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Erasmus+ Programme
of the European Union

**Erasmus Mundus Joint MSc in
Advanced Systems Dependability**

DEPEND

**Student Handbook
2020/2021**

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PLEASE NOTE: This handbook contains information relevant to DEPEND Programme. As far as possible, this handbook avoids duplication of information available in Partner University's Student Handbooks, focusing instead on issues specific to the DEPEND Programme. It should be read in conjunction with the Student Agreement and the Student Handbooks of each partner University.

1. WELCOME

Welcome to the Erasmus Mundus Joint MSc in Advanced Systems Dependability.

During the next two years you will have the opportunity to experience living and studying in two European countries, while participating in the Erasmus Mundus Joint MSc in Advanced Systems Dependability. We hope that it will be an exciting and informative time for you, both culturally, and academically.

Each university involved in the DEPEND programme has a long-standing record of offering postgraduate courses, addressing specialised topics in the development of dependable software systems. The DEPEND programme integrates these specialisms, to generate a unique programme that focuses on providing students with the knowledge, skill, and in-depth technical understanding of the key topics of safety, reliability, availability, and security of software-based systems. This is achieved by bringing together the theory and practice of software development through research projects and work experience in both industrial and research settings. The programme will also integrate you with the cultural environment of the country in which you study, as well as with other European and non-European students and scholars.

Postgraduate education is a joint venture - we are here to facilitate your learning about an exciting field of Computer Science and you are here to learn (and to also enjoy University life). You need to attend **all the lectures, all the laboratory sessions**, and **undertake independent study** if you are to do well. Work steadily throughout the year, and you will develop a good understanding of the subject, and you should do well in your examinations.

You are in the enviable position of embarking on a career in an area that is vibrant and exciting, at a time when the software industry is concerned with the development of software systems that are dependable throughout their lifespan. Our goal is to ensure that you will bring discipline and knowledge of appropriate techniques to your software development in order to guarantee this software quality and reliability.

On graduation you will be equally suited to a career in research where you will develop new techniques for developing more dependable software, or a career in industry where you will develop dependable industrial strength software. We look forward to working with you to achieve your qualification.

If you have any questions about your course - please contact us at mscdepend@mu.ie. If you have any questions about your lectures or course material, you should ask in lectures/tutorials/labs, or go as soon as possible to your relevant **university contact** (listed below) - It is important that you do not ignore things that you don't understand, but approach a member of staff for guidance.

Kind Regards,

Dr Joseph Timoney
Programme Director
Maynooth University

2. CONSORTIUM UNIVERSITIES CONTACTS

Maynooth University (MU)

Dr Joseph Timoney

Programme Director at (MU)

Phone: +353-1-708 3580

Email: mscdepend@mu.ie

University of St. Andrews (UStA)

Dr Juliana Bowles

Programme Director at the University of St. Andrews (UStA)

Phone: +44 (0)1334 461622

Email: depend-pd-cs@st-andrews.ac.uk

Université de Lorraine (UL)

Professor Didier Galmiche

Programme Director at University de Lorraine (UL)

Phone: +33 (0) 3 83 59 20 15

Email: Didier.Galmiche@loria.fr

3. PROGRAMME OBJECTIVE

Our objective is to provide students with the knowledge, skill and in-depth technical understanding of the key concepts required to design and build dependable software systems. This will be achieved by bringing together the theory and practice of software development and, in particular, through the transfer of knowledge from the classroom via research driven and commercially relevant projects, with the option of work experience in both industrial and research settings.

Each student on the integrated programme will study in two of the three partner universities achieving a diploma supplement from each university in which they accomplish 60 ECTS. No diploma supplement will be issued by the host institution until the student has completed 120 ECTS over two years. The joint Erasmus Mundus MSc in Advanced Systems Dependability (DEPEND) will be achieved over two years through the allocation of 120 ECTS.

4. PROGRAMME STRUCTURE

The student will achieve 120 ECTS through a combination of coursework and project work that will present the student with both research and industrial aspects of dependable software systems. The student must accumulate at least 80 ECTS (40 ECTS per year) from coursework and at least 40 ECTS (20 ECTS per year) from project work or placement. Semesters I and III will normally consist of taught modules, whereas semesters II and IV will normally consist of taught modules and project work or placement. If students choose to accumulate more than 60 ECTS in one institution, they still have to achieve 60 ECTS in the second institution to fulfil the DEPEND degree requirements

First semester modules in both years of the programme represent the necessary foundation upon which students can build their specialisations. Even though students will have some background in these topics from their undergraduate degree, these modules will cover them in more depth providing a basis for later specialised modules and project work. These modules will be available to students between late September and mid-January of each year.

Second semester modules, in both years of the programme; provide specialised theory and practice that will prepare students for project work in their chosen area of expertise. As each student must complete 40 ECTS of taught modules at the institution at which they undertake their project

work the student will have time to become fully acquainted with the culture of the host country prior to the project start date.

Extensive project work must commence in the second semester in order to allow students to complete their dissertation before presenting their work at the annual summer school. Semester dates include time for study breaks, examinations and vacations. As the partner institutions are in different European countries, special care will be taken to ensure that adequate time is allocated for study breaks, examinations, and transfer between universities and vacations. Care has also been taken to ensure that students have a balanced work load in each semester.

Students will attend each host institution for a full academic year and timetables are available from the host institutions.

5. PROJECT WORK

Project work is a major aspect of this Masters programme accounting for approximately 33% of the total degree marks. The student will experience two projects during the DEPEND Programme, normally one research based project and one project addressing an Industry relevant problem. The latter might be replaced with a placement in industry.

To ensure that the student maximises their European experience we require that project work should be completed in two different universities and countries. These projects will give the student the opportunity to work with both highly acclaimed research groups and well-respected industrial teams. A thesis must be submitted for examination at the end of each project.

6. MODULES

Individual modules offered by each partner university are listed annually at <https://www.mscdepend.ie>

7. SUMMER SCHOOL

In addition to regular modules, all students will attend a one week summer school at the end of the first year and again at the end of the second year. The Summer School is a compulsory part of the Programme and all students must attend for the duration. The summer schools rotate between partner institutions and provide an opportunity for participating students to meet each other and to meet members of staff from partner universities.

The summer school will offer a forum in which guest lecturers will be invited to speak about their subject area. Students who meet at the summer schools will be encouraged to form online friendships that will continue through the Moodle social forum. This will also act as an exemplar to year 1 students, who will be encouraged to get involved in online course activities throughout the programme.

Course Integration via Summer Schools:

- The summer schools will introduce students to different European cultures as we will rotate the summer school between partners annually, thus ensuring that every student will experience at least two cultures during their MSc programme. Cultural activities, in addition to those that will be made available to students throughout the traditional academic year, will be provided to introduce both professional and cultural aspects of the host country to participants.

- The summer school will provide a forum through which the students who are attending different universities may present their project work and have it evaluated by a panel of examiners from all three partner universities. This, together with a transparent marking scheme will ensure that the grading of project work is consistent no matter what specialisation is chosen and that the standard of project work is comparable across all partner universities.
- An essential aspect of the summer school is its support of student integration across institutions: it will allow 1st year and 2nd year students to meet, so that they can share their experiences of different institutions and specialisations on the Erasmus Mundus Programme. This will help 1st year students to finalise their decision on which specialisation to take in the 2nd year and will provide information about the project work available at each university.
- Through the summer school, we will motivate students by providing presentations which will educate them on technical issues in software development as well as presentations that will develop their generic skills sets as computer scientists.
- Third country scholars will be invited to participate in the summer school to assist with and to benefit from scheduled activities.
- Students who meet at the summer schools will be encouraged to form online friendships that will continue through the Moodle social forum. This will also act as an exemplar to year 1 students, who will be encouraged to get involved in online course activities throughout the programme.

8. REGISTRATION

On admission, students will register for the two-year Programme at the admitting institution as well as the host institution for the upcoming year.

All Students will register remotely with the admitting institution (Maynooth University). Students will also register locally with a host institution for 60 ECTS in each year of their degree. Registration at each institution will follow the normal registration rules for that institution.

9. STUDENT AGREEMENT

Students are required to sign a Student Agreement. The purpose of this agreement is to ensure that:

- the enrolled student is provided with a comprehensive picture of all academic, research, administrative and other aspects related to his/her participation in the Programme
- both parties- i.e. the consortium and the individual participant – agree on these aspects and their respective responsibilities towards them.

10. FEES

The DEPEND Consortium retains 9,000 Euros per annum for Partner Country Students and 4,500 Euros per annum for Programme Country Students of the awarded scholarship funds to cover the participation costs to the DEPEND Erasmus Mundus Masters programme. These participation costs include any compulsory administrative and operational costs related to the participation of the Student in the DEPEND Erasmus Mundus Masters programme (e.g. admission fees, registration, university tuition, course exams, thesis examination, library and computer access, insurance coverage, etc.).

The costs for travel, room and board are the responsibility of each student and shall be paid from his or her own funds. Additional obligatory fees for student related concerns must be paid by each student in the host Institution. The Consortium will provide health insurance meeting the EC requirements for the duration of the course.

Fees other than tuition fees, such as re-examination, late registration or graduation fees, may be payable by students in addition to the tuition fee. These shall be levied at the standard rate of each institution.

11. MOBILITY

Each student on the Programme will study in two of the three partner universities, obtaining a diploma supplement from each university in which they accomplish 60 ECTS.

All combinations of university are permitted in the mobility component of the programme (see Fig 2.1 below). However, each mobility combination has been carefully designed to eliminate overlap of material and to guarantee the inclusion of necessary modules. The result is a set of **Integration Requirements** which are documented on/in the Programme website and documentation.

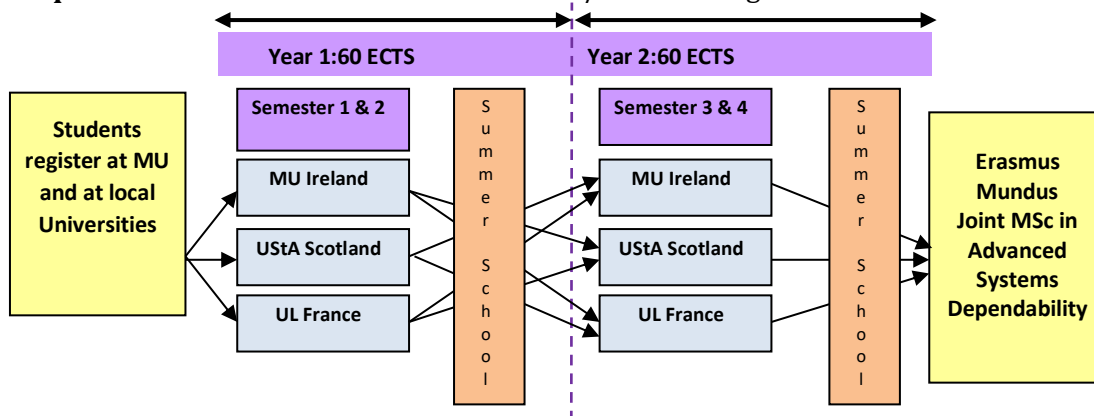


Fig 2.1 Erasmus Mundus Joint MSc in Advanced Systems Dependability (Structure and Mobility)

In addition to regular modules, all students will attend a one-week summer school at the end of the first year and again at the end of the second year. These summer schools will rotate between partner institutions and provide common training on topics such as European culture, the Software Industry and Entrepreneurship skills. It will also provide a forum for students to present their project work to examiners from all partner universities.

12. SCHOLARSHIP PAYMENTS

The monthly allowances of the scholarship for living costs are paid to the Student in 24 monthly instalments as per the Student Agreement.

It is the responsibility of the host institutions to properly allocate these scholarship components to the student/scholar. This allocation of funds will be in line with the Erasmus+: KA1 Higher Education Erasmus Mundus Joint Master Degrees Project Handbook (Version 1: October 2017):

- Amount I (Contribution to the student's travel) will be paid annually, at the end of the registration process.
- Amount II (Contribution to installation, visa related costs and other personal costs, Partner Country Scholarship students only) will be paid per programme/intake in one instalment at the beginning of the first academic year upon arrival at the first host University, but not before the end of the registration process.
- Amount III (Monthly allowance) will be paid on a monthly basis and in full to the student's personal bank account.

13. INSURANCE

The consortium will select a suitable insurance policy for students that is 100% compliant with the EACEA minimum requirements.

14. LANGUAGE

The principal language of instruction and in the consortium is English with all partner Universities offering course modules through English. Hence, a proficiency in English is a pre-requisite for all applicants wishing to enter our proposed Erasmus Mundus programme. The second language is French, which is the language of operation in Université de Lorraine. However, at least 60 ECTS will be available in English at each partner institution. Examinations will be provided in the language of instruction for the relevant course component thus ensuring that all students can achieve the Erasmus Mundus MSc through English. While some ECTS will be available in French, it will not normally be possible to complete the full Masters programme through the French language. All three partner universities provide Language Centres with appropriate courses and facilities for students who wish to improve their language skills. These courses and facilities will be available to Erasmus Mundus Masters students on an optional basis throughout their registration on the Joint MSc in Advanced Systems Dependability.

15. ATTENDANCE

Attendance is recognised by the respective Universities as an integral part of the DEPEND Programme. The Student is expected to maintain a 100% attendance level at prescribed lectures, seminars, summer sessions and examinations of the Joint MSc in Advanced Systems Dependability. Students are required to be in attendance on campus during all required times as listed in the Academic Calendar including study weeks, lecture weeks and weeks allocated to project work. Adequate time is allocated in the calendar for holidays and students should arrange any holidays during this time only. Any deliberate failure on the part of the Student to maintain attendance at the Programme constitutes sufficient reason for action to be taken towards resolving the issue and could lead to the exclusion of the Student from the DEPEND Erasmus Mundus Masters Programme and the reimbursement of any scholarship funds awarded.

16. EXAMINATION

All modules (taught and project) are weighted according to the ECTS system. Precise weightings for each module on the course are listed on/in the Programme website and documentation. At the end of each year, student results for taught modules will be processed by an exam board at their host institution.

The rules for determining an overall grade for the degree are defined in the Marks and Standards document. Examiners from all consortium institutions will be involved in the grading of each student's project work, as presented each year at the annual programme summer school. At the end of each year, the result for each 60 ECTS component of the programme will be determined by a Joint Consortium Examination Board and communicated to the admitting institution. Both UStA and UL use a 20 point scale for postgraduate taught programmes while MU uses a percentage scale. The ECTS grading scale defined in Marks and Standards will be used to translate a student's grade from one institution to the grading scale used in another. This procedure will be transparent, as ECTS grading scales will be available with student transcripts from each institution.

Students may appeal their results of individual modules in the programme through the local examination appeal procedure in each university. Students who wish to appeal their overall result or final project mark may do so through the Maynooth University appeals procedure.

At the end of each joint degree programme, overall degree results will be processed at the Consortium examination board. The Consortium can then provide a Diploma Supplement for the 120 ECTS of the full course.

Progression to Year 2 is conditional on the successful completion of Year 1 as defined in Marks and Standards. In certain circumstances, progression with a deficit of up to 7.5 ECTS is allowed.

While at the host institution, the local policies for re-sitting Masters level examinations will apply: re-sits for Masters level modules are not permitted at UStA; students who have failed their exams at UL are permitted to re-sit at a second session of exams in late June; and students who have failed their exams at MU are (subject to certain limits) permitted to re-sit their exams at the next session for that module.

When the student receives the Erasmus Mundus Joint MSc in Advanced Systems Dependability, their award will be accompanied by a single, joint diploma supplement which will document the grades and ECTS achieved in each component of the joint degree, using a common grading system.

17. GRADUATION

The Erasmus Mundus Joint MSc in Advanced Systems Dependability will be awarded after two years on the completion of 120 ECTS in two of the three partner universities. The students must obtain 60 ECTS from each university in which they study (except as allowed in Marks and Standards) and must have satisfied the requirements of at least two partner institutions for the award of their Erasmus Mundus Master's degree. Students will be issued one degree certificate which will include the crests of the partner Institutions. The degree certificate will normally be presented by the University which the student attended in the 2nd year of the programme.

If the criteria for the award of the degree are not met, a lower award of a postgraduate diploma or certificate will be considered. Alternatively, the student's eligibility for an alternative degree award shall be subject to the regulations of the partner institutions.

18. ALUMNI

Since its establishment in 2006, Erasmus Mundus Students and Alumni Association (EMA) has been working to promote the brand of Erasmus Mundus to the whole world and to offer a networking platform where students and alumni can exchange information and experiences. EMA is an official network that aims to serve the interests of students and alumni of all Erasmus Mundus Masters Courses. Scholarship Students must agree to the mandatory participation in programme surveys/evaluations, as well as the joining of the Erasmus Mundus Students and Alumni Association. For more information visit www.em-a.eu

19. PLAGIARISM

Plagiarism is the passing off of another person's work as your own. It includes copying without acknowledgement from a published source (print or electronic), or from unpublished sources (e.g. another student's essay or notes).

Plagiarism also occurs when the substance or argument of a text is copied even with some verbal alterations, such as in paraphrase or translation, without acknowledgement. Plagiarism includes using material from books or periodicals, from the internet, from grind tutors, or from other students, without full acknowledgement of the sources.

Plagiarism in any form of assignment contributing to marks or a grade for a course is a serious offence. It is a form of cheating on several counts: the perpetrator is attempting to obtain credit for work not done, and is also attempting to benefit from work done by somebody else. Plagiarism undercuts the whole thrust of scholarly enquiry that is the essence of education. Plagiarism will be severely penalised wherever it is detected. Students submitting assignments, essays, dissertations or any form of work for assessment may be required to sign a declaration that the material in question is wholly their own work except where indicated by referencing or acknowledgement.

Cases in which students knowingly permit others to copy their work shall also be subject to disciplinary procedures.

20. STUDENT SERVICES

Each institution of the consortium has an International office with suitable opening hours and linguistic coverage. Orientations specifically arranged for international and Erasmus students are on offer at the beginning of the academic semesters. Activities aimed at social integration, as well as assistance with immigration registration, and social insurance, are offered. In particular, advice on how third-country students and scholars can obtain visas and suitable accommodation is available. Cultural activities will be available to assist students and scholars integration into the host country as well as providing a way for students to get to know local people. Assistance with accommodation is normally offered to all international students through the standard procedures in University accommodation offices. Optional language courses will be available through the Language centres at each University.

Student services in each university will be made available to each Erasmus Mundus Masters participant. These include services such as coaching and counselling, welfare services, services for students with a family or special needs, library facilities, sports facilities, etc.

Each institution in the Consortium has local procedures for dealing with general student problems and complaints. Students should use these procedures in the first instance, where the difficulty is a local one. Students who are not satisfied or who have complaints concerning the programme as a whole should address these to the DEPEND Programme Co-ordinator and/or the Head of the Department of Computer Science in Maynooth University.

Further information is available at <https://www.msccdepend.ie> or by contacting msccdepend@mu.ie

This document should be read in conjunction with the Marks and Standards document and your Student Agreement which should be considered definitive statements.

APPENDIX A



Co-funded by the
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THIS IS A DRAFT DOCUMENT
**DEPEND Partner Country Scholarship
Student Agreement**
MSc in Advanced Systems Dependability
ERASMUS MUNDUS JOINT MASTERS COURSE
Academic Year 2020-2021

The Advanced Systems Dependability (DEPEND) Consortium coordinated by Maynooth University (MU), in collaboration with the University of St Andrews (UStA) and Université de Lorraine (UL) represented by the Programme Director at the university, of the one part

Surname: _____

First name: _____

Date of birth: _____

Place of birth: _____

Nationality: _____

Passport number: _____,

the student, of the other part,

HAVE AGREED to the following terms and conditions.

1. The Student commits him/herself to duly attend the academic programme and the prescribed lectures, seminars, summer sessions and examinations of the *MSc in Advanced Systems Dependability*, having a duration of two academic years, in at least two of the following participating Universities of the DEPEND consortium, in accordance with the programme of studies supported by the European Commission: the Maynooth University (MU, Ireland), the University of St Andrews (UStA, Scotland) and the Université de Lorraine (UL, France). The Student is obliged to reach the expected performance results in order to be allowed to continue participation in the joint programme.
2. The attendance referred to in the previous article is recognised by the respective Universities as an integral part of the qualification for which the Student is preparing, and remains so, as long as the Student is successful in the respective examinations and/or assessments.

3. It is the responsibility of each individual student to ensure that they familiarise themselves with any course work missed should they be unable, for any reason, to arrive in time for the commencement of the Programme. Arrangements should be made, by the student, with lecturers regarding any missed continuous assessments to ensure all course work is covered. Students are not permitted to use late arrival to the Programme as grounds to appeal grades awarded by the University Examination Board. The current academic year commences on 14th September 2020.
4. To participate in the academic programme of the DEPEND Erasmus Mundus Joint Masters, which is approved by the European Commission under the Specific Grant Agreement (SGA 2017-2009) contracted between the Education, Audiovisual & Culture Executive Agency (EACEA) of the Commission of the European Communities and the Coordinating Institution (MU), the Student receives a scholarship to the maximum total value of 49,000/ 47,000 Euros, donated to the DEPEND Consortium, consisting of the Universities mentioned above, by the Commission of the European Communities.
5. The monthly allowances of the scholarship for living costs are paid to the Student in twenty four monthly instalments of 1000 Euros each. The payments of the monthly instalments should begin within 30 days of the commencement of the first academic year as stated in the Student Agreement but not before the completion of registration at the first host University. These monthly instalments are paid by bank transfer to the Student's personal bank account details of which must be provided at time of registration, payments cannot commence until such time as students provide their bank details and complete all necessary documentation. The contribution to the Student's travel is based on the distance of travel from the student's residence to the host university. The contribution will be 2,000 Euros per annum for distances of less than 4000kms and 3,000 Euros per annum for distances greater than 4000kms. The payment of the annual travel contribution will be made at the beginning of each academic year. Installation costs of 1,000 Euros per programme/intake will be made in one instalment at the beginning of the first academic year upon arrival at the first host University. The above payments will **not** be made before the signature of the student agreement and the end of the registration process at the host University.
6. The Student agrees that the DEPEND Consortium retains the contribution of 4,500 Euros per semester of the scholarship to cover the participation fees for the DEPEND Erasmus Mundus Joint Masters programme. These participation fees include any compulsory administrative and operational costs related to the participation of the Student in the DEPEND Erasmus Mundus Joint Masters programme (e.g. admission, registration, university tuition, course exams, thesis examination, library and computer access, insurance coverage, etc.). The insurance scheme selected by the Coordinating Institution covers adequately the Student in case of accident, injury, hospitalisation and illness while participating in the DEPEND Erasmus Mundus Joint Masters Programme. Any other costs that may be charged in addition (e.g. for participation in fieldwork activities and summer sessions), being compulsory or voluntary, are communicated to the Student at the application stage. These costs and any other costs, such as document application, visa and residence permits, books, local transportation, travel to the host universities and accommodation, including the travel and accommodation expenditures to participate in the two summer schools are **not** covered by the participation fees.
7. Under the present Agreement, the Student is obliged:
 - to obtain his/her residence permit from the national and local Authorities upon his/her arrival in the host countries if required;
 - to participate in the orientation and welcome meetings as well as informative and official meetings and events;

- to attend assiduously, and with the objective of successfully passing, the courses, seminars, summer sessions and the thesis inherent in the programme of studies;
 - to refuse any other scholarship or subvention financed by the Commission of the European Communities under other Community programmes.
8. The participating Universities of the DEPEND consortium shall announce, on the DEPEND website, the academic calendar by the first week of the academic year, including the course schedule and location as well as the examination periods. The Coordinating Institution in consultation with the organizing Institution shall announce the period and location of each summer school within the first three months of each academic year. The Consortium is obliged to provide the Student with the necessary support to facilitate his or her mobility to, and installation in the different hosting Universities.
 9. Each participating University of the DEPEND consortium shall post the description of its own courses of the DEPEND academic programme before the beginning of each academic year. The course description includes the objectives and the structure of the course as well as the methods and examination conditions. Each participating University of the DEPEND consortium shall also post the guidelines for the thesis examination before the beginning of each academic year. The Master thesis is examined and evaluated by at least three academics, including the thesis' supervisor from the host participating University and a thesis' adviser from another participating University.
 10. The scholarship does not create or entitle an employer-employee relation between the host Universities and the Student, and therefore is not subject to direct taxation.
 11. The Student is not entitled to embark on any vocational occupation with a regular salary in parallel to the studies under the DEPEND Erasmus Mundus Joint Masters Programme except as an internship/placement organised as part of the programme.
 12. Any alteration to the present Agreement or respective Annexes must be communicated in writing. All alterations to the initial situation must be immediately communicated by the Student to the Coordinating Institution and the host Universities. Upon mutual agreement of contractual modifications, the Coordinating Institution issues an *addendum* to the present Agreement.
 13. Any deliberate failure on the part of the Student to fulfil the conditions expected in terms of attendance at the DEPEND Erasmus Mundus Joint Masters Programme, in particular non-fulfilment of the conditions stipulated in the present Agreement and Student Handbook, constitutes sufficient reason for action to be taken towards resolving the issue and could lead to the exclusion of the Student from the DEPEND Erasmus Mundus Joint Masters programme and the reimbursement of the scholarship awarded.
 14. The DEPEND Programme has been carefully designed in coordination with the funding agency (the EACEA) to ensure that students have adequate time allocated to holidays and for their academic programme. An academic calendar will be made available to all students at registration. To ensure payment of scholarship funds students are required to be in attendance at all required times as listed on the academic calendar. Permission for absence from lectures must be requested prior to the absence, except in emergency medical situations, all requests will be reviewed by the student's Programme Co-ordinator who is under no obligation to approve such requests. Requests should be submitted in writing to the student's Programme Co-ordinator at least two weeks in advance. Absence due to illness must be verified by Medical Certificate.

The academic programme also includes periods of project work where there are no formal lectures to attend, during this time students are required to be on campus and in regular contact with their Project Supervisors. The academic programme also includes an optional placement in industry or research laboratory. Students who take this option are required to complete the placement to the satisfaction of both the industry/research organisation and the university they are attending.

In the case of extraordinary personal circumstances, which require the Student to be absent from campus or placement, documentation must be provided to explain the absence and to convince the EACEA, Visa Authorities and University staff that measures have been put in place to fulfil the student's programme requirements. Should the student be absent for any period of required time, without extenuating circumstances or prior permission, it will be assumed that the student has left the programme by their own demand and as a result scholarship payments will be suspended indefinitely from the first date of absence. A decision regarding the reinstatement of scholarship payments will only occur if/when the student returns to the University and the circumstances of the absence have been reviewed and approved by the relevant Programme Co-Ordinator.

15. As student dissertations will be examined at the programme wide summer schools it is essential that all students attend. Students must pass both summer schools in order to progress on the course. If students are unable to attend the summer school due to personal circumstances (illness, bereavement etc.) we will ask them to take part via video conference. Students will have to request special permission in this case and have documentation to back up their circumstances. Students on placement must arrange to have time free to attend the summer school before they commence the placement.
16. In case of exclusion or withdrawal of the Student from the DEPEND Erasmus Mundus Joint Masters Programme, on his/her own decision or force majeure, the Student hereby makes a commitment on his/her honour to reimburse the host University the excess funding from the scholarship allocated to him/her, which consists in any funds of the scholarship received in terms of monthly allowances covering the period following the months of the date of exclusion or withdrawal. Students who fail to meet the required standard to pass the first 60 ECTS (year 1) in the first sitting will not normally progress to year 2 except where allowed by the consortium to progress with a deficit as described in the *Marks and Standards* document. While students may have the opportunity to repeat exams there is no guarantee that their scholarship will be retained or that they will progress to year 2.
17. Upon exclusion or withdrawal, the Student shall in due time and before his/her departure pay for all his/her financial obligations, in particular:
 - the rent of his/her accommodation,
 - the bank fees corresponding to his/her accommodation insurance,
 - the bank charges to pay for any of his/her bank accounts and credit cards.
18. For the student's information, the Specific Grant Agreement (SGA 2017-2009) between the Coordinating Institution and EACEA which funds the DEPEND programme, imposes upon the Coordinating Institution, following the exclusion or the withdrawal of a student from the programme:
 - to reallocate the remaining funds of the scholarship allocated to that Student to another new suitable student;
 - to refund the EACEA of the Commission of the European Communities with the remainder of the scholarship allocated to that Student if no new applicant is enrolled as a replacement.

19. Without prejudice to the general consequences laid down in national law applicable in the present Agreement, the Coordinating Institution reserves the right to cease the effects of the present Agreement, without recourse to any juridical procedure apart from adequate communication to the Student. Failing agreement by both parts, the Irish courts are designated as the only competent authorities to resolve any legal dispute between the Coordinating Institution and the Student emerging from the present Agreement. The present Agreement is governed by Irish Law.
20. The Coordinating Institution and the participating Universities are exonerated from any responsibility for accidents, illnesses, injuries, losses or damages to persons or goods resulting from or in any way related to the activities that are the object of the present Agreement. The Student is obliged to accept the necessary insurance related to the activities for the full duration of the study period.
21. Internships/placements are available as an option in the second semester of second year of the programme at each university. Students taking this option are required to submit a report/dissertation prior to the summer school. Students are required to arrange time off for attendance at the summer school with their employer.
 - a) At Maynooth University: the optional industrial placement, available only in the second year of the programme if you achieved a grade above 70% in your first year, will usually last for 6 months (the second semester). You will follow the policies of the Maynooth University Placement Office in procuring your placement, and will be supervised by both an industrial representative and the office during your placement. Near the end of your placement, and prior to the summer school, you will submit a work placement report electronically. If you opt for this choice, but are unable to be placed, you will attend the taught second semester activities instead.
 - b) At the University of St. Andrews: the optional research/industrial placement (Special Project), available only in the second year of the programme if you achieved a grade above 70% in your first year, will usually last for 6 months (the second semester). Near the end of your placement, and prior to the summer school, you will submit a report on your activities.
 - c) At the Université de Lorraine: during the second semester, you will undertake a research internship project of 4-5 months duration, inside one of the research teams (usually of the LORIA laboratory). You will produce a report/dissertation on your activities.
22. Students may appeal their results of individual modules in the programme through the local examination appeal procedure in each university. Students who wish to appeal their overall result or final project mark may do so through the Maynooth University appeals procedure.
23. Each institution in the Consortium has local procedures for dealing with general student problems and complaints. Students should use these procedures in the first instance, where the difficulty is a local one. Students who are not satisfied or who have complaints concerning the programme as a whole should address these to the DEPEND Programme Co-ordinator and/or the Head of the Department of Computer Science in Maynooth University.
24. It is mandatory for all EMJMD students to participate in EACEA programme surveys/evaluations as requested from time to time by the EACEA. All students are invited to join the Erasmus Mundus Students and Alumni Association (EMA) see <http://www.ema.eu/> for details.

25. By signing this agreement the student confirms that he/she has not previously obtained an EMJMD scholarship or an Erasmus Mundus Master Course/Joint Doctorate scholarship.

The signatories declare that they have read and accept the conditions laid down in the present Agreement.

First Signatory

Date:
(Stamp of Institution)

Programme Director: (Block Capitals)_____

Host Institution: (Block Capitals)_____

Second Signatory

Date:

Student Name: (B

APPENDIX B



**ERASMUS MUNDUS JOINT MSC IN
ADVANCED SYSTEMS DEPENDABILITY
TO BE AWARDED BY THE DEPEND CONSORTIUM
CONSISTING OF THE 3 UNIVERSITIES
MAYNOOTH UNIVERSITY
UNIVERSITY OF ST ANDREWS
UNIVERSITÉ DE LORRAINE**

MARKS AND STANDARDS

28 November 2018

The following describes the Marks and Standards for the above programme of study. This programme is accorded 120 credits under the ECTS (European Credit Transfer) system. Each student attends the course for two years, spending one year in each of two different universities during the course.

These Marks and Standards should be read in conjunction with the three University and Departmental Handbooks for details of deadlines and penalties, entry criteria for modules with restricted entry, module clashes and other such matters.

1 Directory of Terms

1.1 **Programme:** A programme is the course of study leading to a joint award by the three Universities. The programme description (outlined in the DEPEND website hosted by Maynooth University, <https://www.mscdepend.ie/>, and the three Departmental Handbooks) describes the modules which may be chosen as part of the programme and the credit weighting of each module.

1.2 **Module:** A module is a subcomponent of this programme. The description of the module includes the mode of instruction, the number of contact and other hours involved, the content of the module, the mode of assessment and the credit weighting in ECTS. Each module has a name and a course-wide, joint code (for convenience, each University may also assign a local code). The code consists of two or three letters (CS) followed by three digits (with possibly a final letter). The first of the digits typically indicates the level of the module: for this programme all modules are at Master's level. Details of module codes, the selection of modules, and their availability depending on the mobility pathway of a student, are available in the Themes & Modules document linked to from the DEPEND programmes website.

1.2.1 **Core Module:** A core module in this programme is one which is compulsory for all students. Which modules are core modules depends on the mobility path of the student.

At Maynooth and Lorraine certain modules may be passed by compensation (see clause 2.2). It is a requirement for progression that certain core modules are passed without compensation (i.e. a mark of 50% achieved). At St Andrews all modules must be passed without compensation.

1.2.2 **Specialisation Module:** A specialisation module in this programme is an optional module which may be chosen from a number of available modules but which is not compulsory. However, dependent upon the host institution, students must select from certain combinations of specialisation modules.

1.2.3 **Research and Experiential Learning Module:** Certain Research and Experiential Learning modules must be undertaken as part of the programme.

- 1.2.4 **Ungraded Module:** Some modules may be included on an ungraded basis. In this case, the student is awarded the credits associated with the module once the module is passed to a satisfactory standard, but no mark or grade is included in the calculation of annual or subject marks.
- 1.3 **Local Module Mark:** The mark assigned to a module by a university using the university's local marking scheme.
- 1.4 **Joint Module Mark:** The mark assigned to a module using the common grading scheme. This will be based on the local mark, the grade that the local mark is in, and a course-wide overall determination of a student's performance within the context of the joint degree course. Conversion tables from local to joint module marks are provided in the Appendix.
- 1.5 **Joint Degree Mark and Grade:** All marks are initially assigned for each module using each university's system. These marks are then used to assign marks and a grade for the joint degree using the Common Grading scheme shown below:

COMMON GRADE	GRADE BOUNDARY
DISTINCTION	80%
MERIT	70%
PASS	50%
INCOMPLETE/ NOT PASSED	Below 50%

Unless stated otherwise, marks in this document refers to the Joint Marks.

2 Rules for Progression and Passing

- 2.1 The pass mark for each module is 50% and the pass mark for the programme is 50%.
- 2.2 At Maynooth and Lorraine, but not at St Andrews, certain modules may be passed by compensation (see 1.2.1). Where a student receives a mark of 40% and higher and less than 50% at Maynooth and Lorraine, this may be classified as a pass by compensation if the student's performance in the other modules taken in the same period of study merits compensation. It is

a requirement that certain core modules must be passed without compensation.

- 2.3 The programme mark is the weighted average of the modules contributing credits to the programme. Ungraded modules are excluded.
- 2.4 In order to pass a module a student must fulfil all the requirements of the module, as stated in the module description, and in addition obtain the pass mark in the module. Such conditions may require that a student achieve a certain minimum in continuous assessment, and/or in an oral/practical exam and/or in the written exam, or such other conditions as are appropriate.
- 2.5 Where a module is assessed wholly by Continuous Assessment, and the student presents no work, no mark is recorded.
- 2.6 **Progress to the second year of study:** In order to progress to the second year of study a student must, in their first year of study:
- Attempt a total of 60 ECTS
 - If the first year is at St Andrews
 - Pass all modules in which the student has enrolled in by obtaining at least 50%.
 - If the first year is at Maynooth or Lorraine
 - Obtain 50% on aggregate.
 - Pass all modules that are required for progression by obtaining at least 50%.
 - Not fall below 40% in any module (except with permission to progress with incomplete credits).
- 2.7 **Progressing with incomplete credits:** Students can have up to 7.5 ECTS below 50%, **but above 30%**, and still progress, with the permission of the Course Coordinator, and carry these incomplete credits. The examination for these, or a suitable substitution, will be made at the second institution during the second year of study.

Exceptional circumstances will be considered on a case-by-case basis e.g. a student missing an exam through ill health.

- 2.8 **In order to be awarded the Joint Erasmus Mundus Master's Degree:** a student must:

- Achieve a total of 120 ECTS, having attending two universities in the programme for one year each
- Attend the two summer schools occurring within the time they are registered on the joint course
- Obtain at least 50% on aggregate over the two years.

- Pass all modules required for progression without compensation.
- At St Andrews
 - Pass all modules by obtaining at least 50%.
- At Maynooth and Lorraine
 - Not fall below 40% in any module.

2.9 A student who has an incomplete grade in one or more modules will not be assigned a course mark and will be graded as Incomplete/Not Passed as appropriate. A course mark will not be allocated to a student who has insufficient credits - either by not being registered or by not attending the relevant examination or if they are not awarded a mark in a module.

2.10 Students who successfully complete the programme in 2 years with 120 ECTS credits will exit with an Erasmus Mundus Joint MSc Degree in Advanced Systems Dependability. Students who fail to achieve 120 ECTS credits in two years, but achieve:

- 90 ECTS credits or more will exit with an Erasmus Mundus Joint Postgraduate Diploma in Advanced Systems Dependability.
- 60 ECTS credits or more will exit with an Erasmus Mundus Joint Certificate in Advanced Systems Dependability.

2.11 Students who fail to obtain any of the above, may exit with a local degree of one of the three Institutions where they spent one year provided local exit awards requirements are satisfied.

3 Module Marks

3.1 Initially, modules will be marked using the existing (local) marking/grading systems in place at each university, as shown below, with equivalent grade boundaries identified (for reference to the common grading system; modules receive marks and not grades).

Maynooth University (%-age)	University of St Andrews (out of 20)	Université de Lorraine (out of 20)
1st Class Honours: 70%-100%	Distinction: 16.5-20	Tres Bien: 16-20 marks
2.1 Honours: 60%-70%	Merit: 13.5-16.4	Bien: 14-16 marks
		Assez Bien: 12-14 marks
2.2 Honours: 50%-60%	Pass: 7-13.4	Passable: 10-12 marks

These marks will then be used to calculate joint marks, which will in general, keep marks within the grades as shown below, and retain the order and merit of students on a particular module. Note that only marks and not grades are assigned to individual modules; the table below provides the basis for converting the marks to the common grading system.

COMMON GRADE	Maynooth University GRADE	University of St Andrews GRADE	Université de Lorraine GRADE
DISTINCTION	1 st	Distinction	Tres Bien
MERIT	2.1	Merit	Bien/Assez Bien
PASS	2.2	Pass	Passable
INCOMPLETE/ NOT PASSED			

3.2 The tables in the appendix show the detailed mapping from local marks to joint marks.

4 Dissertation Marks

4.1 Dissertation marks will be subject to special treatment, to ensure compatibility of marking across the consortium.

4.2 As for the taught module marks, dissertation marking will initially take place locally.

4.3 During the joint examination board process, the dissertations for students on both years of the course over all three universities will be ranked (1st year and 2nd year students' dissertations ranked separately). The joint mark assigned will be based both on the local mark and on the position within the ranking.

5 Registration and Withdrawal

5.1 Students register for the Joint Degree course at Maynooth, as the coordinating institution for the DEPEND consortium.

- 5.2 Students also register locally at each university they attend, subject to the local, postgraduate regulations at each university.
- 5.3 In general students must register for each module that they are taking during the year at the registration period at the beginning of the academic year.
- 5.4 Module choice may be restricted in the second year of the course in order to avoid duplication of material, subject to the approval of the course coordinator in the second-year university.
- 5.5 Students may change their module choices, with the written permission of the Head of Department or Erasmus Mundus course coordinator, in each semester up to the end of the second week of that semester. No changes are permitted after this date. In all cases, students are entered for the examination in the modules for which they are registered.

6 Repeating Modules

- 6.1 The local taught postgraduate regulations of the host institution will apply for re-sitting Masters level module examinations at the host. At St Andrews, a student who fails a taught module must have obtained at least 30% (grade 4.0 on the local marking scale) at the first attempt to be eligible to re-sit.
- 6.2 Students who achieve Incomplete/Not Passed in no more than 7.5 credits worth of modules in the first year of the programme are allowed to repeat up to 7.5 credits worth of taught modules (once only) in the second year of the programme, provided they obtained at least 30% at the first attempt.
- 6.3 Students must repeat all of the modules in which they have been awarded Incomplete/Not Passed or suitable approved alternative modules.
- 6.4 Students who are awarded Incomplete/Not Passed for more than 7.5 credits worth of taught modules are not entitled to repeat. They may apply to take the course afresh but their application will be considered alongside all new applicants and the fact that they have already failed to progress in the course will be taken into account.
- 6.5 With regard to the Dissertation(s) in this Master's degree programme: If after final submission it is deemed that the dissertation does not reach the required standard, the student may be allowed to resubmit – upon re-registering to repeat a year.

7 Time Limit on Repetition

- 7.1 Where repetition is permitted a student may repeat a year of study only once.
- 7.2 Where there are special circumstances which make further repetition appropriate, this may be approved by the Consortium with the advice of the appropriate registrar, Heads of Department, and, for St Andrews, the Pro Dean Taught Postgraduate.

8 Appeals

- 8.1 Students may appeal the results of individual modules through the local examination appeal procedure in each university.
- 8.2 Students who wish to appeal their overall result or final project mark can do so through the Maynooth University appeals procedure.

9 Honours Standards and Grade Descriptions

- 9.1 The overall, course-wide mark will be the ECTS-weighted aggregate of the graded modules (i.e. those not marked on a pass/fail basis) counting towards the total of 120 ECTS required on the course.

COMMON GRADE DESCRIPTION	GRADE BOUNDARY
DISTINCTION	80%
MERIT	70%
PASS	50%
INCOMPLETE/ NOT PASSED	Below 50% or Incomplete

Appendix: Conversion Tables from local marks to consortium marks

MU		Consortium	
1ST CLASS	100	100	DISTINCTION
	99	99	
	98	99	
	97	98	
	96	97	
	95	97	
	94	96	
	93	95	
	92	95	
	91	94	
	90	93	
	89	93	
	88	92	
	87	91	
	86	91	
	85	90	
	84	89	
	83	89	
	82	88	
	81	87	
80	87		
79	86		
78	85		
77	85		
76	84		
75	83		
74	83		
73	82		
72	81		
71	81		
70	80		
2.1 CLASS	69	79	MERIT
	68	78	
	67	77	
	66	76	
	65	75	
	64	74	
	63	73	
	62	72	
	61	71	
	60	70	
2.2 CLASS	59	68	PASS
	58	66	
	57	64	
	56	62	
	55	60	
	54	58	
	53	56	
	52	54	
	51	52	
	50	50	

MU		Consortium	
INCOMPLETE	49	49	INCOMPLETE
	48	48	
	47	47	
	46	46	
	45	45	
	44	44	
	43	43	
	42	42	
	41	41	
	40	40	
	39	39	
	38	38	
	37	37	
	36	36	
	35	35	
	34	34	
	33	33	
	32	32	
	31	31	
	30	30	
	29	29	
	28	28	
	27	27	
	26	26	
	25	25	
	24	24	
	23	23	
	22	22	
	21	21	
	20	20	
19	19		
18	18		
17	17		
16	16		
15	15		
14	14		
13	13		
12	12		
11	11		
10	10		
9	9		
8	8		
7	7		
6	6		
5	5		
4	4		
3	3		
2	2		
1	1		
0	0		

UStA		Consortium		UStA		Consortium		UStA		Consortium	
DISTINCTION	20	100	DISTINCTION	13.4	69	PASS	6.9	49	FAIL (RIGHT TO REASSESSMENT)	6.9	49
	19.9	99		13.3	69		6.8	49		6.8	49
	19.8	98		13.2	69		6.7	48		6.7	48
	19.7	98		13.1	68		6.6	47		6.6	47
	19.6	97		13	68		6.5	47		6.5	47
	19.5	97		12.9	68		6.4	46		6.4	46
	19.4	96		12.8	67		6.3	45		6.3	45
	19.3	96		12.7	67		6.2	45		6.2	45
	19.2	95		12.6	67		6.1	44		6.1	44
	19.1	94		12.5	66		6	43		6	43
	19	94		12.4	66		5.9	43		5.9	43
	18.9	93		12.3	66		5.8	42		5.8	42
	18.8	93		12.2	65		5.7	41		5.7	41
	18.7	92		12.1	65		5.6	41		5.6	41
	18.6	92		12	65		5.5	40		5.5	40
	18.5	91		11.9	64		5.4	39		5.4	39
	18.4	91		11.8	64		5.3	39		5.3	39
	18.3	90		11.7	64		5.2	38		5.2	38
	18.2	89		11.6	63		5.1	37		5.1	37
	18.1	89		11.5	63		5	37		5	37
	18	88		11.4	63		4.9	36		4.9	36
	17.9	88		11.3	62		4.8	35		4.8	35
	17.8	87		11.2	62		4.7	35		4.7	35
	17.7	87		11.1	62		4.6	34		4.6	34
	17.6	86		11	61		4.5	33		4.5	33
	17.5	86		10.9	61		4.4	33		4.4	33
	17.4	85		10.8	61		4.3	32		4.3	32
	17.3	84		10.7	60		4.2	31		4.2	31
	17.2	84		10.6	60		4.1	31		4.1	31
	17.1	83		10.5	60		4	30		4	30
	17	83		10.4	59		3.9	29		3.9	29
	16.9	82		10.3	59		3.8	29		3.8	29
16.8	82	10.2	59	3.7	28	3.7	28				
16.7	81	10.1	59	3.6	27	3.6	27				
16.6	81	10	58	3.5	27	3.5	27				
16.5	80	9.9	58	3.4	26	3.4	26				
MERIT	16.4	79	MERIT	9.8	58	FAIL (NO RIGHT TO REASSESSMENT)	3.3	25	INCOMPLETE	3.3	25
	16.3	79		9.7	57		3.2	25		3.2	25
	16.2	79		9.6	57		3.1	24		3.1	24
	16.1	78		9.5	57		3	23		3	23
	16	78		9.4	57		2.9	23		2.9	23
	15.9	78		9.3	56		2.8	22		2.8	22
	15.8	77		9.2	56		2.7	21		2.7	21
	15.7	77		9.1	56		2.6	21		2.6	21
	15.6	77		9	55		2.5	20		2.5	20
	15.5	76		8.9	55		2.4	19		2.4	19
	15.4	76		8.8	55		2.3	19		2.3	19
	15.3	76		8.7	55		2.2	18		2.2	18
	15.2	75		8.6	54		2.1	17		2.1	17
	15.1	75		8.5	54		2	17		2	17
	15	75		8.4	54		1.9	16		1.9	16
	14.9	74		8.3	53		1.8	15		1.8	15
	14.8	74		8.2	53		1.7	15		1.7	15
	14.7	74		8.1	53		1.6	14		1.6	14
	14.6	73		8	53		1.5	13		1.5	13
	14.5	73		7.9	52		1.4	13		1.4	13
	14.4	73		7.8	52		1.3	12		1.3	12
	14.3	72		7.7	52		1.2	11		1.2	11
	14.2	72		7.6	51		1.1	11		1.1	11
	14.1	72		7.5	51		1	10		1	10
	14	71		7.4	51		0.9	9		0.9	9
	13.9	71		7.3	51		0.8	8		0.8	8
	13.8	71		7.2	50		0.7	7		0.7	7
	13.7	70		7.1	50		0.6	6		0.6	6
	13.6	70		7	50		0.5	5		0.5	5
	13.5	70					0.4	4		0.4	4
							0.3	3		0.3	3
							0.2	2		0.2	2
				0.1	1	0.1	1				
				0	0	0	0				

UL		Consortium		UL		Consortium		UL		Consortium	
TRÈS BIEN	20	100	DISTINCTION	ASSEZ BIEN	13.9	74	MERIT	NOT PASSED	7.9	39	INCOMPLETE
	19.9	99			13.8	74			7.8	39	
	19.8	99			13.7	74			7.7	38	
	19.7	98			13.6	74			7.6	38	
	19.6	98			13.5	73			7.5	37	
	19.5	97			13.4	73			7.4	37	
	19.4	97			13.3	73			7.3	36	
	19.3	96			13.2	73			7.2	36	
	19.2	96			13.1	72			7.1	35	
	19.1	95			13	72			7	35	
	19	95			12.9	72			6.9	34	
	18.9	94			12.8	72			6.8	34	
	18.8	94			12.7	71			6.7	33	
	18.7	93			12.6	71			6.6	33	
	18.6	93			12.5	71			6.5	32	
	18.5	92		12.4	71	6.4	32				
	18.4	92		12.3	70	6.3	31				
	18.3	91		12.2	70	6.2	31				
	18.2	91		12.1	70	6.1	30				
	18.1	90		12	70	6	30				
	18	90		11.9	69	5.9	29				
	17.9	89		11.8	68	5.8	29				
	17.8	89		11.7	67	5.7	28				
	17.7	88		11.6	66	5.6	28				
	17.6	88		11.5	65	5.5	27				
	17.5	87		11.4	64	5.4	27				
	17.4	87		11.3	63	5.3	26				
	17.3	86		11.2	62	5.2	26				
	17.2	86		11.1	61	5.1	25				
	17.1	85		11	60	5	25				
	17	85		10.9	59	4.9	24				
	16.9	84		10.8	58	4.8	24				
	16.8	84		10.7	57	4.7	23				
16.7	83	10.6	56	4.6	23						
16.6	83	10.5	55	4.5	22						
16.5	82	10.4	54	4.4	22						
16.4	82	10.3	53	4.3	21						
16.3	81	10.2	52	4.2	21						
16.2	81	10.1	51	4.1	20						
16.1	80	10	50	4	20						
16	80	9.9	49	3.9	19						
15.9	79	9.8	49	3.8	19						
15.8	79	9.7	48	3.7	18						
15.7	79	9.6	48	3.6	18						
15.6	79	9.5	47	3.5	17						
15.5	78	9.4	47	3.4	17						
15.4	78	9.3	46	3.3	16						
15.3	78	9.2	46	3.2	16						
15.2	78	9.1	45	3.1	15						
15.1	77	9	45	3	15						
15	77	8.9	44	2.9	14						
14.9	77	8.8	44	2.8	14						
14.8	77	8.7	43	2.7	13						
14.7	76	8.6	43	2.6	13						
14.6	76	8.5	42	2.5	12						
14.5	76	8.4	42	2.4	12						
14.4	76	8.3	41	2.3	11						
14.3	75	8.2	41	2.2	11						
14.2	75	8.1	40	2.1	10						
14.1	75	8	40	2	10						
14	75			1.9	9						
				1.8	9						
				1.7	8						
				1.6	8						
				1.5	7						
				1.4	7						
				1.3	6						
				1.2	6						
				1.1	5						
				1	5						
				0.9	4						
				0.8	4						
				0.7	3						
				0.6	3						
				0.5	2						
				0.4	2						
				0.3	1						
				0.2	1						
				0.1	0						
				0	0						