outcomes D1, D2 and D5 are developed and practiced in the first semester modules addressing basic essential subjects. D.4 (communication in English) is specifically addressed with a module in Semester 2, and then built upon in subsequent modules, particularly the project or professional practice in semester 4. D.7 is a specialist skill in high demand in the engineering profession, and is addressed specifically by an innovative international web-based collaborative study in Semester 1. All outcomes D.1 – D.7 are developed further and practiced in coursework assignments in Semesters 2 and 3. Subsequently, the principal development of transferable skills (and D.4 and D.6 in particular) occurs through involvement in the research project or professional practice.

### Assessment Strategy

Skills D1–D3 are essential to complete examinations and assignments to a satisfactory standard. Acquisition of D4 is demonstrated during assessment of coursework and of the project. D5 is explicitly assessed in GIS and ICT modules in Semester 1.

Outcomes D5 and D6 are essential for satisfactory completion of the coursework sand the final project so they are indirectly assessed through coursework and project assessment. Completion of the project also requires command of outcomes D1–D4. D7 is trained in project work during Semester 3 but it is not explicitly assessed.

The above Learning Outcomes have been compared with the QAA Frameworks for Higher Education Qualifications Descriptor for a qualification at Masters (7) level. They are believed to meet or exceed the requirements of that Descriptor.

### Programme Curriculum, Structure and Features

#### Basic Structure of the Programme

EuroAquae is a modular degree designed for flexible delivery at a number of institutions, allowing and encouraging mobility of students. It is part of the Erasmus Mundus programme, a co-operation and mobility programme in the field of higher education which promotes the European Union as a centre of excellence in learning around the world.
Erasmus Mundus supports European top-quality Masters Courses and enhances the visibility and attractiveness of European higher education in third countries. It also provides EU-funded scholarships for third country nationals participating in these Masters Courses.

The masters programme spans 4 semesters, or 2 years, and has the following partners:
- University of Nice-Sophia Antipolis (UNSA, France)
- Brandenburg University of Technology Cottbus (BTUC, Germany)
- Warsaw University of Technology (WUT, Poland)
- Technical University of Catalonia (UPC, Spain)
- Newcastle University (NCL, UK)

The programme is organized in a pedagogic continuum to provide introduction and common knowledge/soft skills (sem. 1 all locations except UNUT), acquisition and the use of hydroinformatics concepts, methods and tools (sem. 2 UNUT), a thematic specialisation: hydroinformatics systems, urban waters management, inland management, decision support systems (sem. 3 all locations except UNUT) and for semester 4 (all locations), a research project or professional practice. The consortium issues a joint degree (MSc,) defined as Master of Sciences in Hydro-Informatics & Water Management recognized by all the participating countries.

Every MSc student takes modules to a total value of 120 ECTS credits over four semesters (two years). Mobility is a fundamental concept of the programme which is used to develop and promote a common vision and professional capacity through a variety of specializations. The students must follow at least 30% (36 ECTS) of the curricula in a different institution from their “European home institution”. The mobility is applied in semesters 2, 3 and 4.

All students are appointed an academic supervisor and an industrial supervisor to advise on the work-based dissertation and any issues that may arise during the programme. All students are required to discuss their pattern of study with their academic tutor to ensure that they are following an appropriate programme.

**Key Features of the Programme (including what makes the programme distinctive)**

This course educates future developers and users of Hydroinformatics systems that are supporting management of the water environment in a sustainable manner worldwide. It has a solid foundation on the development of numerical, hydroinformatics and problem-solving skills which is attractive to industry. In addition, graduates are well-versed in the socio-economic and environmental disciplines which makes them very versatile and easily adaptable to changes in work environment.

EuroAquae is a unique degree designed for joint flexible delivery at a number of partner institutions, encouraging and requiring mobility of students. It is part of the Erasmus Mundus programme, a cooperation and mobility programme in the field of higher education which promotes the European Union as a centre of excellence in learning around the world.

**Programme Regulations (link to on-line version)**

MSc Euro Hydro-Informatics and Water Management - Euro Aquae – Code 5140F

**13 Support for Student Learning**

There are overall arrangements for student support at the partner Universities described below, as well as more detailed arrangements at UNUT described additionally. The EuroAquae Curriculum and Management Board is responsible for the overall running of the programme with a role equivalent to that of the UNUT Board of Studies.

The Student Services portal provides links to key services and other information and is available at: https://my.ncl.ac.uk/students/
**Induction**

During the first week of semester 2 students attend an induction programme. New students will be given a general introduction to University life and the University's principal support services and general information about the School and their programme, as described in the Degree Programme Handbook. New students will be given detailed programme information and the timetable of lectures/practicals/labs/ tutorials/etc. The International Office offers an additional induction programme for overseas students.

On arrival at the University of Nice – Sophia Antipolis, students are provided with a set of general information about the university and the city of Nice. The Faculty of Geographic Sciences with the cooperation of the department in charge of International Affairs of UNSA and CROUS provide support for all administrative procedures such as: housing, bank account, visas, residence permit. Each participant receives personal support according to their situation. The International Office provide additional social activities during the academic semester such as introduction to French language, visits of the city and of the region, participation to cultural events. A specific social program is developed for the group of EuroAquae participants with the active participation of staff and students.

Before arrival at BTUC students are recommended to contact the Institute Bauinformatik or the Akademisches Auslandsamt (Foreign Office) which will support visa procedure and housing if needed. On arrival the Akademisches Auslandsamt (Foreign Office) will support enrolment, opening a bank account and introduce students to the University in general, its offices, library and social activities. Information about curriculum are provided during first week of teaching by the Institute Bauinformatik. A Students Handbook will support students.

Akademisches Auslandsamt: [http://www.tu-cottbus.de](http://www.tu-cottbus.de), click for International

On arrival at UPC, students are provided with a set of general information about the University. The Office for support of foreign students will provide some help on administrative and legal procedures (residence permissions, visas) as well as accommodation. Intensive courses on Spanish languages are offered in September and January, according to the arrival time.

**Study Skills Support**

Students will learn a range of Personal Transferable Skills, including Study Skills, as outlined in the Programme Specification. Some of this material, e.g. time management is covered in the appropriate Induction Programme. Students are explicitly tutored on their approach to both group and individual projects.

Numeracy support is available through Maths Aid and help with academic writing is available from the Writing Centre (further information is available from the University Library).

Additionally the EuroAquae programme has a number of specific modules where Personal Transferable Skills, including Study Skills, are learned.

**Academic and Pastoral support**

Each undergraduate and taught postgraduate student will be assigned a personal tutor.* A personal tutor is one part of a wider network of advice and guidance available to students to support their personal and general academic development. The module leader acts as the first point of contact for subject-specific academic advice. Thereafter the Degree Programme Director or Head of School may be consulted. Issues relating to the programme may be raised at the Student-Staff Committee, and/or at the Board of Studies. Within the academic unit, students may also receive additional academic and pastoral advice from a range of other student-facing staff including degree programme directors, dissertation/project supervisors, and administrative support staff.

*Arrangements may vary for students taking special types of provision.

The University also offers a wide range of institutional services and support upon which students can call, such as the Writing Development Centre, Careers Service and Student Wellbeing Service. This includes one-to-one counselling and guidance or group sessions / workshops on a range of topics, such as emotional issues e.g. stress and anxiety, student finance and budgeting, disability matters etc. There is specialist support available for students with dyslexia and mental health issues. Furthermore, the Student Union operates a Student Advice Centre, which can provide advocacy and support to students on a range of topics including housing, debt, legal issues etc.
At UNSA, all students enrolling on the course are assigned firstly, an overall course tutor, responsible for their overall development during the whole programme, and secondly a personal tutor whose responsibility is to monitor the academic performance and overall well-being of their tutees while at their institution. Additional supports in case of special needs can be obtained through social services of UNSA.

At BTUC the Institute Bauinformatik will nominate tutors for groups of students taking care of their personal and academic development. Tutors will advice for special programmes offered at the university and establish contacts correspondingly.

At UPC students are assigned a professor as a personal tutor. This activity is recognized as a teaching activity for the tutors. Erasmus student’s local organization provides support to new foreign students.

Support for Students with Disabilities
Newcastle University’s Disability Support Service provides help and advice for disabled students at the University - and those thinking of coming to Newcastle. It provides individuals with; advice about the University’s facilities, services and the accessibility of campus; details about the technical support available; guidance in study skills and advice on financial support arrangements; a resources room with equipment and software to assist students in their studies.

AT UNSA, support for special needs can be obtained through the Accessibility Center and the Social services. The personal tutors take care and provide information to access the right services.

At BTUC the nominated tutors will take care and provide support. For tutors please contact Institute Bauinformatik.

At UPC students with special needs are supported, through the new Accessibility Center created in 2005.

Learning Resources
Newcastle University’s main learning resources are provided by the University Libraries (for books, journals, online resources), and the University’s IT Service (NUIT), which supports campus-wide computing facilities.

All new students whose first language is not English are required to take an English Language Proficiency Test. This is administered by INTO Newcastle University Centre on behalf of Newcastle University. Where appropriate, in-sessional language training can be provided. The INTO Newcastle University Centre houses a range of resources.

Brandenburg Technical University Cottbus (BTUC) supports a web based collaborative platform (http://www.euroaquae.org/) providing a virtual environment where staff and students involved in the programme from all of the five institutions can communicate, collaborate and share programme documents and lecture notes besides the library and the computer pool support learning and training.

UNSA provides access to all libraries of the institution as well to the digital library with more than 20,000 titles available online for all students. (http://www.unice.fr/BU/docel.html). Individual digital environment is provided to all students through the Web portal of UNSA. For EuroAquae, the participants have the benefit of 2 ‘private’ class rooms with computers available. An application server is established at UNSA and provide access to all EuroAquae participants to several modelling environments.

UPC provides ICT access through the Gabriel Ferrater Library, as well as through the computer room facilities located in the Campus Nord. Virtual Campus “Atenea” is the way students receive documents and information of the teaching modules.

### 14 Methods for Evaluating and Improving the Quality and Standards of Teaching and Learning

**EuroAquae Programme Review**

The programme is fully integrated to the ECTS system according to the Bologna process and the national rules of each institution. The modules of the master course fully enter the quality assurance of each institution of the consortium. Moreover and to obtain a global vision of the curricula, the specific quality
assurance of the course is supervised by the Curriculum and Management Board.

The evaluation is based on a fourfold scheme:

- **SCHEME A**: evaluation by the stakeholders (Students S, Teachers T & Contractors C) through a self-assessment procedure; it summarises the opinions of those concerned on main points concerning quality of organisation, of teaching and didactic methodologies and activities during the Course, and on contractual and financial aspects in the case of the Contractors.
- **SCHEME B**: evaluation by the EE of the published information about the programme;
- **SCHEME C**: evaluation by the EE through formal questionnaires for each module to stakeholders S and T.
- **SCHEME D**: evaluation of adequacy between the course and the demands, both professional and academic; this will be done by the EE through reporting based on their personal experience and on the external opinions collected from the Profession and Academia.

The results of the evaluations are published by the board.

**Procedures Followed at UNSA**

At UNSA, the master program is submitted by the university after internal evaluation to the Ministry of Education every 4 years as part of the 4 years contract established between UNSA and the Ministry of Education. The Ministry experts analyse quality, content and results of the program and deliver accreditation for the master degree (as national degree) with the Conseil National d’Evaluation (CNE). Every year evaluation is made by the Faculty of Geographic Sciences according to the UNSA scheme with the participation of internal and external experts. The councils of the university validate the results. The specific quality assessment structure developed for EuroAquae is fully integrated to the UNSA procedures and is strictly followed.

**Procedures followed at BTUC**

Within BTUC, the Board of Teachers of each curriculum reviews the degree programme.

**Module Reviews** - All BTUC modules are subject to review by questionnaires which are considered by the Quality Assessment Board of the university. New modules and major changes to existing modules are subject to approval by the Faculty Board and the International Curriculum Board of the Erasmus Mundus EuroAquae MSc “Hydroinformatics and Water Management” programme.

**Accreditation Reports** - This programme is not yet accredited by any professional body.

**Student Evaluations** - All modules, and the degree programme, are subject to review by student questionnaires. Informal student evaluation is also obtained at the Quality Assessment Board.

**Procedures Followed at UPC**

At UPC, the local Agencia per la Qualitat del Sistema Universitari de Catalunya, AQU Catalunya, evaluates in a periodical basis the structure of all the curricula existing at the UPC. This process is made every 4 or 5 years, first by means of an internal committee, and finally an external committee composed of an academic not related with the university under evaluation, an external expert from industry or administration, and a technician of the AQU agency. Every year, the UPC evaluates all Teachers and Modules through questionnaires, and the results are analysed by the Board of Studies and exposed to the university community. Moreover, the School of Civil Engineering selects internal experts in charge of the curricula coordination in several academic topics, Water, Transportation, etc.

**Procedures Followed at Newcastle University**

**Module Reviews**
All modules are subject to review by questionnaires which are considered by the Board of Studies. Changes to, or the introduction of new, modules are considered at the Board of Studies. Student opinion is sought at the Student-Staff Committee and/or the Board of Studies. The introduction of new modules and major changes to existing modules are subject to approval by the Faculty Learning, Teaching and Student Experience Committee (FLTSEC).

**Programme Reviews**
The Board of Studies conducts an Annual Monitoring and Review of the degree programme and reports to FLTSEC. The FLTSEC takes an overview of all programmes within the Faculty and reports any Faculty or institutional issues to the Taught Programmes Sub-Committee.
**External Examiner Reports**

External Examiner reports are considered by the Board of Studies. External Examiner reports and the response to the External Examiner from the Board of Studies are shared with institutional student representatives, through the Student-Staff Committee.

**Student Evaluations**

All modules, and the degree programme, are subject to review through online questionnaires. Informal student evaluation is also obtained at the Student-Staff Committee and the Board of Studies. The results from student surveys are considered as part of the Annual Monitoring and Review of the programme and any actions arising are captured at programme and School/institutional level and reported to the appropriate body.

**Mechanisms for Gaining Student Feedback**

Feedback is channelled via the Student-Staff Committee and the Board of Studies.

**Faculty and University Review Mechanisms**

Every six years degree programmes in each subject area undergo Learning and Teaching Review. This involves both the detailed consideration of a range of documentation, and a review visit by a review team (normally one day in duration) which includes an external subject specialist and a student representative. Following the review a report is produced, which forms the basis for a decision by University Learning, Teaching and Student Experience Committee on whether the programmes reviewed should be re-approved for a further six year period.

**Accreditation Reports**

The continuation of accreditation by the Joint Board of Moderators (Institution of Civil Engineers, Institution of Structural Engineers, Chartered Institution of Highways and Transportation, and the Institute of Highway Incorporated Engineers) as meeting the requirements for Further Learning for a Chartered Engineer (CEng) for candidates who have already acquired an Accredited CEng (Partial) BEng (Hons) or an Accredited IEng (Full) BEng/BSc (Hons) undergraduate first degree, was approved in July 2012 for entrants from 2012 up to and including the 2016 intake. See [www.jbm.org.uk](http://www.jbm.org.uk) for further information.

**Additional Mechanisms**

None.

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**15 Regulation of Assessment**

Please refer to the Postgraduate (Taught) Examination Conventions at [http://www.ncl.ac.uk/regulations/docs/2018.html](http://www.ncl.ac.uk/regulations/docs/2018.html)

The University employs a common marking scheme, which is specified in the Taught Postgraduate Examination Conventions. However, the scheme used for EuroAquae students is a simple pass or fail.

**Role of the External Examiner**

An External Examiner, a distinguished member of the subject community, is appointed by the University following recommendation from the Board of Studies. The External Examiner is required to:

i. confirm whether the standards of the University’s awards meet or exceed the academic standards specified in external reference points such as the Framework for Higher Education Qualifications, the UK Quality Code, subject benchmark statements, and, where appropriate, the requirements of professional, statutory and regulatory bodies;

ii. confirm whether the academic standards of the University’s awards are consistent with those of similar programmes in other UK higher education institutions;

iii. report on whether the University’s processes for assessment measure student achievement rigorously and fairly and are conducted in line with University policies and regulations;

iv. identify, where appropriate, examples of exemplary practice and innovation in learning, teaching and assessment;

v. comment on opportunities to enhance the quality of the learning experience provided to students.
Assessment at UNSA is regulated by the Council of the University in charge of Academic affairs. Marks are assimilated according to the ECTS grading scheme (A-F: 0-5) - are excellent (0 - A), very good (1 - B), good (2 - C), satisfactory (3 - D), sufficient (4 - E) and fail (5 – FX/F). Marks from each module are weighted by factors according to the ECTS credit value.

The marks from all modules will normally be 4-E or better for successful completion. Compensation between modules is offered for each semester. The re-assessment for all modules with grade 5 is offered each semester.

UNSA applies a common marking scheme, which is specified in the Faculty marking criteria (See table below) and is based on descriptors for levels of achievement. The pass mark, for UNSA modules, is 10.

<table>
<thead>
<tr>
<th>Mark Range</th>
<th>UNSA Brief Description</th>
<th>ECTS Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>19-20</td>
<td>Outstanding work throughout: excellent analysis, synthesis and evaluation of material and concise, logical thought. Shows originality and critical ability. Comprehensive understanding of topic, virtually no errors. Extremely well presented and structured work.</td>
<td>A - 0</td>
</tr>
<tr>
<td>18-18.9</td>
<td>Outstanding in most elements but minor deficiencies in some, compensated by excellence in others. Extremely well presented and structured work.</td>
<td></td>
</tr>
<tr>
<td>16-17.9</td>
<td>Overall excellent. Thorough understanding of the topic. May contain minor errors. Extremely well presented and structured work.</td>
<td>B - 1</td>
</tr>
<tr>
<td>15 – 15.9</td>
<td>Shows thorough understanding of topic. Substantial detail, with evidence of further study. Very well presented and structured work.</td>
<td></td>
</tr>
<tr>
<td>14 – 14.9</td>
<td>Work provides substantial information. May contain minor errors of understanding. Some evidence of additional study. Very well presented and structured work.</td>
<td>C - 2</td>
</tr>
<tr>
<td>12-13.9</td>
<td>Clear understanding. Material is relevant and largely correct, but lacking in critical analysis and in evidence of further study. May contain errors of understanding or facts compensated by very good work in other areas. Relies almost entirely on course material. Adequately presented and structured.</td>
<td>D-3</td>
</tr>
<tr>
<td>10-11.9</td>
<td>Limited understanding. Considerable omission of relevant material and/or use of irrelevant material. May contain significant errors of understanding and some errors of fact. Presentation and structure adequate to poor.</td>
<td>E – 4</td>
</tr>
<tr>
<td>9-9.9</td>
<td>Very limited understanding of material. Significant omissions, errors of understanding and factual errors. Generally poorly presented and structured.</td>
<td>FX -5</td>
</tr>
<tr>
<td>8 -8.9</td>
<td>Demonstrates minimum acceptable understanding in some though not all areas. Many factual errors and omissions. Generally poorly presented and structured.</td>
<td></td>
</tr>
<tr>
<td>6-7.9</td>
<td>Generally irrelevant approach and failure to understand basic requirements. Significant errors. Little or no structure and poorly presented.</td>
<td>F -5</td>
</tr>
<tr>
<td>4-5.9</td>
<td>Limited work showing an inability to deal with the requirements. Some factually relevant material.</td>
<td></td>
</tr>
<tr>
<td>2-3.9</td>
<td>Extremely limited work with very little factually relevant material.</td>
<td></td>
</tr>
<tr>
<td>0-1.9</td>
<td>Little or no attempt to complete the work.</td>
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</tr>
</tbody>
</table>

Assessment at BTUC is regulated by the Board of Examiners of each curriculum.

At UPC, assessment is made on the basis of a final test, complemented by continuous evaluation made by the professor through coursework or partial tests. Written tests are the normal way used. Marks are from 0 to 10, and the student can re-take the exam few weeks after the first exam. If after these two exams the student does not pass, he must repeat the module in the next semester.

In addition, information relating to the programme is provided in:

The University Prospectus: [http://www.ncl.ac.uk/postgraduate/](http://www.ncl.ac.uk/postgraduate/)

Degree Programme and University Regulations: [http://www.ncl.ac.uk/regulations/docs/](http://www.ncl.ac.uk/regulations/docs/)

Please note. This specification provides a concise summary of the main features of the programme and of the learning outcomes that a typical student might reasonably be expected to achieve if she/he takes full advantage of the learning opportunities provided.